

see 101


SULFUR DYES FROM CHINA AND THE UNITED KINGDOM

Determinations of the Commission
in Investigations Nos. 731-TA-548
and 551 (Final) Under the Tariff
Act of 1930, Together With the
Information Obtained in
the Investigations

USITC PUBLICATION 2602

FEBRUARY 1993

**United States International Trade Commission
Washington, DC 20436**



UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Don E. Newquist, Chairman
Peter S. Watson, Vice Chairman
David B. Rohr
Anne E. Brunsdale
Carol T. Crawford
Janet A. Nuzum

Robert A. Rogowsky,
Director of Operations

Staff assigned:

Diane J. Mazur, Investigator
Michael Anderson, Economist
John Davitt, Economist
Rob Randall, Commodity-Industry Analyst
Marshall Wade, Accountant/Auditor
Katherine Jones, Attorney

Robert Eninger, Supervisory Investigator

**Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436**

C O N T E N T S

	<u>Page</u>
Determinations.....	1
Views of the Commission.....	3
Additional views of Commissioner David B. Rohr on threat of material injury by reason of LTFV imports from China and the United Kingdom...	37
Additional views of Commissioner Carol T. Crawford.....	47
Concurring and dissenting views of Commissioner Anne Brunsdale.....	55
Information obtained in the investigations.....	I-1
Introduction.....	I-3
The products.....	I-5
Description of the subject sulfur dyes.....	I-5
Manufacture of the subject sulfur dyes.....	I-10
Issues relating to the nature of the imported product.....	I-14
Uses of sulfur dyes.....	I-15
Like product issues.....	I-16
U.S. tariff treatment.....	I-17
The nature and extent of sales at LTFV.....	I-18
The U.S. market.....	I-19
Apparent U.S. consumption.....	I-19
U.S. producer and finishers.....	I-20
U.S. importers.....	I-23
Channels of distribution.....	I-24
Consideration of material injury to an industry in the United States.....	I-25
U.S. production, capacity, and capacity utilization.....	I-25
U.S. producer's and finishers' U.S. shipments.....	I-26
U.S. producer's and finishers' exports.....	I-27
U.S. producer's and finishers' inventories.....	I-27
U.S. employment, wages, and productivity.....	I-28
Financial experience of the U.S. producer and finishers.....	I-28
Overall establishment operations.....	I-29
Combined operations on sulfur dyes and sulfur vat dyes.....	I-29
Cost of Goods Sold and SG&A Expenses for Sandoz.....	I-30
Value Added.....	I-31
Capital expenditures.....	I-32
Investment in productive facilities.....	I-32
Research and development expenses.....	I-33
Environmental expenses.....	I-34
Impact of imports on capital and investment.....	I-34
Consideration of the question of threat of material injury.....	I-34
U.S. importers' and finishers' import inventories.....	I-36
Ability of foreign producers to generate exports and availability of export markets other than the United States.....	I-36
The industry in China.....	I-37
The industry in India.....	I-37
The industry in the United Kingdom.....	I-40
Expected imports.....	I-41

CONTENTS

	<u>Page</u>
Information obtained in the investigations--Continued	
Consideration of the causal relationship between imports of the subject products and material injury.....	I-41
U.S. imports.....	I-41
Critical circumstances considerations.....	I-44
U.S. market penetration by imports.....	I-44
Factors affecting demand.....	I-46
Prices.....	I-48
Lost sales and lost revenues.....	I-58
Exchange rates.....	I-61
Appendixes	
A. <u>Federal Register</u> notices.....	A-1
B. List of witnesses.....	B-1
C. <u>Colour Index</u> information.....	C-1
D. Comments on characteristics and uses.....	D-1
E. Comments on manufacturing processes.....	E-1
F. HTS notes and nomenclature.....	F-1
G. Summary data on the subject sulfur dyes.....	G-1
H. Income-and-loss data on individual sulfur dye products.....	H-1
J. Comments on the impact of imports.....	J-1
K. Information related to Indian transshipments.....	K-1
L. Information related to tariff misclassifications.....	L-1
M. C.I. solubilized black 1: F.o.b. prices.....	M-1
N. U.S. f.o.b. transfer prices for certain U.S. concentrate.....	N-1
Figures	
1. Manufacturing stages in the production of sulfur black 1 products	I-11
2&3. Imports by type and source.....	I-42
4. Sulfur dyes: Market shares.....	I-44
5. Denim production.....	I-47
6. Sulfur black 1: Delivered prices to end users.....	I-55
7. Sulfur black dyes: Sandoz sales to end users.....	I-56
8. Sulfur black dyes: C.H. Patrick sales to end users.....	I-56
G-1. Subject sulfur dyes: Salient data.....	G-3
N-1. Sulfur black dyes: Unit values based on converted quantity.....	N-3

CONTENTS

Page

Tables

1.	Subject sulfur dyes: Shares of U.S. shipments by Sandoz and finishers/importers, by end use, by color, by environmental impact, and by process, 1989-91, January-September 1991, and January-September 1992.....	I-15
2.	Dyes: Estimated apparent U.S. consumption, by groupings of dyes, 1989-91.....	I-20
3.	Subject sulfur dyes: U.S. producer and finishers, location of producing/finishing facility, position on petition, and share of production in 1991.....	I-22
4.	Subject sulfur dyes: U.S. producer's and finishers' capacity, production, and capacity utilization, by types, 1989-91, January-September 1991, and January-September 1992.....	I-26
5.	Subject sulfur dyes: U.S. producer's and finishers' U.S. shipments, by types, 1989-91, January-September 1991, and January-September 1992.....	I-26
6.	Subject sulfur dyes: U.S. producer's and finishers' export shipments, by types, 1989-91, January-September 1991, and January-September 1992.....	I-27
7.	Subject sulfur dyes: U.S. producer's and finishers' end-of-period inventories, by types, 1989-91, January-September 1991, and January-September 1992.....	I-27
8.	Average number of U.S. production and related workers producing all sulfur dyes, hours worked, total compensation paid, hourly wages, productivity, and unit labor costs, by types of sulfur dyes, 1989-91, January-September 1991, and January-September 1992.....	I-28
9.	Income-and-loss experience of the U.S. producer and finishers on the overall operations of their establishments in which sulfur dyes and sulfur vat dyes are produced and/or finished, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-29
10.	Income-and-loss experience of U.S. producer and finishers on their sulfur dye and sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-30
11.	Income-and-loss experience of the U.S. producer and finishers on their sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-30
12.	Income-and-loss experience of U.S. producer and finishers on their sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-30
13.	Cost of goods sold and selling, general, and administrative expenses for Sandoz on its sulfur dye and sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992...	I-31
14.	Value added by U.S. finishers on sulfur dye and sulfur vat dye products, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-32
15.	Capital expenditures by Sandoz and C.H. Patrick, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-32

CONTENTS

Tables--Continued

	<u>Page</u>
16. Value of assets and return on assets of Sandoz and C.H. Patrick for their overall establishment, sulfur dye, and sulfur vat dye operations as of the end of fiscal years 1989-91, September 30, 1991, and September 30, 1992.....	I-33
17. Research and development expenses of Sandoz and C.H. Patrick, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-33
18. Environmental expenses of Sandoz and C.H. Patrick, fiscal years 1989-91, January-September 1991, and January-September 1992.....	I-34
19. Subject sulfur dyes: U.S. importers'/purchasers' end-of-period inventories, and ratios of inventories to imports, by sources, 1989-91, January-September 1991, and January-September 1992.....	I-36
20. C.I. sulfur dye operations in China: Capacity, production, capacity utilization, and shipments, 1989-91, January-September 1991, and January-September 1992.....	I-38
21. Subject sulfur dye operations of Atul: Capacity, production, capacity utilization, and shipments, 1989-91, January-September 1991, and January-September 1992.....	I-40
22. Subject sulfur dye operations of James Robinson: Capacity, production, capacity utilization, and shipments, 1989-91, January-September 1991, and January-September 1992.....	I-41
23. Subject sulfur dyes: Importers' and finishers' U.S. imports, by subject countries and by types of sulfur dyes, 1989-91, January-September 1991, and January-September 1992.....	I-42
24. Subject sulfur dyes: Apparent U.S. consumption and market penetration of subject imports, by sources and by types of sulfur dyes, 1989-91, January-September 1991, and January-September 1992.....	I-45
25. Weighted-average delivered prices for sales of certain unfinished sulfur dyes from China, by products and by quarters, January 1989-September 1992.....	I-51
26. Delivered prices to end users by the U.S. producer and the importer of British produced C.I. Solubilized Sulfur Black 1 and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-52
27. Delivered prices for sales of unfinished sulfur dyes from the United Kingdom, by products and by quarters, January 1989-September 1992.....	I-52
28. Delivered prices for sales of certain sulfur dyes from India, by products and by quarters, January 1989-September 1992.....	I-52
29. Delivered prices for sales to end users of Sandoz's Sodyesul Black 4GCF and Patrick's Patcosul Black 4RB and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-54
30. Delivered prices for sales to end users of Sandoz's Deniblack 4G and Patrick's Patco Denim Black 2000 and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-54

CONTENTS

Tables--Continued

	<u>Page</u>
31. Delivered prices for sales to end users of Sandoz's Deniblack 4G and Patrick's Patcosul Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-54
32. Delivered prices for sales to end users of Sandoz's 4G-RDT and Southern Dye's "Free Sulfur Free" Sulfur Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-55
33. Delivered prices for sales to end users of Sandoz's 4G-RDT and Southern Dye's "Megasulfur Black Liquid" and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-55
34. Delivered prices for sales to end users of Sandoz's Sodyesul Liquid Navy GICF and Patrick's Patcosul Navy GIFN Liquid and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-56
35. Delivered prices for sales to end users of Sandoz's Sodyevat Blue N Paste and Patrick's Patco Econovat Blue N Paste and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-57
36. Delivered purchase prices for Sandoz's Sodyesul Black 4GCF and Patrick's Patcosul Black 4RB and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-57
37. Delivered purchase prices of Sandoz's Deniblack 4G and Patrick's Patcosul Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-58
38. Delivered purchase prices of Sandoz's 4G-RDT and Southern Dye's "Free Sulfur Free" Sulfur Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992.....	I-58
39. Exchange rates: Indexes of nominal and real exchange rates of selected currencies, and indexes of producer prices in those countries, by quarters, January 1989-September 1992.....	I-61
G-1. Subject sulfur dyes: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992.....	G-3
H-1. Combined external and internal income-and-loss experience of Sandoz on its intermediate sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-3
H-2. Income-and-loss experience of the U.S. producer and finishers on their C.I. leuco sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-3
H-3. Income-and-loss experience of Sandoz on its C.I. solubilized sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992	H-3

CONTENTS

Tables--Continued

	<u>Page</u>
H-4. Internal income-and-loss experience of Sandoz on its presscake sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-3
H-5. Income-and-loss experience of Sandoz and Southern Dye on their reduced sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-3
H-6. Income-and-loss experience of the U.S. producer and finishers on their paste sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-4
H-7. Income-and-loss experience of the U.S. producer and finishers on their black sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-4
H-8. Income-and-loss experience of Sandoz and Southern Dye on their environmentally safe sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-4
H-9. Income-and-loss experience of Sandoz on its C.I. leuco sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992.....	H-4
M-1. C.I. Solubilized Sulfur Black I: F.o.b. prices of U.S.-produced dye to end users and f.o.b. prices of Indian-produced dye sold by a distributor to end users and margins of under/(over)selling, by quarters, January 1989-September 1992.....	M-3
N-1. Net f.o.b. transfer prices of certain U.S.-produced sulfur dye concentrate, by quarters, January 1989-September 1992.....	N-3
N-2. C.H. Patrick's delivered purchase prices of certain Chinese- and Indian-produced sulfur dye concentrate, by quarters, January 1989-September 1992.....	N-3

Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigations Nos. 731-TA-548 and 551 (Final)

SULFUR DYES FROM CHINA AND THE UNITED KINGDOM

Determinations

On the basis of the record¹ developed in the subject investigations, the Commission determines, pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the Act), that an industry in the United States is not materially injured or threatened with material injury, and the establishment of an industry in the United States is not materially retarded,² by reason of imports from China and the United Kingdom of sulfur dyes, including sulfur vat dyes,³ provided for in subheadings 3204.15, 3204.19.30, 3204.19.40, and 3204.19.50 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

¹ The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

² Commissioner Brunsdale found two like products consisting of intermediate dyestuffs and finished dyes, voting in the affirmative with respect to intermediate dyestuffs from both countries, and negative with respect to finished dyes from both countries.

³ Sulfur dyes are synthetic organic coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro, or amino groups, or by reaction of sulfur or alkaline sulfide with aromatic hydrocarbons. For purposes of these investigations, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms.

Background

The Commission instituted these investigations effective September 21, 1993, following preliminary determinations by the Department of Commerce that imports of sulfur dyes, including sulfur vat dyes, from China and the United Kingdom were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the institution of the Commission's investigations and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of October 7, 1992 (57 F.R. 46195). The hearing was held in Washington, DC, on January 13, 1993, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION¹

Based on the information obtained in these final investigations, we determine that an industry in the United States is not materially injured or threatened with material injury by reason of less than fair value (LTFV) imports of sulfur dyes from China and the United Kingdom.^{2 3}

I. LIKE PRODUCT

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of the subject imports, the Commission must first define the "like product" and the "industry." Section 771(4)(A) of the Tariff Act of 1930 (the "Act") defines the relevant domestic industry as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product" ⁴ In turn, the statute defines "like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation" ⁵

The Commission's determination of what is the appropriate like product or products in an investigation is a factual determination, to which it applies the statutory standard of "like" or "most similar in characteristics

¹ See Dissenting Views of Commissioner Brunsdale.

² Material retardation of a domestic industry by reason of the subject imports is not an issue in these investigations, and therefore will not be discussed further.

³ The Commerce Department has made no final determination with respect to sulfur dyes from India. Nevertheless, because they are subject to investigation, we have cumulated the price and volume effects of Indian imports as we are required to do by the statute. See 19 U.S.C. § 1677(7)(C)(iv)(I).

⁴ 19 U.S.C. § 1677(4)(A).

⁵ 19 U.S.C. §1677(10).

and uses" on a case-by-case basis.⁶ Generally, the Commission disregards minor variations between the articles subject to an investigation and looks for clear dividing lines between possible like products.⁷

In its final determinations, the Department of Commerce (Commerce) defined the class or kind of merchandise subject to investigation as sulfur dyes, including sulfur vat dyes. The merchandise covered by the scope of the investigation includes all forms of sulfur dyes and sulfur vat dyes, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, and so-called "pre-reduced, liquid ready-to-dye" forms.⁸

The terminology employed in the sulfur dye industry varies and often is inconsistent. In this opinion, and for purposes of our analysis, we adopt the classifications contained in the Color Index (C.I.).⁹ The three types of sulfur dyes are 1) C.I. sulfur dyes, 2) C.I. leuco sulfur dyes, and 3) C.I. solubilized sulfur dyes, unless otherwise noted. C.I. sulfur dyes are sulfur dyes that have been synthesized, but that require further processing (they must be reduced) before they can be used to dye textiles. C.I. leuco sulfur

⁶ In defining the like product, the Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability of the products; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) the use of common manufacturing facilities and production employees; and, where appropriate, (6) price. No single factor is dispositive, and the Commission may consider other factors relevant to its like product determination in a particular investigation. See, e.g., Asociacion Colombiana de Exportadores de Flores v. United States, 693 F. Supp. 1165, 1169, n.5 (CIT 1988).

⁷ S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

⁸ Final Determination of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, from the United Kingdom, 58 Fed. Reg. 3253, January 8, 1993, and Notice of Determination of Sales at Less Than Fair Value: Sulfur Dyes, including Sulfur Vat Dyes, from The People's Republic of China, 58 Fed. Reg. 7537, February 8, 1993.

⁹ See Report at I-5. The Colour Index is published jointly by the Society of Dyers and Colourists in England and the Association of Textile Chemists and Colorists in the United States. The Index is the accepted industry classification system for dyes.

dyes are sulfur dyes that have been further processed to the point where they can be applied to textiles. The dyes are "reduced" and in a water-soluble liquid form. Finally, C.I. solubilized sulfur dyes are sulfur dyes obtained by reacting synthesized sulfur dyes (C.I. sulfur dyes) with thiosulfonic acid to produce a thiosulfonic acid derivative. Sulfur dye in this form is water-soluble and generally in a powder form.¹⁰ Unlike "conventional" or leuco sulfur dyes, solubilized sulfur dye is not used exclusively to dye textiles but is often used to dye leather and paper.¹¹

C.I. leuco sulfur dyes are relatively inexpensive dyes that are applied primarily to vegetable or "cellulosic" fibers, such as cotton, rayon, and linen. They also are used in lesser quantities to dye paper, leather, and certain synthetic fibers. The vast majority of sulfur dyes are used to dye cotton textiles, with approximately half used to dye denim.¹²

The manufacture of sulfur dyes takes place in two stages: 1) dyestuff synthesis, and 2) dyestuff finishing.¹³ To synthesize sulfur dyes, raw materials first are converted to chemical intermediates to produce a substance with many of the physical and chemical characteristics of the finished dye. This intermediate product is generally water-insoluble and must be "solubilized" or "finished" before the dye is sold to end-users. Solubilization involves reacting dye intermediates with additional chemicals so that they become water-soluble or "reduced," and then standardizing the

¹⁰ Report at I-5.

¹¹ Report at I-7.

¹² Report at I-15 to I-16. Sulfur dyes can be used to dye jeans in a range of colors, but indigo is the preferred dye for the color blue.

¹³ Report at I-10.

resulting dye to the producer's strength or coloring power.¹⁴

Almost all the sulfur dyes produced in the United States are sold as ready-to-use or pre-reduced liquid sulfur dyes. Nearly all the imported dyes subject to investigation enter the United States as a partially reduced liquid or powder. The subject imports then are converted by being reduced or finished into solubilized liquid dyes before sale to end users.

In the preliminary investigations, the Commission found a single like product consisting of all sulfur dyes, including C.I. solubilized sulfur dye.¹⁵ After considering the record in these final investigations, as well as the arguments of the parties in these final investigations, we reaffirm our finding that the like product is composed of all sulfur dyes.

In these investigations, as in the preliminary investigations, the only issue relating to the like product definition is whether C.I. solubilized sulfur dye is a like product separate from all other sulfur and sulfur vat dyes. Two respondents, Atul, an Indian producer, and Biddle-Sawyer, a U.S. importer, argue that C.I. solubilized sulfur dye, as compared to other sulfur dyes, is sufficiently different to warrant its treatment as a separate like product.¹⁶ ¹⁷ Petitioner and the remaining respondents contend that the

¹⁴ The term "solubilization" is used here to refer to a chemical process during which conventional sulfur dyes of a type used to dye textiles is chemically reduced. It is distinct from the term "C.I. solubilized sulfur dyes" used above which refers to a thiosulfonic acid derivative form of sulfur dye that is used to dye both leather and textiles. See discussion at p. 2 supra.

¹⁵ See Sulfur Dyes from China, India, and the United Kingdom, Inv. Nos. 731-TA-548, 550, and 551 (Preliminary), USITC Pub. 2514 (May 1992) at 7.

¹⁶ In these final investigations, Atul relies primarily on the fact that it would be more expensive for end users to use solubilized sulfur dyes on textiles rather than conventional sulfur dyes. Posthearing Brief of Atul and Biddle Sawyer at 8.

¹⁷ While the investigation involving subject imports from India is not currently before us, we have addressed the like product issue raised by Indian
(continued...)

Commission's preliminary finding of a single like product was appropriate.

With respect to physical characteristics and uses, Atul argues that solubilized sulfur dyes are used exclusively to dye leather and sometimes paper products, while conventional (C.I. sulfur and C.I. leuco) sulfur dyes are only used to dye textiles. Information collected in these final investigations, however, reveals that both Sandoz, the domestic producer, and C.H. Patrick, a U.S. finisher of sulfur dyes, sell some of their C.I. solubilized sulfur dyes to the textile industry as well as the leather industry.¹⁸ This fact, as well as responses to the Commission's questionnaires, indicates that C.I. solubilized and conventional sulfur dyes are interchangeable to some degree for certain applications.¹⁹

Information on the record suggests that there is little overlap in channels of distribution between C.I. solubilized sulfur dyes and conventional sulfur dyes because virtually all sales of conventional or C.I. leuco sulfur dyes are made directly to end users,²⁰ while C.I. solubilized dyes are generally sold to distributors who then sell them to end users. However, we note that very small amounts of C.I. solubilized sulfur dyes are sold directly to end users in the textile industry.²¹

Information collected in these final investigations suggests that producers and customers perceive C.I. leuco and C.I. solubilized sulfur dyes

¹⁷ (...continued)

respondents because resolution of this issue is useful in our analysis of whether to cumulate subject imports from India with imports from China and the United Kingdom for purposes of assessing material injury and threat.

¹⁸ Report at Table 1.

¹⁹ See Report at I-7 and D-3.

²⁰ Report at I-24; Questionnaire responses. The subject imports of C.I. sulfur (partially reduced) dyes are sold to U.S. finishers, either directly or through importers. The finished dyes are then sold to end users as C.I. leuco sulfur dyes. See Domestic Industry discussion, *infra* at pp. 8-14.

²¹ Responses to the Commission's questionnaires.

as differing to some degree in physical or chemical characteristics, but as having some overlap in uses and production processes.²² Indeed, respondent C.H. Patrick, which sells both C.I. leuco and C.I. solubilized sulfur dyes, argues that the Commission should define the like product as all sulfur dyes.²³

With respect to production processes, it appears that C.I. solubilized sulfur dye undergoes an additional chemical reaction that other sulfur dyes do not undergo.²⁴ However, information on the record indicates that except for the final stage of production, C.I. solubilized and conventional sulfur dye are produced on common equipment by the same production employees.²⁵

Finally, respondent Atul argues that solubilized sulfur dyes are two to three times as expensive as other types of sulfur dyes.²⁶ Petitioner testified, however, that after converting C.I. solubilized dyes into their liquid equivalent, the cost of the finished C.I. leuco dye obtained from C.I. solubilized sulfur dye would be similar to the cost of converting C.I. sulfur into the C.I. leuco form.²⁷

In sum, we find that the record does not support defining C.I. solubilized sulfur dye as a separate like product.

II. DOMESTIC INDUSTRY²⁸

Section 771(4)(A) of the Tariff Act of 1930 defines domestic industry

²² Report at D-3.

²³ Prehearing Brief of C.H. Patrick at 3.

²⁴ Unlike other sulfur dyes, C.I. solubilized sulfur dye is obtained by reacting sulfur dye with thiosulphonic acid to produce thiosulphonic acid derivatives. Because these dyes are inherently water soluble, they can be used on substrates such as leather without undergoing a separate "reduction process." Report at I-5.

²⁵ Report at E-3.

²⁶ Posthearing Brief of Atul and Biddle Sawyer at 8.

²⁷ Tr. at 31; Petitioner's Prehearing Brief at 14.

²⁸ See Additional Views of Commissioner Crawford.

as:

. . . the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product.²⁹

In determining the scope of the domestic industry in these investigations the Commission must address two issues: (1) whether the two U.S. finishers of sulfur dyes, C.H. Patrick and Southern Dye, should be included within the domestic industry as "producers" of the like product, and (2) if finishers are considered part of the domestic industry, whether they should then be excluded as related parties.

A. Whether Finishers are Domestic Producers

Petitioner argues that the Commission should not consider domestic finishers to be a part of the domestic industry because they import and merely further process the subject dyes.³⁰ Petitioner asserts that when C.H. Patrick and Southern Dye mix imported unreduced and partially reduced C.I. sulfur dyes with water and reduction chemicals to obtain the fully reduced C.I. leuco form and standardize them to a particular shade and cast, they are merely performing a minor finishing operation.³¹ This minor finishing operation is a task that textile producers performed in the past and continue to perform in other parts of the world.³² Thus they argue that the primary interests of C.H. Patrick and Southern Dye lie in importation rather than in domestic production.

C.H. Patrick and Southern Dye, as well as respondent James Robinson, argue that U.S. finishers are engaged in sufficient production-related

²⁹ 19 U.S.C. § 1677(4)(A).

³⁰ Tr. at 70.

³¹ Tr. at 29.

³² Tr. at 22.

activity to be considered "producers". Southern Dye additionally argues that it should be included within the domestic industry because it manufactures a product that is distinct from the intermediate product it imports.³³

In deciding whether a firm qualifies as a domestic producer, the Commission often has analyzed the overall nature of a firm's production-related activities in the United States.³⁴ Specifically, the Commission has examined such factors as: (1) the extent and source of a firm's capital investment; (2) the technical expertise involved in U.S. production activity; (3) the value added to the product in the United States; (4) employment levels; (5) the quantities and types of parts sourced in the United States; and any other costs and activities in the United States leading to production of the like product, including where production decisions are made.³⁵ The Commission has emphasized that no single factor -- including value added -- is determinative and that value added information becomes more meaningful when other production activity indicia are taken into account.³⁶ The Commission also has stated that it will consider any other factors it deems relevant in light of the specific facts of any investigation.³⁷

Since the preliminary investigation, additional evidence has been

³³ Posthearing Brief of Southern Dye at 8-9.

³⁴ Dry Film Photoresist from Japan, Inv. No. 731-TA-622 (Preliminary), USITC Pub. 2555 (August 1992) at 14; Dynamic Random Access Memories of One Megabit and Above from the Republic of Korea, Inv. No. 731-TA-556 (Preliminary), USITC Pub. 2519 (June 1992) at 11-12.

³⁵ Dry Film, Inv. No. 731-TA-622 (Preliminary), USITC Pub. 2555 (August 1992) at 14; DRAMS, Inv. No. 731-TA-556 (Preliminary), USITC Pub. 2519 (June 1992) at 11-12.

³⁶ See, e.g., Dry Film Photoresist from Japan, Inv. No. 731-TA-622 (Preliminary), USITC Pub. 2555 (August 1992); Color Television Receivers from the Republic of Korea and Taiwan, Inv. Nos. 731-TA-134 and 135 (Final), USITC Pub. 1514 (May 1984) at 7, 8.

³⁷ Dry Film Photoresist from Japan, Inv. No. 731-TA-622 (Preliminary), USITC Pub. 2555 (August 1992); Erasable Programmable Read Only Memories from Japan, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (December 1986).

gathered which causes us to re-consider our earlier determination that finishers are part of the domestic industry. Finishing operations involve the mixing of chemicals in reactor vessels. There is considerable disagreement among the parties as to the amount of technical expertise and sophistication of technology required in finishing. Petitioner argues that solubilization of sulfur dye is not a sophisticated process and notes that before Sandoz introduced its "ready-to-use" leuco sulfur dyes, U.S. textile manufacturers purchased unreduced dyes and performed the reducing operations themselves.³⁸ Respondents, on the other hand, contend that the finishing operation is complex and requires specialized equipment and skilled personnel. Respondents point out that none of their customers, many of whom are large technically sophisticated textile mills, chose to finish sulfur dyes themselves because such finishing is not a simple procedure.³⁹

Responses to purchaser questionnaires confirm that several end-users do not have the necessary equipment and personnel to perform finishing operations, and that to do so would require significant investment. Some end-users, however, indicated that they would not require any new equipment to perform their own finishing operations.⁴⁰ Further, it is not clear whether some end-users simply find it more convenient to purchase sulfur dyes in ready-to-use form, or whether they actually could not perform any finishing operations because of the level of technological sophistication required.

As we noted in our preliminary determinations, the level of capital investment by C.H. Patrick is significant.⁴¹ Capital investment by itself,

³⁸ Petitioner's Prehearing Brief at 3; Petitioner's Posthearing Brief at 10.

³⁹ Posthearing Brief of C.H. Patrick at 4.

⁴⁰ Report at I-7, n.15.

⁴¹ Report at I-33.

however, is not necessarily dispositive of an entity's status as a domestic producer.⁴²

With respect to employment levels, we note that C.H. Patrick and Southern Dye's toll producer employs a relatively small number of production related workers, particularly when compared to Sandoz.⁴³

Finally, there is additional evidence that raises questions about the amount and significance of the value added by finishers to the subject imports. First, it now appears that a large portion of the subject imports are not "unreduced" sulfur dyes, but are "semi-reduced", and, therefore, may not require as much processing as we believed in the preliminary investigations.⁴⁴

Second, when all of the finishers' costs are included, the amount of value added by C.H. Patrick and Southern Dye is as high or higher than the levels we have found sufficient to constitute domestic production in other investigations.⁴⁵ We note that one U.S. importer reported that it adds a cost to the price of its imports to cover certain procedures and expenses, including laboratory costs for quality control, amortization of expensive laboratory equipment, and warehousing and trucking.⁴⁶ The amount of value added by this importer's operations was actually greater than that added by

⁴² See, e.g., Dry Film Photoresist from Japan, Inv. No. 731-TA-622 (Preliminary), USITC Pub. 2555 (August 1992).

⁴³ We recognize, however, the number of employees is but one factor in defining the domestic industry and, in some instances, a domestic industry has relatively few employees.

⁴⁴ Report at I-14 to I-15.

⁴⁵ Report at I-69 to I-70. See, e.g., Dynamic Random Access Memories of One Megabit and Above from the Republic of Korea, Inv. No. 731-TA-556 (Preliminary), USITC Pub. 2519 (June 1992) at 10-12.

⁴⁶ Memorandum INV-Q-027 at 3. C.H. Patrick initially had included several of these same procedures in its calculation of its domestic production value added.

the operations performed by C.H. Patrick on its imports, yet the importer never considered itself to be a domestic producer. We note, however, that this importer does not perform any actual reduction of sulfur dyes, as do C.H. Patrick and Southern Dye.

We also have examined the actual "conversion" costs from the operations performed by C.H. Patrick on the subject imports which reduce the sulfur dyes into their ready-to-use, leuco form. We believe it is appropriate and helpful in this case to examine carefully these conversion costs apart from selling, general and administrative expenses because the latter may include costs that would be incurred by any importer and thus may not reflect domestic production activity.⁴⁷ The amount of value added by direct labor, raw materials and factory overhead was smaller than what C.H. Patrick originally contended. We also note that the value added by Southern Dye's toll production is somewhat misleading. A moderate amount of conversion costs can give a significant percentage of value added because the base on which the percentage is calculated is relatively small.⁴⁸

In short, the evidence indicates that for this particular process (i.e., finishing operations), calculating a precise or even approximate percentage of value added is problematic. Depending upon the approach taken, it may be overstated or understated.

In light of the additional evidence gathered during the final investigation, we find that it is a close question whether C.H. Patrick and Southern Dye are domestic producers of sulfur dyes. We need not reach any

⁴⁷ In fact, as required by generally accepted accounting principles (GAAP), some of C.H. Patrick's SG&A expenses cover the same types of activities as those performed by the importer discussed above.

⁴⁸ Report at I-33.

final conclusion in this case, however, because, as discussed immediately below, if we were to find that C.H. Patrick and Southern Dye were part of the domestic industry, we would exclude them as related parties.⁴⁹

B. Related Parties

The related parties provision, 19 U.S.C. § 1677(4)(B), allows for the exclusion of certain domestic producers from the domestic industry for the purposes of an injury determination. Applying the provision involves two steps.⁵⁰ First, the Commission must determine whether the domestic producer meets the definition of a related party. Second, if a producer is a related party, the Commission may exclude such producers in "appropriate circumstances."⁵¹

The statute defines related parties as producers who are "related to the exporters or importers, or are themselves importers of the allegedly subsidized or dumped merchandise."⁵² Exclusion of a related party is within the Commission's discretion based upon the facts presented in each case.⁵³ The rationale for the related parties provision is the concern that domestic producers who either are related to foreign producers or exporters, or are themselves importers of the subject merchandise, may be in a position that

⁴⁹ Based upon the foregoing analysis, Chairman Newquist finds that C.H. Patrick and Southern Dye are not part of the domestic industry. Chairman Newquist agrees, however, that if included in the domestic industry, it is appropriate, as discussed below, to exclude C.H. Patrick and Southern Dye as related parties.

⁵⁰ See, e.g., Certain Carbon Steel Butt-Weld Pipe Fittings from China and Thailand, Inv. Nos. 731-TA-520 and 521 (Final), USITC Pub. 2528 at 7 (June 1992).

⁵¹ 19 U.S.C. § 1677(4)(B).

⁵² 19 U.S.C. § 1677(4)(B).

⁵³ See, e.g., Torrington Co. v. United States, 790 F. Supp. 1162 (CIT 1992); Sandvik AB v. United States, 721 F. Supp. 1322, 1331-32 (CIT 1989), aff'd without opinion, 904 F.2d 46 (Fed. Cir. 1990); Empire Plow Co. v. United States, 675 F. Supp. 1348, 1352 (CIT 1987).

shields them from any injury that might be caused by the imports.⁵⁴

In these investigations, C.H. Patrick and Southern Dye are related parties because they import the subject merchandise. Thus the only issue is whether "appropriate circumstances" exist for the Commission to exclude them from the domestic industry in the event the Commission determines them to be domestic producers.

The Commission traditionally has examined at least three factors in deciding whether a related party is being "shielded" from the effects of subject imports and determining that appropriate circumstances exist to exclude that party. Those factors include:

- (1) the percentage of domestic production attributable to the importing producer;
- (2) the reasons the U.S. producer has decided to import the product subject to investigation, i.e., whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market, and
- (3) the position of the related producers vis-a-vis the rest of the industry, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry.⁵⁵

In addition, the Commission has considered other factors, such as the ratio of

⁵⁴ See S. Rep. No. 249, 96th Cong., 1st Sess. at 83 (1979). The Senate Report states that:

The ITC is given discretion not to include within the domestic industry those domestic producers of the like product which are either related to exporters or importers of the imported product being investigated, or which import that product. Thus, for example, where a U.S. producer is related to a foreign exporter and the foreign exporter directs his exports to the United States so as not to compete with his related U.S. producer, this should be a case where the ITC would not consider the related U.S. producer to be a part of the domestic industry.

This is the only legislative guidance provided by Congress with regard to the Commission's application of the related party provision.

⁵⁵ See Torrington Co. v. United States, 790 F. Supp. 1161 (CIT 1992) (affirming Commission's application of the related party provision).

import shipments to U.S. production for each producer and the length of time that the producer has been engaged in domestic production.⁵⁶

Respondents C.H. Patrick and Southern Dye argue that they should not be removed from the Commission's definition of the domestic industry because they have a small share of the domestic industry, and because they have had no choice but to import their inputs because petitioner refused to supply them with domestically-produced product.⁵⁷ Record evidence indicates that Sandoz has been willing in the past to enter into negotiations with potential purchasers of its intermediate dyes but that no purchases have taken place, in some cases because the price was considered too high.⁵⁸

We determine that appropriate circumstances exist to exclude both C.H. Patrick and Southern Dye as related parties. Information collected in these final investigations supports our finding, initially made in the preliminary investigations, that the primary interests of both finishers of sulfur dyes lie in importation rather than in domestic production.

III. CONDITION OF THE DOMESTIC INDUSTRY⁵⁹

In determining whether there is material injury to a domestic industry by reason of the LTFV imports, the Commission is directed to consider "all

⁵⁶ As a preliminary matter, we note that the primary purchasers of C.I. sulfur dye imports, C.H. Patrick and Southern Dye Company, in some instances purchase their imports of C.I. sulfur dyes from importers rather than import them directly, and thus are not always the importer of record. Report at I-33. This fact does not alter our related party analysis because we have previously determined that it was not appropriate to adopt a narrow definition of the term "importer" that would limit the term to mean "importer of record." Certain Carbon Steel Butt-Weld Pipe Fittings from China and Thailand, Inv. Nos. 731-TA-520 and 521 (Final), USITC Pub. 2528 (June 1992).

⁵⁷ Prehearing Brief of Southern Dye at 4; Prehearing Brief of James Robinson at 4-6; Posthearing Brief of C.H. Patrick at 5-6.

⁵⁸ Tr. at 50-53.

⁵⁹ Because we are analyzing the condition of a single domestic producer, our discussion must necessarily be of a general nature because much of the information relevant to analysis is business proprietary.

relevant economic factors that have a bearing on the state of the industry in the United States"60 These include production, consumption, shipments, inventories, capacity utilization, market share, employment, wages, productivity, financial performance, capital expenditures, and research and development.⁶¹ No single factor is determinative, and the Commission considers all relevant factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."⁶²

We note that the consumption of sulfur dyes is driven largely by the demand for certain textiles (primarily cotton fabric) and particularly black denim, which has increased significantly in popularity in recent years.⁶³ Demand for sulfur dyes increased by approximately 32 percent between 1989 and 1991.⁶⁴

The increased popularity of black denim has led to the introduction of new sulfur dye products developed to meet the needs of the fashion industry. Both Sandoz and C.H. Patrick have engaged in research and development efforts to develop sulfur dyes and dye pretreatments that create a "stone washed" or "distressed" look and have marketed their dyes extensively, but C.H. Patrick appears to have captured a larger share of the high fashion niche market for black denim than has Sandoz.⁶⁵ Evidence on the record suggests that Sandoz

⁶⁰ 19 U.S.C. § 1677(7)(C)(iii).

⁶¹ Id.

⁶² Id.

⁶³ Report at I-46. There was testimony at the Commission's hearing that the market for black denim has grown from approximately 10 percent of the total denim market to approximately 30 percent today. Tr. at 92-93.

⁶⁴ Report at Table 24.

⁶⁵ Report at I-46 to I-48. Sales of sulfur dyes are generally made through direct contacts between sales representatives of the dye companies and purchasing agents at the textile mills. However, when a company develops new dyes or pretreatments that create novel effects, the marketing staff of the dye company may produce sample fabrics that display these effects and contact

(continued...)

has not always been at the forefront of innovation with respect to new sulfur dye products.⁶⁶ Demand for sulfur dyes for use in dyeing leather has also increased in recent years.⁶⁷

A second recent development affecting the industry was the introduction by Southern Dye of an environmentally safer "free sulfur free" dye. All of the dyes sold by Southern Dye are of the environmentally safer variety. This innovation by Southern Dye was followed by Sandoz's introduction of a new line of dyes that produce less free sulfur during its application.⁶⁸ One of the two new product lines introduced by Sandoz over the period of investigation is its Sandozol RDT which is designed to reduce the amounts of certain pollutants released during application of the dyes to textiles.⁶⁹

A third development in the sulfur dyes market is the introduction by Sandoz and C.H. Patrick of lower priced black dyes that are substantially similar to dyes already on the market. In 1989, Sandoz began offering its "Deniblack 4G" as a lower priced alternative to its existing Sulfur Black 4GCF for use on denim.⁷⁰ In 1990, C.H. Patrick introduced its less expensive dye known as "Denim Black 2000."⁷¹ In spite of the introduction of these lower priced products, however, some large customers are unwilling to change dye

⁶⁵ (...continued)

designers and garment manufacturers rather than the textile mill. If a designer is interested in the new product, the dye producer can create what is known as a "pull-through" sale, whereby the garment manufacturer places an order with the textile company specifying both the fabric and the new dye. Report at I-49.

⁶⁶ End User Submissions; Tr. at 16-17.

⁶⁷ Report at I-46.

⁶⁸ Report at I-48. Southern Dye asserts, however, that its dyes are significantly different from the environmentally safer dyes produced by Sandoz and that its customers purchase its products because they meet special environmental and health concerns. Report at I-48.

⁶⁹ Report at I-48.

⁷⁰ Report at I-48.

⁷¹ Report at Figure 6.

suppliers because they do not want to risk altering the appearance of their products in ways that might make them less marketable in order to obtain small savings in the cost of dyestuffs.⁷²

Apparent domestic consumption of sulfur dyes increased between 1989 and 1991 and was higher in January to September of 1992 than in the corresponding period in 1991.⁷³ Sandoz's production and U.S. shipments also increased in both quantity and value over the three year period of investigation and were higher in January to September of 1992 than in the corresponding period in 1991.⁷⁴ Sandoz's production capacity increased between 1989 and 1991 then remained constant between January to September of 1991 and January to September of 1992.⁷⁵ Sandoz's rate of capacity utilization decreased moderately between 1989 and 1991, but was higher in January to September of 1992 than in the corresponding period of 1991.⁷⁶

The unit value of Sandoz's U.S. shipments increased between 1989 and 1991 and was higher in January to September of 1992 than in the corresponding period in 1991.⁷⁷ In addition, Sandoz's end-of-period inventories of finished sulfur dyes decreased between 1989 and 1991, but were moderately higher in January to September of 1992 than in the corresponding period in 1991. The ratio of such inventories to total shipments also decreased between 1989 and 1991, and was slightly higher in the first nine months of 1992 than in the first nine months of 1991.⁷⁸

⁷² Report at I-48. We note that the cost of the dye generally accounts for a very small percentage of the cost of the finished product.

⁷³ Report at Table 24.

⁷⁴ Report at Table 4 and Table 5.

⁷⁵ Report at Table 4.

⁷⁶ Report at Table 4.

⁷⁷ Report at Table 5.

⁷⁸ Report at Table 7.

The average number of U.S. production and related workers producing sulfur dyes for Sandoz decreased between 1989 and 1991, as Sandoz's productivity (measured in pounds produced per hours worked) increased. The number of production and related workers employed by Sandoz was higher in January to September 1992 than in the corresponding period of 1991 and its productivity was higher in January to September 1992 than in the corresponding period in 1991. The number of hours worked decreased between 1989 and 1991, but was higher in January to September of 1992 than in the corresponding period of 1991. Wages paid to production workers decreased over the three year period, but were higher for the period of January to September of 1992 than for the corresponding period in 1991. Average hourly wages paid increased between 1989 and 1991 and were higher in January to September 1992. Finally, Sandoz's unit labor costs (measured in cents per pound) decreased between 1989 and 1991 but were higher in the first nine months of 1992 than in the corresponding period in 1991.⁷⁹

Sandoz's net sales increased over the three year period of investigation, and were higher for the period January to September 1992 than for the corresponding period in 1991. In spite of this increase, its operating income decreased throughout the three year period of investigation, as did operating income and operating income as a percentage of net sales. Sandoz's operating income as a percent of its net sales, however, were higher for the period January to September 1992 than for the corresponding period in 1991.⁸⁰

The decrease in Sandoz's operating income in spite of an increase in net

⁷⁹ Report at Table 8.

⁸⁰ Report at I-29.

sales appears to be the result of a number of factors unrelated to the subject imports including, among other things, an increase in sales of Sandoz's lower priced Deniblack dye at the expense of its higher priced sulfur black dye and increases in its operating costs.^{81 82}

IV. CUMULATION

In determining whether there is material injury by reason of LTFV imports, the Commission is required to assess cumulatively the volume and effect of imports from two or more countries subject to investigation if such imports are reasonably coincident with one another and "compete with each other and with like products of the domestic industry in the United States market."⁸³ Cumulation is not required; however, when imports from a subject country are negligible and have no discernible adverse impact on the domestic industry.⁸⁴

In assessing whether imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

- (1) the degree of fungibility between the imports from different

⁸¹ See Report at I-65 and I-66.

⁸² Commissioner Rohr finds that the domestic industry is not currently experiencing material injury. He bases this determination on Sandoz's strong participation in the growing sulfur dye market as evidenced by its solid increases in production, shipments, capacity, productivity and net sales and notes that, though Sandoz did experience decreased operating income and income margins between 1989 and 1991, both of these indicators rebounded significantly in the first nine months of 1992. Accordingly he does not join in the remainder of these views. For his findings on threat, see the Additional Views of Commissioner David B. Rohr.

⁸³ 19 U.S.C. § 1677(7)(C)(iv)(I); Chaparral Steel Co. v. United States, 901 F.2d 1097 (Fed. Cir. 1990).

⁸⁴ 19 U.S.C. § 1677(7)(C)(v). In determining whether imports are negligible, the statute directs the Commission to consider all relevant economic factors including whether: (I) the volume and market share of the imports are negligible; (II) sales transactions involving the imports are isolated and sporadic; and (III) the domestic market for the like product is price sensitive by reason of the nature of the product, so that a small quantity of imports can result in price suppression or depression. Id.

countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product; and

(4) whether the imports are simultaneously present in the market.⁸⁵

While no single factor is determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the imports compete with each other and with the domestic like product.⁸⁶ Only a "reasonable overlap" of competition is required.⁸⁷

We find that there is sufficient competition between the subject imports of sulfur dyes from China, India, and the United Kingdom and between the subject imports and the domestic like product to warrant cumulation. Respondent James Robinson, a U.K. producer of C.I. sulfur dyes, argued at the hearing that the sulfur black product it sells is unique and has no competitors.⁸⁸ C.H. Patrick, the largest purchaser of subject imports who purchases imports from all three subject countries (and therefore is aware of the nature of competition between the subject imports), argues that cumulation is appropriate.⁸⁹

⁸⁵ See Fundicao Tupy, S.A. v. United States, 678 F. Supp. 898 (CIT 1988), aff'd, 859 F.2d 915 (Fed. Cir. 1988).

⁸⁶ See, e.g., Wieland Werke, AG v. United States, 718 F. Supp. 50, 52 (CIT 1989).

⁸⁷ See, e.g., Granges Metallverken AB v. United States, 716 F. Supp. 17 (CIT 1989).

⁸⁸ Tr. at 126-127.

⁸⁹ Posthearing Brief of C.H. Patrick at 9.

As discussed above, Sandoz has been willing in the past to enter into negotiations with potential purchasers of its intermediate dyes indicating that some level of competition exists between Sandoz's intermediate C.I. sulfur dyes and the subject imports.^{90 91 92}

With respect to sales to end users of C.I. leuco sulfur dyes, it is clear that C.I. leuco sulfur dyes produced by Sandoz compete with C.I. sulfur dyes that are imported from the subject countries and finished by C.H. Patrick and Southern Dye into C.I. leuco sulfur dye. All end users reported that both the domestic product and the products produced by C.H. Patrick and Southern Dye were employed in the same range of uses.⁹³

V. NO MATERIAL INJURY BY REASON OF LTFV IMPORTS

In determining whether the domestic industry is materially injured by reason of the imports under investigation, the statute directs the Commission to consider:

(I) the volume of imports of the merchandise which is the subject of the investigation;

⁹⁰ See discussion supra at 16.

⁹¹ Respondents Atul, an Indian producer, and Biddle Sawyer, an importer of Indian dye, contend that the Commission should not cumulate imports of C.I. sulfur dyes from India because C.I. solubilized sulfur dye used in the leather industry does not compete with C.I. leuco sulfur dyes in either end use or in geographic markets. Prehearing Brief of Atul and Biddle Sawyer at 34-35. There is evidence on the record to indicate that imports of C.I. solubilized sulfur dyes compete with domestically produced C.I. solubilized sulfur dyes, and that distributors, such as Keystone Aniline, sell both domestic and imported C.I. solubilized sulfur dyes. Tr. at 23; Tr. at 95-96.

⁹² Commissioner Crawford disagrees with the majority that evidence in the record indicates some level of competition exists between Sandoz's intermediate sulfur dyes and the subject imports. Sandoz's offer to sell to Patrick was in no sense a good faith bargaining effort since the price quoted by Sandoz for the intermediate dye was greater than the current market price for the finished sulfur dye. Although the record on Southern's experience with Sandoz is business confidential, Commissioner Crawford notes that she does not find the record supports any reasonable definition of competition.

⁹³ Report at I-49.

(II) the effect of imports of that merchandise on prices in the United States for like products; and

(III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations within the United States.⁹⁴

In making this determination, the Commission may consider "such other economic factors as are relevant to the determination" ⁹⁵ However, the Commission is not to weigh causes.^{96 97 98}

In determining whether there is material injury by reason of the LTFV imports, the statute directs the Commission to consider "whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."⁹⁹ In calculating trends for such indicators as total domestic consumption and other trends relating to volume, it has been necessary to convert data regarding the quantity of subject imports into estimates of the equivalent weight of the finished dyes.¹⁰⁰ This process necessarily introduced some degree of uncertainty into the quantity figures because raw material characteristics vary from factory to factory depending on the

⁹⁴ 19 U.S.C. § 1677(7)(B)(i).

⁹⁵ 19 U.S.C. § 1677(7)(B)(ii).

⁹⁶ See, e.g., Citrosuco Paulista, S.A. v. United States, 704 F. Supp. 1075, 1101 (CIT 1988).

⁹⁷ Chairman Newquist and Commissioner Nuzum note that the Commission need not determine that imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 249, 96th Cong., 1st Sess. 57 and 74 (1979). Rather, a finding that imports are a cause of material injury is sufficient. E.g., Metallverken Nederland, B.V. v. United States, 728 F. Supp. 730, 741 (CIT 1989); Citrosuco at 1101.

⁹⁸ Views on the proper standard of causation of Vice-Chairman Watson are set out in Certain Helical Spring Lockwashers from the People's Republic of China and Taiwan, Inv. No. 731-TA-624 and 625 (Preliminary), USITC Pub. 2565 at 21, note 99 (October 1992).

⁹⁹ 19 U.S.C. § 1677(7)(C)(i).

¹⁰⁰ Report at I-97.

characteristics and age of the raw materials.¹⁰¹

We note that domestic sulfur dyes accounted for the vast majority of shipments during the period of investigation. At no time during this period did cumulated imports account for more than thirty percent of domestic consumption in terms of either quantity or value.¹⁰² ¹⁰³ During the period of investigation, the market share of cumulated subject imports increased between 1989 and 1990, but decreased between 1990 and 1991, and continued to decrease in the interim period.¹⁰⁴ In view of the nonprice factors relating to imports discussed below, we do not find the volume or increase in volume of cumulated LTFV imports to be significant.

In evaluating the effect of LTFV imports on prices, the Commission considers whether there has been significant price underselling of imports and whether the imports suppress or depress prices to a significant degree.¹⁰⁵ We note that Sandoz's prices generally have risen over the period of investigation, indicating a lack of price depression.¹⁰⁶

Respondents argue that the Commission may not use the pricing data collected in these investigations in its analysis of whether significant price underselling exists or whether there has been price suppression or depression

¹⁰¹ Report at I-97, n.109.

¹⁰² Report at Table G-1.

¹⁰³ In calculating the volume of cumulated imports we included imports of subject sulfur dyes allegedly transshipped from subject countries through Europe. See Report at I-98. Generally Commerce determines which imports are "subject to investigation". In the investigation with respect to India, however, Commerce will not make a final determination until after we must issue our opinion. We note, however, that Commerce's finding on this issue will not change our conclusion that a domestic industry is not materially injured by reason of the subject LTFV imports.

¹⁰⁴ Report at Table G-1.

¹⁰⁵ 19 U.S.C. § 1677(7)(C)(ii).

¹⁰⁶ Report at Tables 26, 29, 30, 31, 32, 33, 36, and 38.

to a significant degree.¹⁰⁷ They allege that a significant portion of the prices of dyes finished from imports is attributable to processing activities performed after importation by C.H. Patrick and Southern Dye and therefore any underselling is not the result of dumping.¹⁰⁸

We disagree with the assertion that the Commission can make no use whatsoever of the pricing data collected in these investigations. Indeed, the Commission is required by statute to consider, "in each case," "the effects of imports of [the subject] merchandise on prices in the United States for like products" ¹⁰⁹ The Court of International Trade has stated that "[i]n evaluating the effect of imports on prices, it is clear that Congress vested the Commission with broad discretion 'to make reasonable interpretations of

¹⁰⁷ Tr. at 118.

¹⁰⁸ Prehearing Brief of C.H. Patrick at 12; Prehearing Brief of James Robinson at 14. To support this proposition, respondents cite two Commission determinations, Certain Granite From Italy and Spain, Inv. No. 701-TA-289 and 731-TA-381-383 (Final), USITC Pub. 2110 (August 1988), and Fabricated Structural Steel from Canada, Inv. No. 731-TA-387 (Preliminary), USITC Pub. 2062 (February 1988), which they allege stand for the proposition that "price comparisons are of no probative value and do not demonstrate significant underselling by the 'imported merchandise' when the comparison involves services, components or products not subject to investigation." Prehearing Brief of James Robinson at 12-13.

We disagree both with respondents' reading of Certain Granite From Italy and Spain and Fabricated Structural Steel from Canada and with their assertion that those two Commission determinations are the ones most applicable to the issues in these investigations. In the Granite investigation, a large number of factors limited the Commission's ability to make price comparisons between domestic and import prices of granite, including the fact that related products and services could account for a significant portion of the total bid price and many of the reported bid prices did not break out the cost of those items. Thus, this case does not support respondents' assertion that the Commission can make no use of price comparisons when the imported product undergoes any amount of finishing before being sold in the domestic market. Like Granite, Certain Fabricated Structural Steel from Canada, is not an analogous case because the only pricing data available for the domestic product were for bids in which the subject steel was sold along with engineering services, erection costs, and the cost of other products necessary for the erection of buildings.

¹⁰⁹ 19 U.S.C. § 1677(7)(B)(II).

the evidence and to determine the overall significance of any particular factor or piece of evidence.'"¹¹⁰

In these final investigations, petitioner argued at the hearing that the Commission should compare a constructed price for Sandoz's C.I. sulfur dye product that it uses captively with the price of the subject C.I. sulfur dye imports. While we believe that the Commission may use these data in evaluating the price effects of subject imports, we note that the CIT has stated that, "[i]t is critical to fair price comparisons that they be made at the level of actual competition in the U.S. market."¹¹¹ Thus we find data regarding prices at the level of sales to end users, which is the actual point of competition, to be more probative evidence than price comparisons between subject exports and an artificial transfer price constructed by Sandoz, which may bear limited relevance to the prices quoted in the end user markets in which the merchandise is actually sold.

While we disagree with respondents' contention that we are precluded from considering pricing data, we recognize certain limitations in the data.^{112 113} We note first that in assessing the prices to end users of finished dyes sold by Sandoz, C.H. Patrick and Southern Dye we are assessing

¹¹⁰ Copperweld Corporation v. United States, 682 F. Supp. 552, 564 (CIT 1988).

¹¹¹ Chung Ling Co. v. United States, Slip Op. 90-10-00528 (July 28, 1992) at 22 (citing Maine Potato Council v. United States, 613 F. Supp. at 1245).

¹¹² We note that direct price comparisons between the imported and the domestic products were possible only for imports of C.I. solubilized sulfur black 1 from the United Kingdom. Report at I-115.

¹¹³ Vice Chairman Watson and Commissioner Crawford find the pricing data in these investigations to be of limited, if any, value in assessing underselling in determining whether the domestic industry is materially injured by reason of the subject imports, because the significant amount of value added by U.S. finishers may have masked any price effects from the dumped imports. In addition, the substantial value added blurs the distinction between a comparison of an import and a U.S. like product and a comparison of two U.S. products.

prices at a different level of trade than that at which the subject dyes are imported. In addition, we note that the purchase prices for finished dyes include value added by the U.S. finishers.

In considering the evidence of record on price effects, we do not find significant underselling for the following reasons. First, an examination of prices of finished dyes sold by U.S. finishers and Sandoz's prices imports revealed no overall trend among the dyes selected for comparison, although the prices for individual dyes showed both upward and downward trends.¹¹⁴ In evaluating price trends, we selected for comparisons, among others, the Sulfur Black 1 dyes that appeared to compete most closely with each other based on factors such as dye characteristics and purchasers perceptions.¹¹⁵

Second, we believe that nonprice factors play an important role in the market for sulfur dyes. Indeed there is evidence that for certain purchasers, nonprice factors play a more important role than price in purchasing decisions. These customers include many customers who purchase environmentally safer sulfur dyes¹¹⁶ and those customers who desire particular fashion effects.^{117 118} As noted previously, there is evidence on the record

¹¹⁴ Report at I-53.

¹¹⁵ Report at I-53.

¹¹⁶ We note that Sandoz attributes a portion of the increase in its sales to increasing demand for its environmentally safer sulfur black dye. Report at I-65.

¹¹⁷ See Tr. at 16-18, 84-87, 89 and 61. We note that representatives of Sandoz testified at the Commission's hearing that Sandoz is increasing its capacity to produce environmentally safer sulfur dyes. Tr. at 62. C.H. Patrick does not currently market an environmentally safer sulfur dye.

¹¹⁸ Chairman Newquist notes that in some instances, particularly where "fashion" is involved, the Commission has recognized that heightened consideration of customer or end-user preference and demand may be appropriate. For example, in its negative determination in Sweaters Wholly or in Chief Weight of Manmade Fibers from Hong Kong, the Republic of Korea and Taiwan, USITC Pub. 2577, Inv. Nos. 731-TA-448-450 (Final Views on Remand) (Nov. 1992), the Commission stated:

(continued...)

that Sandoz has not always been at the forefront of innovation with respect to new sulfur dye products.¹¹⁹ For other customers, however, price is clearly an important factor in purchasing decisions.¹²⁰

In the segment of the market where purchasing decisions are made principally on the basis of price, we note that price reductions were initiated by Sandoz.¹²¹ As noted earlier, Sandoz was the first to introduce a lower priced line of black sulfur dyes when it introduced its Deniblack product in 1989. C.H. Patrick then introduced its lower priced Denim Black 200 product in 1990.¹²² On the basis of the above discussion, we conclude that domestic prices have not been suppressed to a significant degree by the LTFV imports.

In assessing the impact of LTFV imports on the domestic industry we consider, among other relevant factors, U.S. consumption, production, shipments, capacity utilization, employment, wages, financial performance,

¹¹⁸ (...continued)

[a]s a background to our discussion . . . we note that domestic producers tend to produce sweaters using basic yarns and styles, whereas [the subject countries] and other foreign producers are better able to produce fancier sweaters requiring more handwork. With this in mind, we note first that there have been changes in consumer preferences. For example, consumers have become more conscious of style and fashion trends, resulting in a shift in consumer taste toward sweaters with more intricate designs and patterns. In addition, the evidence in these investigations indicates a significant shift in sweater consumption away from [manmade fiber] toward cotton sweaters.

Id. at 23 (footnotes omitted).

¹¹⁹ End User Submissions; Tr. at 16-17.

¹²⁰ Report at I-113. We note that all end users reported that both the Sandoz and C.H. Patrick dyes were used in the same range of uses and that a majority of end users stated that the Sandoz product and the products of U.S. finishers and distributors of subject imports were of comparable quality. id.

¹²¹ Report at I-41.

¹²² Report at I-41.

capital investment, and research and development expenses.¹²³ In these investigations, due to the lack of significant volume or price effects of the subject imports, we do not find a sufficient impact by the LTFV imports on the industry to warrant an affirmative determination.

Based on our analysis of the financial condition of the domestic industry and the nonprice factors discussed above, we find a lack of causal nexus between any injury the industry may be suffering and the LTFV imports. While Sandoz experienced a decrease in its net sales and share of apparent U.S. consumption in 1990, its net sales and market share increased in 1991 and both were higher in the first nine months of 1992 than in the first nine months of 1991.¹²⁴ Further, Sandoz's net sales in terms of volume increased throughout the entire period of investigation.¹²⁵ We conclude, therefore, that the domestic sulfur dyes industry is not materially injured by reason of LTFV imports from China and the United Kingdom.

VI. NO THREAT OF MATERIAL INJURY BY REASON OF LTFV IMPORTS

A. Cumulation

In analyzing whether unfair imports threaten to cause material injury to a domestic industry, the Commission is not required, but has the discretion, to cumulate the price and volume effects of imports from two or more countries if such imports compete with each other and with the like products of the domestic industry in the United States market, and are subject to

¹²³ See 19 U.S.C. § 1677(7)(C)(iii).

¹²⁴ Report at Table 24 and I-61. As noted above, Sandoz's operating income decreased between 1990 and 1991 but was higher in the first nine months of 1992 than in the first nine months of 1991. Report at I-61.

¹²⁵ The discrepancy between the volume and value of Sandoz's net sales between 1989 and 1990 may reflect the introduction of its lower priced Deniblack.

investigation.¹²⁶

Imports from China, India, and the United Kingdom are subject to concurrent antidumping duty investigations. For the reasons cited in our discussion of cumulation for material injury, we find that the competition requirement has been met in these investigations.

In these final investigations we have cumulatively assessed the price and volume effects of the subject imports from China, India, and the United Kingdom and find that the domestic industry is not threatened with material injury by reason of LTFV imports from China and the United Kingdom.^{127 128}

B. Analysis of Threat of Material Injury By Reason of Unfair Imports

Section 771(7)(F) of the Tariff Act of 1930 directs the Commission to determine whether a U.S. industry is threatened with material injury by reason of LTFV imports "on the basis of evidence that the threat of material injury is real and that actual injury is imminent."¹²⁹ The statute identifies ten specific factors to be considered and we have considered all of the factors

¹²⁶ Metallverken Nederland B.V. v. United States, 728 F. Supp. 730, 741-42 (CIT 1989); Asocoflores, 704 F. Supp. 1068, 1072 (CIT 1988).

¹²⁷ This determination relates only to LTFV imports from China and the United Kingdom. However, because we cumulate the subject imports, we also cumulate the price and volume effects of allegedly LTFV imports of sulfur dyes from India which are also subject to investigation.

¹²⁸ Vice Chairman Watson has determined that appropriate circumstances exist to cumulate subject imports from China, India and the United Kingdom. He notes that the various trends in the statutory threat factors as well as the capabilities and intentions of the foreign respondents overlap to a sufficient extent. Even if he had determined, however, not to cumulate the subject imports from China, India and the United Kingdom, Vice Chairman Watson would have made individual negative determinations with respect to those countries.

¹²⁹ 19 U.S.C. § 1677(7)(F)(ii). While an analysis of the statutory threat factors necessarily involves projection of future events, our determination is not made based on supposition, speculation or conjecture, but on the statutory directive of real and imminent injury. See, e.g., S. Rep. No. 249, 96th Cong., 1st Sess. 88-89 (1979); Hannibal industries Inc. v. United States, 712 F. Supp. 332, 338 (CIT 1989).

relevant to the particular facts of this investigation. These include data regarding foreign production capacity, market penetration, price suppression or depression, inventories of the subject merchandise, under-utilized production capacity in the exporting countries, and the actual or potential negative effects on the domestic industry's existing development and production efforts.^{130 131} The presence or absence of any single threat factor is not necessarily dispositive.¹³²

In these final investigations, we find that the domestic industry is not threatened with material injury by reason of LTFV imports from the subject countries.

We do not find any excess or underutilized capacity in the subject countries that is likely to result in a significant increase in exports to the United States. We note that the only two significant importers of the subject dyes, Southern Dye and C.H. Patrick are currently operating at close to full capacity and have no plans to increase their imports.¹³³ There also is no credible evidence on the record that indicates that these two finishers have the ability to increase their capacity to import and finish sulfur dyes in the near future. Because the "bottleneck" effect of these finishers limits the amount of imports that enter the U.S. market, it is unlikely that any excess

¹³⁰ Three of the statutory factors are not relevant to the facts of these investigations and therefore will not be discussed further. These are factors (I) regarding subsidies, (VIII) regarding potential product shifting, and (IX) regarding raw and processed agricultural products.

¹³¹ The Commission must also consider whether dumping findings or antidumping remedies in markets of foreign countries against the same class of merchandise suggest a threat of material injury to the domestic industry. 19 U.S.C. § 1677(7)(F)(iii)(I). We have not received any evidence that there are any dumping findings or remedies in any other country involving sulfur dyes from China, India, or the United Kingdom.

¹³² See e.g., Rhone Poulenc, S.A. v. United States, 592 F. Supp., 1324 n.18 (CIT 1984).

¹³³ Report at Table 4.

capacity in the subject countries will result in a significant increase in exports to the United States.

In addition, information on the record indicates that some amount of excess capacity to produce the subject sulfur dyes does exist in China,¹³⁴ but data collected in these investigations indicate that there is a large home market in China for the subject sulfur dyes and that the United States is not the largest export market for the Chinese industry.¹³⁵

Because there are only two manufacturers of the subject sulfur dyes from India who export to the United States, capacity figures for India are business proprietary. We note, however, that imports from India accounted for less than 10 percent of subject imports and that there are several constraints on the capacity of the Indian sulfur dye industry, including shortages of chemical intermediates such as DNCB and the need to upgrade its technology in various areas.¹³⁶

There is only a single producer of the subject imports in the United Kingdom and evidence collected in these investigations indicates that the production capacity of that producer has decreased over the period of investigation, that the capacity utilization rate for that producer is high, and that the importance of export markets other than the United States is increasing.¹³⁷

With respect to any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level, we again find that due to the importing "bottleneck," it is unlikely that an

¹³⁴ Report at I-87.

¹³⁵ Report at I-83; Tr. at 115.

¹³⁶ Report at I-88.

¹³⁷ Tr. at 99-100; Report at Table 22.

increase in cumulated imports will increase to an injurious level. Moreover, while the volume of cumulated imports did increase to some degree over the period of investigation, import market penetration of cumulated imports did not "rapidly increase" between 1989 and 1991.¹³⁸

We also find no probability that cumulated imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise¹³⁹ for the reasons stated above in our discussion of material injury by reason of the subject imports.

With respect to "any substantial increase in inventories of the merchandise in the United States,"¹⁴⁰ inventories of cumulated imports by quantity increased between 1989 and 1990, then decreased from 1990 to 1991. As a ratio to imports, inventories of cumulated imports decreased between 1989 and 1991 and were lower in January to September 1992 than in the corresponding period in 1991.¹⁴¹

We also find that any existing or potential effects on existing development and production efforts of the domestic industry are not sufficient to warrant a threat finding. While petitioner alleged that the LTFV imports have affected its plans for the future, we note that existing funding for capital expenditures and research and development suggest that the industry is not threatened with material injury by reason of imports of sulfur dyes from the subject countries.¹⁴²

¹³⁸ Report at Table 23. The volume of cumulated imports by quantity increased from 11.5 million pounds in 1989 to 13.7 million pounds in 1991.

¹³⁹ 19 U.S.C. § 1677(7)(F)(i)(IV).

¹⁴⁰ 19 U.S.C. § 1677(7)(F)(i)(V).

¹⁴¹ Report at Table 19.

¹⁴² Report at Appendix J; I-75.

Finally, we find no other demonstrable trends or evidence in the record that would support a finding of threat of material injury by reason of cumulated subject imports.

CONCLUSION

For all of the foregoing reasons, we find that the domestic industry producing sulfur dyes is neither materially injured nor threatened with material injury by reason of LTFV imports of sulfur dyes from China and the United Kingdom.

**Additional Views of Commissioner David B. Rohr on Threat of
Material Injury by Reason of LTFV Imports from China and the
United Kingdom**

I concur with my colleagues that the domestic sulfur dye industry is not threatened with material injury by reason of LTFV imports from China and the United Kingdom. However, I disagree with their use of a formal cumulated analysis in reaching this conclusion. I have therefore prepared these additional views in order to set forth my individual findings as to the individual threats posed to the domestic industry by the subject imports from China and the United Kingdom.

Vulnerability of the Industry

For purposes of my analysis of the vulnerability of the sulfur dyes industry, I incorporate the discussion contained in the Condition of the Industry section of the views of the Commission majority.¹ In making my determination, I relied on no single indicator. I conclude that the indicators as a whole reveal an industry that cannot be said to be currently experiencing material injury. I also conclude, based upon these same factors, that it is not highly vulnerable to material injury.

¹ Views of the Commission at 16.

Cumulation

I have expressed my concerns in the past over the use of formal cumulated analysis in Commission threat opinions. As I have explained, a threat analysis involves the assessment by the Commission of the capabilities and intentions of foreign producers with regard to the domestic market and domestic industry. Formal cumulation, by ignoring differences in the trends in the various threat indicators, raises the possibility that the capabilities or intentions of one set of foreign producers will be "assigned" to another set of foreign producers.

I have also been mindful of the fact that imports from different sources may have a collective impact on a domestic industry. This is what I believe the Court of International Trade had in mind when it stated that "cumulation" may be appropriate in certain circumstances in the context of threat analysis. I have reconciled these differences by undertaking what I term "informal" cumulation in my threat determinations. In performing this "informal" cumulation, I provide individual analysis of the threat posed by imports from a particular country but take into account the presence of other unfairly traded imports in my consideration of "other demonstrable adverse trends." By doing so, I can consider the collective impact of imports in the context of individual threat indicators while avoiding the unfair assigning of the consequences of the capabilities or intentions of one country to others.

The Commission can exercise its discretion in cumulating the price and volume effects of imports from two or more countries if such imports compete with each other and with the like products of the domestic industry in the United States market, and are subject to investigation.² In addition, the Commission also considers whether the imports are increasing at similar rates in the same markets, whether the imports have similar margins of underselling, and the probability that imports will enter the United States at prices that would have a depressing or suppressing effect on domestic prices of that merchandise.

In these final investigations I have assessed separately the price and volume effects of the subject imports from China and the United Kingdom due to differences in the rates at which at the imports are increasing and other factors.

The Statutory Factors

Section 771(7)(F) of the Tariff Act of 1930 directs the Commission to determine whether a U.S. industry is threatened with material injury by reason of LTFV imports "on the basis of evidence that the threat of material injury is real and that actual injury is imminent."³ The statute identifies ten specific

² Metallwerken Nederland B.V. v. United States, 728 F. Supp. 730, 741-42 (CIT 1989); Asocoflores, 704 F. Supp. 1068, 1072 (CIT 1988).

³ 19 U.S.C. § 1677(7)(F)(ii). While an analysis of the statutory threat factors necessarily involves projection of future events, my determination is not made based on supposition, speculation or conjecture, but on the statutory directive of real and imminent injury. See, e.g., S. Rep. No. 249, 96th Cong., 1st

(continued...)

factors to be considered and I have considered all of the factors relevant to the particular facts of this investigation. These include data regarding foreign production capacity, market penetration, price suppression or depression, inventories of the subject merchandise, underutilized production capacity in the exporting countries, and the actual or potential negative effects on the domestic industry's existing development and production efforts.^{4 5} The presence or absence of any single threat factor is not necessarily dispositive.⁶

In these final investigations, I find that the domestic industry is not threatened with material injury by reason of LTFV imports from each of the subject countries. As in the majority's analysis of the condition of the domestic industry, I note that much of the information on the condition and behavior of the foreign producers is business proprietary. Therefore, my

³ (...continued)
Sess. 88-89 (1979); Hannibal industries Inc. v. United States,
712 F. Supp. 332, 338 (CIT 1989).

⁴ Three of the statutory factors are not relevant to the facts of these investigations and therefore will not be discussed further. These are factors (I) regarding subsidies, (VIII) regarding potential product shifting, and (IX) regarding raw and processed agricultural products.

⁵ The Commission must also consider whether dumping findings or antidumping remedies in markets of foreign countries against the same class of merchandise suggest a threat of material injury to the domestic industry. 19 U.S.C. § 1677(7)(F)(iii)(I). The Commission has not received any evidence that there are any dumping findings or remedies in any other country involving sulfur dyes from China, India, or the United Kingdom.

⁶ See e.g., Rhone Poulenc, S.A. v. United States, 592 F. Supp., 1324 n.18 (CIT 1984).

discussion of the effects of the subject imports must necessarily be in general terms.

Threat of Material Injury by Reason of LTFV Imports from China

First, I do not find any excess or underutilized capacity in China that is likely to result in a significant increase in exports to the United States. Information on the record indicates that some amount of excess capacity to produce the subject sulfur dyes does exist in China. However, these dyes must be finished for sale to end-users in the United States. The only two significant importers and finishers of the subject dyes, Southern Dye and C.H. Patrick are currently operating at close to full capacity and have no plans to increase their imports.⁷ There also is no credible evidence on the record that indicates that these two finishers have the ability to increase their capacity to import and finish sulfur dyes in the near future. Because the "bottleneck" effect of these finishers limits the amount of imports that enter the U.S. market, it is unlikely that any excess Chinese capacity will result in a significant increase in exports to the United States. In addition, data collected in these investigations indicates that there is a large home market in China for the subject sulfur dyes and that the United States is not the largest export market for the Chinese industry.⁸

⁷ Report at Report at Table 4.

⁸ Report at I-37; Tr. at 115.

With respect to "any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level," I again find that due to the importing "bottleneck," it is unlikely that an increase in subject imports from China will increase to an injurious level.

I also find no probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise⁹ for the reasons stated earlier in the majority's discussion of material injury by reason of the subject imports.

Inventories of Chinese merchandise in the United States increased between 1989 and 1990, then decreased in 1991.¹⁰

I find no other demonstrable adverse trends or evidence in the record that would support a finding of threat of injury by reason of subject imports from China.¹¹

I also find that any existing or potential effects on existing development and production efforts of the domestic industry are not sufficient to warrant a threat finding. While petitioner alleged that the LTFV imports have affected its plans for the future, I note that existing funding for capital expenditures and research and development suggest that the

⁹ 19 U.S.C. § 1677(7)(F)(i)(IV).

¹⁰ Report at Table 19. Such inventories were also higher in the first nine months of 1992 than in the corresponding period in 1991. Id.

¹¹ 19 U.S.C. § 1677(7)(F)(i)(VII).

industry is not threatened with material injury by reason of imports of sulfur dyes from China.¹²

Based on these factors, I cannot determine that the subject imports from China pose a real and imminent threat of injury to the industry. Therefore, I conclude that LTFV imports from China do not pose a real and eminent threat of material injury to the domestic sulfur dye industry.

No Threat of Material Injury by Reason of LTFV Imports from the United Kingdom

Because there is only a single U.K. producer, I must discuss only general trends to avoid disclosing business proprietary information.

With respect to "any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports,"¹³ and "the presence of underutilized capacity for producing the merchandise in the subject exporting country,"¹⁴ I note that the same limitation on subject imports presented by the production capacity of the two U.S. finishers, C.H. Patrick and Southern Dye, also limits the level of subject imports from the United Kingdom. In addition, there is only a single producer of the subject imports in the United Kingdom and evidence collected in these investigations indicates that the production capacity of that producer has

¹² Report at Appendix J; I-33.

¹³ 19 U.S.C. § 1677(7)(F)(i)(II).

¹⁴ 19 U.S.C. § 1677(7)(F)(i)(VI).

decreased over the period of investigation.¹⁵ Moreover, the capacity utilization rate for that producer is high.¹⁶ In addition, there is evidence that indicates that the percentage of U.K. exports to the United States has decreased while relative exports to third country markets have increased.¹⁷

I also find with respect to the United Kingdom, as I did with respect to China, that petitioners' allegations that a rapid increase in U.S. market penetration by U.K. imports is likely and that the penetration will increase to an injurious level is highly speculative in light of the import "bottlenecks" discussed above. Moreover, imports of sulfur dyes from the United Kingdom decreased in both volume and value between 1989 and 1991.¹⁸

With respect to "any substantial increase in inventories of the merchandise in the United States,"¹⁹ I note that because there is a single U.K. producer, the level of inventories of subject imports from the United Kingdom is also business proprietary.²⁰

As I did in the case of China, I find no probability that imports of sulfur dyes from the United Kingdom will enter the

¹⁵ Report at Table 22.

¹⁶ Report at Table 22. The single U.K. producer, James Robinson, is presently operating at close to full capacity. Tr. at 99-101.

¹⁷ Tr. at 101.

¹⁸ Report at I-43. Those imports, however, were somewhat higher in the first nine months of 1992 than in the corresponding period in 1991. *Id.* The market share of United Kingdom imports was business proprietary.

¹⁹ 19 U.S.C. § 1677(7)(F)(i)(V).

²⁰ Report at Table 19.

United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise again for the reasons stated in the majority's discussion of causation. I find no other demonstrable adverse trends that indicate the probability that would support a finding of threat by reason of the LTFV imports from the United Kingdom.²¹

Finally, information collected in these investigations indicates that, in light of the domestic industry's recent capital expenditures, LTFV imports from the United Kingdom have not had "actual and potential negative effects on the existing development and production efforts of the domestic industry."²²

I conclude that subject imports from the United Kingdom do not pose a real and imminent threat of material injury to the domestic sulfur dye industry.

²¹ 19 U.S.C. § 1677(7)(F)(i)(VII).

²² 19 U.S.C. § 1677(7)(F)(i)(X). Report at Appendix J and I-33.

ADDITIONAL VIEWS OF COMMISSIONER CAROL T. CRAWFORD

Sulfur Dyes from China and the United Kingdom
Inv. Nos. 731-TA-548, 551 (Final)

I join the majority opinion in its discussion and determination that the like product in these investigations is all sulfur dyes and that the domestic industry producing sulfur dyes in the United States is not materially injured or threatened with material injury by reason of subject imports from China and the United Kingdom. However, I differ with the majority on the issue of the domestic industry.

At issue is whether to include U.S. finishers in the domestic industry, whether these firms are related parties, and if these firms are related parties, whether appropriate circumstances exist to warrant excluding these firms from the domestic industry for purposes of our analysis.

Having reviewed all the evidence of record, I have determined that the two U.S. finishers should be included in the domestic industry, and that they should not be excluded as related parties. I note that neither of these determinations affects the outcome of my analysis.

However, I would also note that the fact that the domestic industry, and related party determinations are not outcome determinative does not, in my judgment, relieve us of the statutory requirement to define the domestic industry. The statute directs the Commission to determine whether an industry

is materially injured by reason of the unfair imports. Defining the industry at issue does not become moot simply because it does not alter the outcome in this case.

I. Domestic Industry

Section 771(4) (A) of the Tariff Act of 1930 defines the domestic industry as:

the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product.¹

In determining whether a firm is a member of the domestic industry, the Commission has analyzed the overall nature of a firm's production-related activities in the United States. In my view, value added encompasses all of these factors and should carry considerable weight in determining whether a producer qualifies as part of the domestic industry. Furthermore, the Commission has determined on numerous occasions that "the like product determination is the industry determination,"² that is, companies that produce the like product constitute the domestic industry.

In deciding whether a firm qualifies as a domestic producer, the Commission has examined such specific factors as (1) the extent and source of a firm's capital investment; (2) the technical expertise involved in U.S. production activity; (3) the

¹ 19 U.S.C. § 1677(4) (A) .

² Asocoflores, 693 F. Supp. at 1169.

value added to the product in the United States; (4) employment levels; (5) the quantities and types of parts sourced in the United States, and any other cost and activities in the United States leading to production of the like product, including where production decisions are made.³ In the case of the like product including unfinished or intermediate products, I have also placed considerable weight on whether separate markets exist for the unfinished or intermediate products.⁴

In examining the record in these investigations, I find the preponderance of evidence supports the inclusion of C.H. Patrick and Southern Dye in the domestic industry producing sulfur dyes. Patrick's capital investment in its finishing operations is substantial. Southern uses a toller as its source of production, and it has been the Commission's practice to include all domestic production, including toll-produced or converted, in the definition of the domestic industry.⁵ I find no basis in the evidence or arguments presented to deviate from this practice. Therefore, both Patrick and Southern have real and substantial capital investment in their finishing operations.

³ Dry Film Photoresist from Japan, Inv. No. 731-TA-622 (Preliminary) USITC Pub. 2555 (August 1992) at 14; Dynamic Random Access Memories of One Megabit and Above from the Republic of Korea, Inv. No. 731-TA-556 (Preliminary), USITC Pub. 2519 (June 1992) at 11-12.

⁴ Dry Film Photoresist, Additional Views of Commissioner Carol T. Crawford at 24-25.

⁵ Refined Antimony Trioxide from the People's Republic of China, Inv. No. 731-TA-517, USITC Pub. 2497 (April 1992); Shop Towels from Bangladesh, Inv. No. 731-TA-514 (Final), USITC Pub. No. 2467 (February 1992).

Although the record is mixed on the issues of the amount of technical expertise involved and the sophistication of the technology employed in finishing unsolubilized sulfur dye, and the necessary amount of research and development required to compete effectively, I find the weight of the evidence, particularly from endusers' questionnaire responses, supports the respondents' position. I am also persuaded by the respondents' position that producing a commercially and technologically acceptable chemical modification (i.e., reduction and blending to create a unique dye) is considerably more difficult to perform in practice.⁶ As the staff report notes, "the chemical reactions that occur during the reduction process can affect significantly the final form of the product, as is the case, for example in the production of the new environmentally safer dyes."⁷ As the Commission states in its opinion, "some large customers are unwilling to change dye suppliers because they do not want to risk altering the appearance of their products in ways that might make them less marketable in order to obtain small savings in the cost of dyestuff."⁸ If large customers find considerable risk in changing suppliers that regularly compete in this market, then it is reasonable that these same customers would find equal or even greater risk in becoming suppliers to themselves.

As the majority Commission opinion states, C.H. Patrick

⁶ Transcript, pp.100-101, 194-196, and 202.

⁷ Staff report at I-13.

⁸ Commission opinion at 19, citing Report at I-48.

has engaged in development efforts to develop certain sulfur dyes and dye pretreatments.⁹ Given the success of U.S. finishers in product innovation and developing new niche markets, I do not find the comparison of U.S. finishers' R&D expenditures with Sandoz's expenditures meaningful. In addition, I agree with the Commission's opinion that the number of employees may not be relevant in some industries and do not find it to be determinative in these investigations.

Furthermore, there is no separate market for the unfinished or intermediate sulfur dye product.

Based on the evidence presented in these investigations, I find the domestic industry consists of all producers of sulfur dyes, including U.S. finishers.

II. Related Party Provision

The related parties provision allows for the exclusion of certain domestic producers from the domestic industry in analyzing whether there is material injury to the domestic industry. Applying this provision involves a two step process. First, the Commission must determine whether the domestic producer meets the definition of a related party. Second, if a producer is a related party, the Commission must determine whether "appropriate circumstances" exist to exclude such producers from the domestic industry.¹⁰

⁹ Commission opinion at 17.

¹⁰ 19 U.S.C. § 1677(4)(B).

C.H. Patrick and Southern Dye clearly are related parties, because they import the subject merchandise. The only issue is whether appropriate circumstances exist for the Commission to exclude them from the domestic industry. The Commission traditionally has examined at least three factors in deciding whether a related party is being "shielded" from the effects of subject imports and determining that appropriate circumstances exist to exclude that party. I find that the evidence in the record does not support exclusion of Patrick and Southern Dye from the domestic industry.

Patrick accounts for a substantial portion of U.S. production of sulfur dyes; Southern Dye accounts for only a small portion. I am persuaded, as are my colleagues, that the inclusion of Patrick and Southern Dye does not skew the overall operating performance and financial condition of the domestic industry. Although considerable debate has arisen in these investigations regarding the correct valuation of value added by the two finishers, I find that both Patrick and Southern provide significant value added to the finished sulfur dye product.

Of primary importance in my consideration is the reason the U.S. producers have decided to import the product subject to these investigations. The only domestic source of unfinished intermediate sulfur dye is petitioner, Sandoz, which competes with Patrick and Southern Dye in the market for finished sulfur dye. Sandoz has de facto denied Patrick and Southern Dye access to the unfinished intermediate sulfur dye, leaving them no choice

but to import to continue production and compete in the U.S. market for finished sulfur dyes.¹¹

¹¹ The specifics of these denials are business confidential and cannot be discussed in this opinion.

CONCURRING AND DISSENTING VIEWS OF COMMISSIONER ANNE BRUNSDALE
Sulfur Dyes from China and the United Kingdom

Invs. Nos. 731-TA-548 and 551 (Final)

I continue to analyze the like product, and thus many other issues, in these investigations somewhat differently than my colleagues. Although I encouraged the parties at the end of the preliminary investigation to discuss my views if the case returned for a final investigation, they silently declined the invitation. My analysis of this case is therefore not too different from what it was then.

I. Like Product

As I concluded in the preliminary investigation, the record strongly indicates another like product issue -- i.e., whether concentrated sulfur dye and solubilized sulfur dye are separate like products.

In Polyethylene Terephthalate Film etc. from Japan and Korea, Inv. Nos. 731-TA-458 and 459 (Final) USITC Pub. 2383, I distilled the usual multipart test the Commission uses (and which is repeated at note 6, supra), to focus on whether dumping would induce significant substitution between two or more potential like products by either producers or consumers (or, to use a shorthand phrase, whether they are "producer or consumer substitutable.") In this case, Commerce defined the articles under investigation to include both the various forms of intermediate dyestuff and finished dyes (the concentrated dyes

and the "so-called 'pre-reduced, liquid ready-to-dye' forms."
App. A-23.)¹

Consumers cannot readily switch between concentrated dye and solubilized sulfur dye, most obviously because the solubilization of concentrated dye involves performing a complex series of chemical reactions, not simply adding water. I-12-13; see also Additional Views of Commissioner Crawford at 50. The ultimate purchasers of the solubilized dyes do not perform these reactions, and so cannot use concentrated dyes in their businesses. I-13 n.37.² Those who buy concentrated dye are solubilizers, who use it as an input for their product. I-7.

The interesting question this set of facts raises is whether we should consider upstream and downstream goods to be like the articles subject to investigation, even though they are not consumer substitutable. It is a difficult question, but these

¹ I will refer to them, as I did in my opinion in the preliminary investigation, as concentrated dye and solubilized sulfur dye. By "solubilized sulfur dyes," I mean both C.I. solubilized sulfur dye and C.I. leuco sulfur dyes. In the final investigation, the parties used the term "solubilized sulfur dyes" to refer only to C.I. solubilized sulfur dyes. C.I. solubilized sulfur dyes are made from reacting intermediate dyestuff with thiosulfonic acid. C.I. leuco sulfur dyes are made from intermediate dyestuff that is chemically reduced (which makes it soluble). C.I. solubilized sulfur dyes and C.I. leuco sulfur dyes, though not consumer substitutable, are producer substitutable, as the majority opinion describes in some detail. Op. at 7-8. I fully join that conclusion.

² It is disingenuous, at the least, for Sandoz to argue that textile manufacturers used to reduce concentrated dye themselves. That was literally decades ago, and involved a different technology altogether. I-6 n.7. No textile mill does it today, nor could they do so at all easily or at a reasonable cost, as Commissioner Crawford points out in her separate opinion. Crawford op. at 50.

investigations created a good opportunity for beginning a general discussion.

As I noted in the preliminary investigation, there are three paradigmatic situations. The first is where the scope of investigation describes articles that are only an upstream product. In that situation, we should exclude any downstream products from the like product. Even if an integrated producer could easily vary its ratio of upstream to downstream production, this would be insufficient to conclude that its downstream products are "like" the upstream product being imported. The reason is that the imports of the upstream product could not possibly harm the downstream portions of the integrated producer's operations. As we have held before, "[b]roadening the definition of like product, and hence the definition of the domestic industry, to include products which result from further processing of the articles subject to investigation, has the effect of including within the definition of the domestic 'industry' producers of a downstream product whose interest, as consumers, in the investigation is contrary to the domestic producers of those articles . . . corresponding directly to the articles subject to investigation." Tungsten Ore Concentrates from the People's Republic of China, Inv. No. 731-TA-497 (Preliminary), USITC Pub. 2367 at 9. See also Nepheline Syenite from Canada, Inv. No. 731-TA-525 (Final), USITC Pub. 2502 at 8 n.15.

This focus on whether there is a coincidence of economic interest between producers of the upstream and downstream products strikes me as being exactly right. Consider the difficult case of an integrated producer. Even if imports of the upstream product reduced the market price of the upstream product in general, an integrated producer's marginal cost of making the downstream product would not change, and so its production should not be affected. One exception would be if the imports became so cheap that even an integrated producer began using them, instead of its own upstream product, as input for its downstream production. Even if this made its overall operation less profitable, its downstream production would not be harmed, because the costs of that production could only decline.³ As a general rule, domestic products that use the subject imports as an input should not be part of the like product just because they are made by an integrated producer.

The second situation is where the scope of investigation describes articles that are only a downstream product. In this situation, the Commission sometimes does include upstream products within the like product, by applying a "semifinished" product analysis. This analysis consists of listing various factors (not all of them recited in a consistent way), describing whether and to what extent they exist, and stating a conclusion.

³ There may well be exceptions to this general rule if, for example, production processes vary within an industry or downstream resources could not function outside an integrated operation.

These factors usually include: (1) the necessity of further processing the upstream product, (2) the relative cost of that processing, (3) the degree of interchangeability between the upstream and downstream product, (4) whether the upstream product is used only in the downstream product, and (5) whether the upstream product imparts to the downstream product its essential characteristics.

I find this test deeply unsatisfying. The first factor is downright silly: It is always necessary to process an upstream product further to make it a downstream product -- that is why it is called an "upstream" product. The last factor is positively mystical: I have never been able to understand what it means to say that an upstream product imparts to a downstream product "its essential characteristics." See, e.g., Fresh and Chilled Atlantic Salmon from Norway, Inv. No. 701-TA-302 (Final), USITC Pub. 2371 at 9 (discussing the salmonness of baby salmon compared to adult salmon). And the second and third factors, the cost of processing the upstream product into the downstream product and the interchangeability of the two, really make more sense on the consumer substitutability side of the like product analysis.

The remaining factor, whether the upstream product is used only in the downstream product, is much more useful. It helps us focus on what I regard as the key question of whether there is a coincidence, or at least a near coincidence, of economic interest between those who make the upstream product and those who make the downstream product. When we are asked to decide whether a

domestically produced product is "like" an imported one, we are not being invited to play at free association, we are being directed to determine where the economic impact of particular imports will be felt most directly. If our like product analysis deviates from a focus on the coincidence of economic interest between those who produce upstream and downstream products, it may blind us from recognizing the full impact that imports under investigation may be having on an American industry.

This case presents the third situation: The scope of investigation includes both upstream and downstream products. The Commission is not consistent in the approach it takes. Earlier this week, for instance, it applied the "semifinished" product analysis in Stainless Steel Flanges from India and Taiwan Invs. Nos. 731-TA-639 and 640 (Preliminary), even though none of the parties raised it. In this case, the Commission ignored the issue (both in the preliminary and final investigations), even though both Sandoz and I raised it.⁴

⁴ I therefore find it a bit troubling to see the majority state that "[i]n these investigations, as in the preliminary investigations, the only issue relating to the like product definition is whether C.I. solubilized sulfur black is a like product" Op. at 6. It is true that the parties did not contest the characterization of at least some downstream products as "like" the upstream products in this investigation, while in Stainless Steel Flanges they did. But this Commission does not routinely let the parties define the issues that we address or the analyses we use to resolve them. This independence usually takes the form of the mantra that "the Commission's title VII proceedings are investigations, not adjudications." The inconsistencies this promotes are then sometimes warded off with the incantation that "Commission determinations are sui generis, and the Commission is not obligated to follow prior decisions," see, e.g., Softwood Lumber from Canada, Inv. No. 701-TA-312

(continued...)

Nothing has turned up in this investigation to persuade me to change my conclusion in the preliminary. When the scope of investigation includes both upstream and downstream products, we should ask ourselves whether there is a coincidence of interest among the relevant producers. If there is, we should find one like product; if there is not, we shouldn't. In this investigation, the record shows that the production of sulfur dye has become componentized, with at least some upstream production occurring in one country for use in downstream production in another. There will not be a coincidence of economic interest among those specializing in downstream production and those having integrated operations. Therefore, I find there to be two like products in this investigation, concentrated sulfur dye and solubilized sulfur dye.

II. Domestic Industry

One of the advantages of finding two like products is that it makes analyzing the rest of the issues in these investigations very straightforward. The domestic industry producing concentrated sulfur dye consists of Sandoz, the only integrated domestic producer. The domestic industry producing solubilized sulfur dye consists of Sandoz and those firms that buy concentrate and solubilize it (the "solubilizers"). These solubilizers are not part of the concentrated dye industry,

⁴(...continued)
(Preliminary), USITC Pub. No. 2468 at 5 n.13 (connoisseurs of Latin will recognize the solecism: Commission determinations are really "ad hoc.")

because they produce a downstream product without making concentrated dye themselves. They need not be excluded as related parties from the industry of which they are a part -- the solubilized dye industry -- because they do not import solubilized dye.

Finding only one like product in this investigation quickly leads to two knotty problems, neither of which in my view can be untangled very well at all. The first is whether the solubilizers are part of the domestic industry, and the second is whether they are related parties.

Domestic Industry. I agree with my colleagues that the "domestic industry" means the domestic producers of the like product. But that just raises the question of what it means to "produce" a product when so much of the raw material comes from abroad. The Commission used to focus on the value added to that raw material in the United States. As we stated in Color Television Receivers From Korea and Taiwan, Inv. Nos. 731-TA-134, 135 (Final), USITC Pub. 1514 ("Color Televisions") at 7-8, "[t]he first issue which the Commission may examine in order to determine whether a firm is a 'domestic producer,' where significant parts or components are imported and assembled in a domestic facility, is the value added to the product in the United States."

It is certainly not easy to make a complete and accurate accounting of the value being added. As the Commission pointed out in Color Televisions, the "rules of allocation and the

problem of inter-party transfers may cause value-added analysis to be misleading." Id. at 8. But the difficulty is not only in accounting. It is in the meaning of "value" as well. Thus, the Commission also began looking at what it called "indicia of U.S. production activity" -- that is, the four or five or six factors that now constitute what the Commission "traditionally examines". Originally, we recognized that the purpose of taking "these indicia into consideration . . . [was to make] the value-added information become[] more meaningful." Id.

Since then, the list of factors has been repeatedly recited, often with a warning that no one factor is decisive. We then discuss each factor a little, and state a conclusion.⁵ I continue to question the vitality of this test in the absence of some criterion, such as value added, by which to judge the significance of the factors. See Portable Electric Typewriters from Singapore, Inv. No. 731-TA-515 (Preliminary), USITC Pub. 2388 at 21-23 (views of Acting Chairman Brunsdale). I am also wary at the majority's declining to reach a conclusion on the issue in this investigation, because to them it was "a close question." Op. at 12.

It really isn't. There has never, for instance, been a requirement that a majority of a product's value must be added in

⁵ Sometimes the discussion does not even go that far. In Stainless Steel Flanges, we simply noted that producers who finish imported unfinished flanges were part of the domestic industry "[i]n light of the definition of the like product" (which included both finished and unfinished flanges). USITC Pub. No. 2600 at 9.

this country for it to be considered a domestic product. In Low-Fuming Brazing Copper Wire and Rod From New Zealand, Inv. No. 731-TA-246 (Final), USITC Pub. No. 1779 (Nov. 1985) at 7, for example, products with only 20 percent of their value added in the United States were considered to have a "significant" value added which, when combined with the producers' "substantial" capital investment in the industry, was sufficient to make those producers part of the domestic industry. More recently, in Generic Cephalexin Capsules From Canada, Inv. No. 731-TA-423, USITC Pub. 2211 (Aug. 1989) at 11-12, the Commission included firms in the domestic industry whose added value was "extremely low," at least in part because the firms had invested a "significant amount of capital."⁶

Related Parties. The second knotty problem is the question of whether the solubilizers, having been deemed "producers of the like product," are to be excluded as related parties. My colleagues, following the parties' lead, frame the issue in the terms the Commission has traditionally used in the past.

First, the Commission has usually stated, and does again today, that the purpose of the related parties provision is to

⁶ Perhaps the formulation of when an industry exists in the United States, in 19 U.S.C. section 1337, should be applied as well to title VII cases: A domestic industry might include any firm with "(A) significant investment in plant and equipment; (B) significant employment of labor or capital; or (C) substantial investment in . . . engineering, research and development, or licensing." Even if these capital- or knowledge-intensive activities cannot simply be included in a value-added analysis, we might want to recognize them as "productive activities" in deciding questions of inclusion in the domestic industry.

address the concern that domestic producers who are related parties "may be in a position that shields them from any injury that might be caused by the imports." Op. at 14-15. This formulation is geared, I think, to a bifurcated approach where aggregated statistics are used to gauge the abstract health of a domestic industry. The majority of the Commission does not use this approach anymore, and I suspect we will need to reexamine the purpose of the related parties provision sometime soon. Moreover, this formulation seems aimed only at parties whose domestic production of the like product is reduced by their purchase of imports. Here, the solubilizers' domestic production of the like product may well be increased by their purchase of imports. The operations of the solubilizers are one of the effects of the subject imports, not something that is "shielded from" them. I regret that neither the parties nor my colleagues discussed these points. I hope some interested party in some other investigation will.

Indeed, the majority's discussion of the specific factors of the "appropriate circumstances" test is even thinner than it was in the preliminary. Although it reprints the factors, there is no discussion of them, only a conclusion that appropriate circumstances exist to exclude the finishers because "the primary interests of both finishers of sulfur dyes lie in importation rather than in domestic production." Op. at 16. There is no reference to record evidence to support this conclusion. (Not

that it matters: The Commission's negative determination guarantees that this issue is nonappealable.)

Still, I must conclude again, as I did in the preliminary investigation, that if the goal of our like product and domestic industry analysis is to define an industry so that any deleterious effects of dumping will be plainly visible, then I must agree with my colleagues' ultimate conclusion that the solubilizers are not part of the same industry as Sandoz. I continue to regret that the path they take to reach this sensible result is unnecessarily twisted, because they find one like product where there are really two.

III. Material Injury or Threat

Having defined two like products and therefore two domestic industries, I must then determine whether either of them is materially injured, or threatened with material injury, by the subject imports. I will consider each industry in turn.

The Solubilized Dye Industry. It is easy to see on this record that the solubilized dye industry is not being materially injured by the dumped imports. As the staff report notes, imports of solubilized sulfur dye were only a tiny percentage of the subject imports as a whole. I-42 (Table 23), I-49 n.126.⁷

⁷ I have changed my mind from the preliminary investigation and, as I stated earlier, I have now concluded that C.I. solubilized sulfur dyes are part of the same like product as C.I. leuco sulfur dyes. I therefore no longer consider it part of the concentrated dye industry. Nevertheless, imports of solubilized dyes of both sorts are still a very small fraction of the U.S. market. Table 24.

Moreover, only a very small part of the solubilized sulfur dyes are from China (which has by far the largest dumping margin assessed against its exports). I therefore repeat my determination in the preliminary investigation: There is no indication that any such imports are materially injuring the domestic solubilized dye industry. Moreover, those domestic firms that produce only solubilized dye oppose the petition, and this is fairly good evidence that the dumping of the subject imports is not materially injuring them.

It is also good evidence that the dumping of the subject imports is not threatening to injure them. The record is barren of any indication that there will be any great increase in imports of solubilized dye in the near future.

The Concentrated Dye Industry. In contrast, it is easy to see a reasonable indication that the domestic concentrated dye industry (i.e. Sandoz) is being materially injured by the dumping of concentrated dye. The key fact here is that the cumulated market share⁸ of the dumped imports is reasonably large, Table 24, and the dumping margins of the Chinese imports (which account for by far the largest part of imports) are enormous. I-18.

This means that a fair price (as calculated by the Commerce Department) for the Chinese imports would triple their price. Because concentrated sulfur dye is an essential and costly input in the production of the solubilizers' solubilized sulfur dyes, a

⁸ I join the majority's discussion of cumulation, and apply it to my analysis of material injury. See op. at 21-23.

near trebling of its cost would be an astonishing blow to their profitability. Compare Table 14 with I-29 (especially the operating income figures for the finishers). It is most unlikely that they could survive.

This would mean that Sandoz, as the only domestic producer of concentrate, would have its monopoly restored. Either Sandoz would be able to extract a very high price for sales of its concentrate to the finishers, or it would be able to drive them from the marketplace altogether and charge the downstream users of solubilized sulfur dyes a monopoly price. In either case, the competition provided by the sales of concentrate from abroad, in depriving Sandoz of such monopoly rents from its concentrate business, is materially injuring Sandoz. This may seem a perverse result; it is nevertheless one compelled by the application of antidumping law to all domestic industries regardless of the structure of the market in which they operate.⁹

⁹ It seems a bit odd for the majority to argue that "[t]he decrease in Sandoz's operating income in spite of an increase in net sales appears to be the result of a number of factors unrelated to the subject imports including, among other things, an increase in sales of Sandoz's lower-priced Deniblack dye at the expense of its higher priced sulfur black dye" Op. at 20-21. The record shows that Sandoz introduced Deniblack in 1989, the same year Southern Dye began operations, and only a year after C.H. Patrick began finishing sulfur dyes. I-23. For two years before that, Sandoz had no competition. I-21 n.67. The introduction of Deniblack while still selling a similar dye to existing customers looks less like a corporate blunder, and more like a completely rational attempt to attract new customers in the face of renewed competition, while trying to preserve old ones willing to pay a higher price (i.e. price discriminate).

INFORMATION OBTAINED IN THE INVESTIGATIONS

INTRODUCTION

On September 21, 1992, the U.S. Department of Commerce (Commerce) notified the U.S. International Trade Commission (Commission), with notice subsequently published in the Federal Register (57 F.R. 44163, September 24, 1992), that imports of sulfur dyes (including sulfur vat dyes)¹ from China and the United Kingdom are being, or are likely to be, sold in the United States at less than fair value (LTFV). Accordingly, effective September 21, 1992, the Commission instituted and established a schedule for the final antidumping investigations (Invs. Nos. 731-TA-548 and 551 (Final)) under the applicable provisions of the Tariff Act of 1930 to determine whether an industry in the United States is materially injured or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise.

On October 23, 1992, Commerce notified the Commission, with notice subsequently published in the Federal Register (57 F.R. 48502, October 26, 1992), that imports of sulfur dyes (including sulfur vat dyes) from India are being, or are likely to be, sold in the United States at LTFV. In addition, Commerce preliminarily determined that critical circumstances do not exist with respect to imports of the subject sulfur dyes from India. Accordingly, effective October 23, 1992, the Commission instituted and established a schedule for the final antidumping investigation (Inv. No. 731-TA-550 (Final)) under the applicable provisions of the Tariff Act of 1930 to determine whether an industry in the United States is materially injured or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise (57 F.R. 53779, November 12, 1992).

Notice of the institution of the Commission's final investigations, and of the public hearing to be held therewith, was given by posting copies of the notices in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notices in the Federal Register.² The hearing was held in Washington, DC, on January 13, 1993.³

¹ Sulfur dyes are synthetic organic coloring matter containing sulfur. Sulfur dyes are obtained by high-temperature sulfurization of organic material containing hydroxy, nitro, or amino groups or by reaction of sulfur and/or alkaline sulfide with aromatic hydrocarbons. For the purposes of these investigations, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms. The sulfur dyes subject to these investigations are classifiable under subheadings 3204.15.10, 3204.15.20, 3204.15.30, 3204.15.35, 3204.15.40, 3204.15.50, 3204.19.30, 3204.19.40 and 3204.19.50 of the Harmonized Tariff Schedule of the United States (HTS).

² Copies of the Commission's and Commerce's cited Federal Register notices are presented in app. A.

³ A list of witnesses appearing at the hearing is presented in app. B.

On January 25, 1993, Commerce notified the Commission of the postponement of its final determination in the antidumping duty investigation of sulfur dyes, including sulfur vat dyes, from India, until February 19, 1993. Accordingly, the Commission voted only on the investigations concerning China and the United Kingdom on February 11, 1993, and transmitted its determinations to Commerce on February 18, 1993.⁴

Commerce's Final Determinations

On January 8, 1993, Commerce published in the Federal Register (58 F.R. 3253) its final determination that imports of sulfur dyes, including sulfur vat dyes, from the United Kingdom are being, or are likely to be, sold in the United States at LTFV. With respect to allegations of critical circumstances for imports of the subject merchandise from the United Kingdom, Commerce found that critical circumstances do not exist.

On February 1, 1993, Commerce made its final determination that imports of sulfur dyes, including sulfur vat dyes, from the People's Republic of China (China) are being, or are likely to be, sold in the United States at LTFV. Commerce also determined that critical circumstances exist for all exporters of sulfur dyes from China, except Sinochem International Chemicals Company, Ltd.

Background

These investigations result from a petition filed by counsel on behalf of Sandoz Chemicals Corp. (Sandoz), Charlotte, NC, on April 10, 1992. The petition alleged that an industry in the United States is being materially injured and is threatened with further material injury by reason of imports of sulfur dyes (including sulfur vat dyes) from China, Hong Kong, India, and the United Kingdom that are alleged to be sold in the United States at LTFV. In response to that petition the Commission instituted antidumping investigations Nos. 731-TA-548, 549, 550, and 551 (Preliminary). Subsequently, Commerce did not initiate an antidumping duty investigation concerning imports of sulfur dyes from Hong Kong, and the Commission accordingly amended its institution notice to discontinue its antidumping investigation concerning Hong Kong (Inv. No. 731-TA-549).

As a result of its preliminary investigations, the Commission determined that there was a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of alleged LTFV imports of sulfur dyes from China, India, and the United Kingdom.

⁴ No vote has been scheduled, at this time, for the investigation concerning India, but the Commission's determination would be due to be transmitted to Commerce no later than 45 days after Commerce's final determination.

Previous Investigations

Sulfur dyes, including sulfur vat dyes, have not been the subject of other previous Commission investigations.

THE PRODUCTS

Description of the Subject Sulfur Dyes

The imported products subject to these investigations are sulfur dyes and sulfur vat dyes.⁵ The subject sulfur dyes are defined as follows:

Sulfur dyes.--Sulfur dyes are synthetic organic coloring matter or preparations based on synthetic organic coloring matter containing sulfur; they are obtained by high-temperature sulfurization of organic material containing hydroxy, nitro, or amino groups, or by reaction of sulfur or alkaline sulfide with aromatic hydrocarbons. For purposes of this report, sulfur dyes consist of the following categories of dyestuffs based on Color Index (C.I.) classifications:⁶

C.I. sulfur dyes.--C.I. sulfur dyes are sulfur dyes that have been synthesized but that require further processing for use in dyeing applications. C.I. sulfur dyes are generally processed into presscake (excluding sulfur vat presscake), powder, granular, or flake forms. Presscake refers to material as removed from the

⁵ Sulfur dyes are a subset of chemical products known as dyes, which, in turn, are a type of colorant. Colorants are products that impart color to a variety of substances, which are known as substrates. Colorants are classified as either dyes or pigments. Pigments are insoluble colorants that are physically incorporated into the substrate. Dyes are colorants that are soluble and that adhere to the substrate by chemical reaction with the substrate. Colorants act by absorbing all but a selected portion of the spectrum of white light. The portion of the spectrum not absorbed is reflected and is the color perceived by the eye. Dyes can be further classified as natural dyes or synthetic organic dyes; pigments are either inorganic or synthetic organic chemicals.

Sulfur dyes, as a group, constitute one dye application class. Application classes are groups of dyes (of sometimes varying chemical structure) which share common production, use, or application characteristics. The major application classes of synthetic organic dyes are acid, azoic, basic, direct, disperse, fiber reactive, sulfur, and vat dyes.

⁶ The Colour Index is the accepted industry classification for the thousands of dyes and pigments that are currently in existence. It is published by the Society of Dyers and Colourists, Bradford, England, in cooperation with the American Association of Textile Chemists & Colorists, Research Triangle Park, NC. The index covers natural and synthetic dyes, and synthetic organic and inorganic pigments. Additional information relating to the subject sulfur dyes, as provided in the Colour Index, is presented in app. C.

filter press fabric after synthesis. As noted below, physical characteristics are modified before sale to users.

C.I. leuco sulfur dyes.--C.I. leuco sulfur dyes are sulfur dyes that have been processed through chemical reduction into a water-soluble (or leuco) form. C.I. leuco sulfur dyes are processed into liquid form.

C.I. solubilized sulfur dyes.--C.I. solubilized sulfur dyes are sulfur dyes obtained by reacting synthesized sulfur dyes with thiosulfonic acid to produce a thiosulfonic acid derivative that is inherently water soluble. C.I. solubilized sulfur dyes are generally processed into powder form.

Sulfur vat dyes.--Sulfur vat dyes are a hybrid class of dyes, resembling both sulfur dyes and vat dyes. The subject sulfur vat dyes include, but are not limited to, vat dyes with the following C.I. generic numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. For purposes of this report, sulfur vat dyes consist of the following categories of dyestuffs:

Presscake.--Presscake sulfur vat dyes include those sulfur vat dyes that have been synthesized but are unreduced and require further processing for use in dyeing applications.

Reduced.--Reduced sulfur vat dyes include those sulfur vat dyes that have been processed through chemical reduction into a water-soluble (or leuco) form. Reduced sulfur vat dyes are processed into liquid form.

Paste.--Sulfur vat pastes are those vat dyes that have been processed through dispersion (grinding) into paste form.

The term "sulfur dyes" actually refers to a series of dyes⁷ that are shipped and/or sold in a variety of physical forms, including presscake, grains, powders, pastes, and liquids.⁸ Additionally, the product may be sold

⁷ The first synthesized sulfur black dye was produced in 1893, a development that stimulated the use of numerous organic compounds as starting material for additional sulfur dyes. Sulfur Black 1 was discovered in 1898; today it is still the number one volume dye in the textile industry. Before the 1930s, all sulfur dyes were produced in powder form and required chemical reduction by end users before they could be applied to a substrate. This step was eliminated by the next major development in the industry--the creation in 1936 of the first ready-to-use (pre-reduced) sulfur dye solution. The inventor of this solution patented his process and formed the Southern Dyestuff Co. (Sodyeco), which manufactured and marketed the product as "Sodyesul Liquids." Sodyeco has been in operation continuously since 1936 and is now part of Sandoz Chemicals Corp., the petitioner. Petition, p. 14.

⁸ The actual chemical composition of many sulfur dyes is still unknown. However, the chemical structure of both sulfur dyes and sulfur vat dyes can be
(continued...)

as reduced, water-soluble dye or in its non-reduced, water-insoluble form. In general, sulfur dyes must be in a water-soluble (or reduced) state before being applied by an end user to a substrate.⁹ Most of the subject sulfur dyes produced in the United States are sold as a ready-to-use, pre-reduced (C.I. leuco) liquid. Imported dyes are shipped into the United States as C.I. sulfur dyes in powder or granular form, which are then finished into the liquid form before sale to end users.¹⁰ Textile mills, the major end users, prefer to purchase the product as a pre-reduced liquid. C.I. leuco sulfur liquids, C.I. solubilized sulfur powder, and sulfur vat presscake are also imported.¹¹ Domestically produced and imported C.I. solubilized sulfur dyes, usually in the form of a soluble powder, are widely used in the leather and tanning industries.¹²

C.I. sulfur dyes, C.I. leuco sulfur dyes, C.I. solubilized sulfur dyes, and sulfur vat dyes are chemically and commercially distinct products that are not absolutely interchangeable in use. However, each chemical form of the dye can be successfully applied to textiles--the major use for the subject dyes--if appropriate application techniques are used.¹³ Although foreign textile manufacturers use C.I. sulfur dyes in their operations, no textile manufacturer in the United States is known to do so.^{14,15} Instead, U.S.

⁸ (...continued)

readily identified by the presence of sulfide or polysulfide linkages. Petition, p. 17.

⁹ Sulfur dyes consist of polymerized molecules containing numerous sulfur-sulfur chemical bonds. These bonds are broken during a reduction process when chemical reagents are added, placing the dye in a water-soluble form. After application, the dyes are returned to a water-insoluble form (by chemical oxidation) and thus attached or "fixed" to the substrate.

¹⁰ There are currently two large-scale finishers in the United States: C.H. Patrick & Co., Inc. (C.H. Patrick), Taylors, SC; and Southern Dye and Chemical Co. (Southern Dye), Greenville, SC, which finishes products under a toll arrangement. These firms import or purchase the vast majority of the subject imports.

¹¹ See app. D for a presentation of comments on the differences and similarities in the physical and chemical characteristics and uses of sulfur dyes and sulfur vat dyes, as well as comparisons of other categories of the subject sulfur dyes, as compiled from responses to the Commission's questionnaires.

¹² As further explained in app. C, C.I. solubilized sulfur dyes constitute a separate generic class in the Colour Index from other described sulfur dyes.

¹³ Transcript of the Commission's hearing, Jan. 13, 1993 (TR), p. 30, and petitioner's videotaped demonstration presented at hearing. Appropriate application techniques are discussed in the sulfur dyes portion of the Colour Index as presented in app. C.

¹⁴ TR, pp. 21, 22, and 263.

¹⁵ During these final investigations, end users were asked the question "what type of additional equipment would be necessary for you to use unsolubilized sulfur dyes?" Responses varied. For example, (a) "Mixing equipment--Operator training, safety training, and safety equipment" (***) response to the Commission's End User questionnaire, p. 17); (b) "(m)ajor capital investment would be required for mixing, blending, scrubbing and standardizing equipment plus the addition of trained personnel" (***) (c)

(continued...)

textile mills buy C.I. leuco sulfur dyes or mixtures containing C.I. leuco and C.I. solubilized sulfur dyes.¹⁶ At present, the only commercial use of conventional C.I. sulfur dyes in the United States is the manufacture of C.I. leuco sulfur dyes and C.I. solubilized sulfur dyes by sulfur dye finishers.¹⁷

The subject sulfur dyes in finished form are sold as proprietary compositions under tradenames specific to a manufacturer (e.g., Deniblack). Individual dye preparations may contain different diluents and application adjuvants or may contain two or more individual dyes to produce a specific hue or shade.^{18,19} There can be variations in product strength.²⁰

Petitioner claims that, except for the "environmentally safer dyes" discussed below, C.I. leuco sulfur dyes can be used interchangeably by end-users, permitting dual sourcing. Respondents disagree, stating that sulfur dyes from different sources demonstrate varying performance characteristics which finishers incorporate into and use to differentiate their finished products.²¹

Included in these investigations are sulfur vat dyes. Such dyes comprised approximately *** percent of total U.S. shipments of sulfur dyes by U.S. producers and finishers during 1991. Sulfur vat dyes are a hybrid class of dyes resembling both sulfur dyes and vat dyes. They can be sold and applied to the substrate in the form of most sulfur dyes (i.e., pre-reduced to a water-soluble liquid (C.I. leuco) using aqueous alkaline, sodium sulfide, and/or sodium sulfhydryde) or like a vat dye (i.e., as a non-reduced, water-insoluble paste requiring different reduction and oxidation agents). Most of the sulfur vat dyes consumed in the United States are of the former type.²²

¹⁵ (...continued)

"(w)e would have to purchase additional mixing equipment" (***), (d) "(e)nclosed mix tanks with external ventilation and odor removal devices" (***); (e) "(c)hemical processing equipment--reactor, additional building space" (***); (f) "(n)one" (***); and (g) "(n)one, but we would not want to do this" (***).

¹⁶ TR, pp. 50-51.

¹⁷ TR, pp. 101 and 120.

¹⁸ The subject sulfur dyes come in a wide range of hues and include most colors except true red. However, black (accounting for approximately *** percent of U.S. shipments during 1991) is by far the most important hue, followed by blues, olives, and browns.

¹⁹ See TR, p. 197, for testimony on the reasons for, and value of, blending of proprietary dyes to make a finished commercial dye product.

²⁰ Product strength refers both to the coloring strength of the unfinished presscake and to the dyeing strength of the finished product. Higher coloring strength is a result of fewer organic or inorganic impurities and produces a more fluid, soluble finished product. Prehearing brief of McNair Law Firm, exh. 6.

²¹ For example, products from ***. These different traits are reportedly manifested at the customer level, where dyes for different application techniques are not always interchangeable. Prehearing brief of McNair Law Firm, exh. 6.

²² During 1991 *** percent of U.S.-produced and finished sulfur vat dyes were sold as a vat dye (i.e., in the form of a non-reduced, water-insoluble

(continued...)

"Environmentally Safer Dyes"

Dyeing of textiles produces waste products that must be dealt with by the textile dyeing and finishing mill. These waste products include excess dye that is discarded,²³ impurities in the dyestuff used,²⁴ and dyeing

²² (...continued)

paste). Petitioner testified at the Commission's conference that the price of a sulfur vat dye sold in a pre-reduced form (i.e., like a C.I. leuco sulfur dye) is less than it would be if sold as a vat paste. Also, because they share common reducing agents, sulfur vat dyes may be combined with other sulfur dyes to produce a variety of shades. Preliminary TR, p. 63.

²³ "Textile dyeing" is a batch process and any given manufacturer is likely to apply a number of different dyes in the course of business. "Exhaust dyeing," in which exactly the amount of dye necessary to color the textile is used, can be employed with sulfur dyes. Exhaust dyeing is economical in its use of dyestuff and uses no excess dye that has to be treated.

Fabric lots can vary in their uptake and responsiveness to dyeing, and because the exact fiber weight of a fabric lot can be difficult to determine as fabric lots are produced in (rather approximate) lengths, calculating the exact amount of dyestuff needed is not always easy. Precise shade matching can be difficult with exhaust dyeing and the fabric may have to remain in the dye bath for a long period of time before all the dye is exhausted. For these reasons, it may be more effective and economical to use an amount of dye in excess of the theoretical minimum requirements. If so, the excess will be released in the effluent and must be given appropriate treatment by the dye applicator under current environmental regulations.

"Continuous dyeing," commonly used to apply the subject dyes to textiles, is called continuous because the fabric to be dyed moves continuously through the dyeing apparatus in large batches. However, the dye bath itself is not continuously replenished by a chemical process and dyeing is distinctly a batch operation, as this term is understood by the chemical industry.

²⁴ While soluble impurities are easily separated from insoluble products (such as C.I. sulfur dyes) by simple washing procedures, reduction to C.I. leuco sulfur dyes introduces excess reactants and generates reaction products that are difficult to separate from the soluble C.I. leuco sulfur dyes.

Exhibit C of Petitioner's prehearing brief shows several sulfur compounds used as reactants in conversion of C.I. sulfur dyes to other forms, and Sandoz testified that it actually uses sodium polysulfide as a reactant instead of the sodium sulfide shown on its schematic diagram.

If sulfides (or polysulfides) are used as a reducing agent, they produce free sulfur which will remain in the final dye mixture. Use of a non-sulfur-containing reductant, such as sugar or sodium borohydride, will reduce the amount of free sulfur present in the final dye mixture.

The free sulfur in the leuco dye product can deposit on the fabric and cause various processing problems. While there are ways of coping with these problems, so-called "environmentally safer" dyes generally contain less free sulfur.

Another problem with sulfur may occur during waste treatment and disposal. While free sulfur has no taste or odor, many sulfur compounds are extremely (and unpleasantly) odoriferous. Again, the lower free sulfur content of "environmentally safer" dyes may reduce waste treatment problems at

(continued...)

adjuvants.²⁵ "Environmentally safer dyes" is a term for proprietary finished dyes that some textile mills may find easier to handle in their manufacturing and waste treatment facilities. Because any such product requirement is related directly to a customer's plant configuration and operations, such dyestuff products normally cannot be readily interchanged without potentially recreating the waste treatment problems for which that particular dyestuff was selected.²⁶

Manufacture of the Subject Sulfur Dyes

The manufacturing processes involved in the production of the subject sulfur dyes are analyzed below and consist of two different stages: (1) dyestuff synthesis, and (2) dyestuff finishing (see figure 1).^{27,28}

Synthesis Stage

The subject sulfur dyes are produced by a series of batch (or unit) processes using raw materials supplied by the petrochemical industry.²⁹ The raw materials are first converted into chemical intermediates. The specific chemical intermediate used, along with variations in pressure and processing time, determines the color and physical and chemical characteristics of the finished dye. Sandoz produces sulfur black 1 (its major sulfur dye product) through the sulfurization of the intermediate dinitrochlorobenzene (DNCB)³⁰ with sodium hydrogen sulfide, caustic soda, and sulfur flake at 120 to 130

²⁴ (...continued)

the textile mill. The term "environmentally safer," however, is rather misleading, as discarded dye bath mixtures are required to be treated to the same standards before discharge into the environment whatever their composition.

²⁵ These products include those incorporated in the purchased dyestuff, those added by the textile dyeing mill, and any textile finishes applied simultaneously during dyeing.

²⁶ The practical effect of this engineering parameter is to reduce the substitutability of one proprietary dyestuff formulation for another.

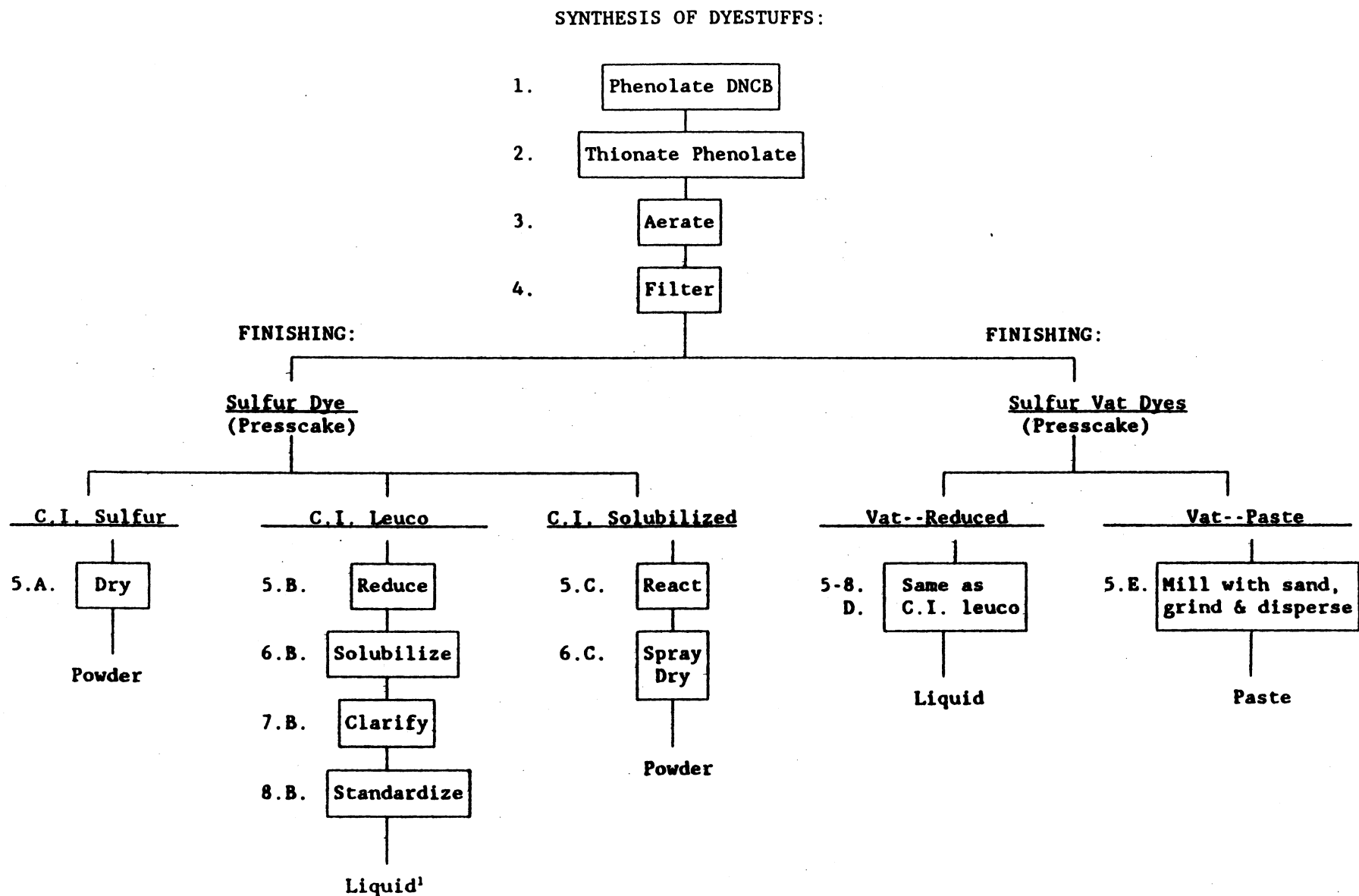
²⁷ See app. E for a presentation of comments on the differences and similarities in the manufacturing processes of sulfur dyes and sulfur vat dyes, as well as comparisons of other categories of the subject sulfur dyes, as compiled from responses to the Commission's questionnaires.

²⁸ Dyestuff finishing, which is the preparation of commercially salable dyestuffs, is to be distinguished from textile dyeing and finishing, which is the application of dyes and finishes to textiles.

²⁹ Historically, synthetic organic dyes (which include sulfur dyes) were known as coal tar dyes because they were derived from raw materials found in coal tar. The raw materials that become the building blocks for synthetic organic dyes (and synthetic organic pigments) are aromatic compounds such as benzene, toluene, xylene, naphthalene, and anthracene, which today are supplied mostly by the petrochemical industry.

³⁰ In terms of value, ***.

Figure 1. Manufacturing stages in the production of sulfur black 1 products



II-1

¹ Also available in powder form.

degrees centigrade.³¹ The product is isolated and purified by treating it with water, sulfuric acid, and oxygen in an airing tank, resulting in a water-wet oxidized filter cake or concentrate.

Sulfur vat dyes are produced using similar processes but, according to petitioner, cannot be made on the particular equipment used to produce non-vatted sulfur dyes. Nonvatted sulfur dyes use high-temperature, high-pressure reactors for thionating; sulfur vat dyes use oil-heated rotary reactors and other types of reactors. However, nonvatted sulfur dyes can be manufactured on either type of equipment.³²

Finishing Stages

Sulfur dyes

C.I. sulfur.--Sulfur dye presscake is mixed with water and dilution chemicals, then evaporated to dryness to obtain a sulfur dye powder.

C.I. leuco.--Following synthesis, production proceeds with solubilizing the filter cake through chemical reduction in an alkaline bath of sodium hydrogen sulfide, caustic soda, and water to a water-soluble (or "leuco") form. During chemical reduction/solubilization, the product is standardized to the vendor's strength or coloring power. The dyes may or may not be clarified to remove impurities.³³

Petitioner states that the chemical reduction or solubilization of the filter cake is insignificant in terms of overall cost. Production of the filter cake accounts for virtually all capital, labor, and energy consumed in the manufacturing process since reduction/solubilization does not require the high-temperature, controlled reactions necessary in the production of filter cake.³⁴ Petitioner further argues that the processing performed by U.S. sulfur dye finishers is "simply mixing of imported, unreduced conventional C.I. sulfur dyes with certain amounts of water and reduction chemicals to

³¹ Sulfur black 2 is produced from heating 2,4-dinitrophenol, picric acid, and sodium polysulfide. Colored sulfur dyes use an intermediate other than DNCB and require a condensation step that, in essence, increases the purity of the dye.

³² Sandoz's May 6, 1992, postconference statement, pp. 3-4. In response to a Commission inquiry for information, *** stated that use of certain intermediates leading to slightly faster dyeing properties allows specific sulfur dyes to be classed as sulfur vat dyes.

³³ Petition, pp. 15-16.

³⁴ Petitioner states that, in terms of time, reduction/solubilization accounts for less than *** percent of petitioner's total overall manufacturing time. In terms of cost, reduction/solubilization accounts for less than *** percent of direct variable production costs, *** percent of manufacturing costs, and *** percent of the total cost of production. Petition, p. 16. During these final investigations, C.H. Patrick has reported that its conversion process adds between *** percent to its total costs of goods sold. The comparable value added by Southern Dye is *** (between *** percent). Detailed information on value added by U.S. finishers is presented in the section "Financial Experience of the U.S. Producer and Finishers."

obtain the reduced leuco form, standardized to a particular shade and cast" and that this process amounts to a "dyeing method" as described by the Colour Index (see appendix C).³⁵

Respondents claim that, although the chemical modification of C.I. sulfur dyes to C.I. leuco sulfur dyes and C.I. solubilized sulfur dyes may be diagrammed simply (e.g., exhibit C in petitioner's prehearing brief), commercially and technologically acceptable chemical modification is considerably more difficult to perform in practice.^{36,37} Further, the chemical reactions that occur during the reduction process can affect significantly the final form of the product as is the case, for example, in the production of the new environmentally safer dyes.

C.I. solubilized.--C.I. solubilized sulfur dyes are obtained by reacting sulfur dye filter cake/presscake with thiosulfonic acid to produce a thiosulfonic acid derivative that is inherently water soluble.

Sulfur vat dyes

Vat--reduction.--Processes used in the production of reduced sulfur vat dyes are similar to those used to manufacture C.I. leuco sulfur dyes as previously described.

Vat--paste.--Vat presscake is dispersed with sand in a grinding process to produce a paste that can be mixed with other vat dyes by end users.

Manufacturing Environmentally Safer Dyes

During these investigations, varying degrees of difference in the manufacturing processes to produce environmentally safer dyes have been described by the parties. The petitioner's environmentally safer product is differentiated (and chemically altered) from its other sulfur black dyes during finishing. Such dyes have a lower sulfide content. A comparable imported product also acquires its "environmental" characteristics when finished in the United States prior to sale to end users. Southern Dye has testified that its "Free-Sulfur Free" sulfur dye (patent pending) is not like the Sandoz patented product, in that the chemistry and reduction systems are different; i.e., Sandoz uses a sugar-type reduction system, whereas Southern Dye uses a sulfide reduction system.³⁸

Petitioner characterizes the differences in the two environmentally safer lines as differences involving method of application. Whereas Sandoz's

³⁵ TR, p. 22.

³⁶ TR, pp. 100-101, 194-196, and 202.

³⁷ Respondents note that large, financially able and technologically sophisticated textile mills with chemical operations, such as Burlington, Millikin, West Point Pepperell, Fieldcrest, and Cannon, do not start with imported or domestic C.I. sulfur dyes, indicating that U.S. textile mills apparently do not find performing the chemical reduction themselves to be a cost-effective use of their resources (TR, pp. 15 and 203-204).

³⁸ Preliminary TR, pp. 130-131; TR, pp. 226-227.

RDT dyes require glucose-based reducing agents, Southern Dye's "Megablack" relies on sodium borohydride. The petitioner testified to the fact that Sandoz researched sodium borohydride technology more than 30 years ago but rejected it due to the fact that if misapplied by the dyer, explosive hydrogen gas would be produced.³⁹ Similarly, Southern Dye testified that Sandoz's "reduction environmental black" requires transporting large amounts of caustic soda to the textile dyeing machines, and caustic soda is a highly corrosive material that can burn skin upon contact.⁴⁰

Patent dispute

During 1990 Sandoz was awarded a patent on its environmentally friendly dyes, Sandozol RDT-type dyes. Because of this patent C.H. Patrick, the principal U.S. sulfur dye finisher, has been effectively precluded from participating in the expanding environmentally safer sulfur dye market during the period of investigation. In August 1991, C.H. Patrick filed for re-examination of the patent with Commerce's Commissioner of Patents and Trademarks.⁴¹ Patrick has characterized the results of the re-examination as having rendered Sandoz's patent "worthless."⁴² Although hearing testimony indicates that C.H. Patrick *** environmentally safer dyes,⁴³ Sandoz argues that C.H. Patrick currently is advising end users of its immediate intent to offer environmentally safer dyes similar to those of Sandoz.⁴⁴

Issues Relating to the Nature of the Imported Product

During the preliminary investigations, parties identified the nature of imported sulfur dyes subject to the investigations as follows:

Petitioner.--The petition stated that "(p)etitioner believes that virtually all imported Sulfur Dyes (including Sulfur Vat Blue Dyes) consist of unsolubilized (i.e., non-reduced) dried press-cake or powdered dye concentrates which are manufactured for sale and exportation to U.S. solubilizers."⁴⁵

Respondents.--Counsel for the U.K. exporter, James Robinson Ltd., described the imported product as "sulfur dyes in two forms: unsolubilized, liquid concentrate and unsolubilized concentrated powder."⁴⁶ And further, "CHP (C.H. Patrick) imports and purchases imports of sulfur dyes in the form of unsolubilized liquid concentrate and unsolubilized concentrated powder."⁴⁷

³⁹ Sandoz posthearing brief, p. 10.

⁴⁰ Preliminary TR, p. 131.

⁴¹ Preliminary TR, p. 145.

⁴² Ibid. In addition, C.H. Patrick has ***.

⁴³ During the Commission's Jan. 28, 1993, verification of C.H. Patrick's questionnaire data, ***.

⁴⁴ Sandoz posthearing brief, exh. C.

⁴⁵ Petition, p. 19.

⁴⁶ Postconference brief of Rogers & Wells, p. 1, fn. 3.

⁴⁷ Ibid, p. 1, fn. 4.

During these final investigations, counsel for respondents has asserted that the "subject imports consist primarily of semi-reduced (emphasis added), concentrated sulfur dyes that must be further chemically reduced before being sold to end-users."⁴⁸ When asked to explain the significance, if any, of this change in the description of the subject imports of sulfur dyes, an official of C.H. Patrick testified that:

"(w)e import from six or seven different sources in China, from India, and from England. Each one of those products have different characteristics, different soluble characteristics, different degrees of reduction. Some of them have none, some of them have some, some of them have more than others."⁴⁹

Counsel for C.H. Patrick further asserts that there is no substantive significance to the change in description, but rather that the recent description is simply more precise terminology.⁵⁰ However, evidence on the record indicates that, in some cases, the subject sulfur dyes imported into the United States are reduced almost completely before importation. For example, in response to a request for information on James Robinson's conversion of sulfur black 1 presscake to a leuco liquid, the U.K. respondent described the stage of manufacture for its exported product as follows:

***.⁵¹

With respect to imports from China, an official of C.H. Patrick has described a major product imported from China as follows:⁵²

***. "53, 54

Uses of Sulfur Dyes

The subject sulfur dyes are applied primarily to vegetable or cellulosic fibers (such as cotton, rayon, and linen), but are also used to a lesser extent in dyeing paper, leather, and certain synthetic fibers. Table 1 presents data compiled from the Commission's questionnaires in these final investigations relating to the subject sulfur dyes, in terms of end use, color, process differences, and environmental impact differences. As shown, over *** percent of Sandoz's subject sulfur dyes were sold to textile end users; black sulfur dyes accounted for more than *** percent of U.S.

⁴⁸ Prehearing brief of McNair Law Firm, p. 2.

⁴⁹ Testimony of Silvio Rodriguez, TR, p. 122.

⁵⁰ Posthearing brief of McNair Law Firm, p. 16.

⁵¹ Postconference brief of Rogers & Wells, attachment 4, p. 1.

⁵² During the Jan. 28, 1993 verification visit to C.H. Patrick, ***.

⁵³ Prehearing brief of McNair Law Firm, exh. 6, addendum No. 1,

p. 2.

⁵⁴ In a Feb. 1, 1993, clarifying statement submitted to the Commission ***.

Table 1

Subject sulfur dyes: Shares of U.S. shipments by Sandoz and finishers/importers, by end use, by color, by environmental impact, and by process, 1989-91, January-September 1991, and January-September 1992

* * * * *

shipments; environmentally-safer sulfur dyes represent growing shares of total shipments, accounting for *** percent during January-September 1992; and shipments of clarified product have been declining as shipments of unclarified product increased. With respect to imports, approximately *** percent of U.S. shipments of the subject dyes were used in textile applications, approximately *** percent were black dyes, shipments of environmentally-safer products increased, and *** dyes were clarified.

Additional information gathered during the preliminary investigations concerning end uses of the subject dyes sold for textile applications is presented below (in 1,000 pounds):

	<u>Sulfur dyes</u>	<u>Sulfur vat dyes</u>	<u>Total</u>
Textiles:			
Denim.....	***	***	***
Wearing apparel ¹	***	***	***
Yarn.....	***	***	***
Toweling.....	***	***	***
Uniforms and tents.....	***	***	***
Other textiles ²	<u>***</u>	<u>***</u>	<u>***</u>
Total.....	***	***	***

¹ Other than uniforms and not made of denim.

² Includes raw stock, rugs, samples, textile collages, etc.

As shown, slightly more than half of the subject sulfur dyes sold for textile applications were applied to denim,⁵⁵ although wearing apparel and, to a lesser extent, dyeing of yarn (as opposed to fabric) were also significant end uses for sulfur dyes. Sulfur vat dyes were used primarily for uniforms and tents because of their greater water fastness, but were also sold for application to denim (***) .

Like Product Issues

In the preliminary investigations the majority of the Commission found that there is a single like product consisting of all sulfur dyes.⁵⁶

⁵⁵ "Denim" is generally recognized as referring to a warp-faced twill weave comprising cotton or cotton/polyester fiber blends of intermediate weight.

⁵⁶ See Sulfur Dyes from China, India, and the United Kingdom, USITC Publication No. 2514, May 1992, p. 7.

Commissioner Brunsdale found two like products in the investigations, "concentrated (herein identified as intermediate) sulfur dye and solubilized (herein identified as finished) sulfur dye."⁵⁷ Notwithstanding the unanimous Commission finding that "soluble sulfur dye" is not a separate like product,⁵⁸ counsel for the Indian respondent has argued that evidence now on the record provides the Commission with more detailed information to reconsider the issue of whether there are two different like products: "conventional" sulfur dyes and C.I. solubilized dyes.⁵⁹

This report presents as much information as is available regarding these alternative like-product industries.

U.S. Tariff Treatment

Imports of sulfur dyes, including sulfur vat dyes, that are subject to these investigations⁶⁰ are classified in chapter 32 of the HTS. The column 1-general rates of duty that apply to the subject imports under the enumerated HTS subheadings are as follows (in percent ad valorem):⁶¹

<u>Item</u>	<u>HTS subheading</u>	<u>Rate of duty</u>
Sulfur black dyes: C.I. Nos. 53185, 53190, and 53195.....	3204.19.30	\$0.033/kg + 14%
Other C.I. sulfur black dyes, all C.I. sulfur color dyes, and C.I. solubilized sulfur dyes.....	3204.19.40 3204.19.50	15% 20%
Sulfur vat dyes ⁶²	3204.15.10 3204.15.20 3204.15.30 3204.15.35 3204.15.40 3204.15.50	\$0.033/kg + 14.4% 20% 8.4% 14.2% 15% 20%

⁵⁷ Ibid, p. 38.

⁵⁸ Ibid, pp. 8 and 33.

⁵⁹ Counsel to the U.K. respondent had indicated intentions to also argue for such like product distinctions (Sept. 25, 1992, letter to Paul Bardos from William Silverman, counsel to James Robinson, Ltd., p. 1), but decided not to pursue the issue following Commerce's rejection of such arguments regarding two separate classes or kinds of merchandise in the final antidumping determination concerning the United Kingdom (Jan. 8, 1993, letter to Paul Bardos from William Silverman).

⁶⁰ See app. A for Commerce's and the Commission's notices of institution.

⁶¹ See app. F for HTS notes and nomenclature.

⁶² In response to the Commission's questionnaire, importers have reported that imports of sulfur vat dyes are generally brought in under HTS subheadings
***.

THE NATURE AND EXTENT OF SALES AT LTFV

The following tabulation provides dumping margins as determined by Commerce for each of the foreign countries (and companies) subject to these investigations (in percent):⁶³

<u>Country</u>	<u>Company</u>	<u>Margins</u>	<u>Critical circumstances</u>
Final determinations:			
U.K.:	James Robinson Ltd.....	19.97 ¹	No ²
	All others.....	19.97	No ²
China:	Sinochem Shandong Import/ Export--Tianjin factory....	34.96 ³	Yes ⁴
	Sinochem International Chemicals--Handan factory..	102.46 ⁵	No ⁴
	All others.....	213.16 ⁵	Yes ⁴
	Kwong Fat Hong Chemicals (Hong Kong trading Co.)-- Wuhan factory.....	191.00 ^{3,6}	Yes ⁴
Preliminary determination:			
India:	Atul Products Ltd.....	2.69 ⁷	No ⁸
	Hickson & Dadajee Ltd.....	17.55 ⁹	No ⁸
	All others.....	10.12	No ⁸

¹ U.S. prices (USPs) were based on packed prices to unrelated customers, with appropriate deductions for freight and rebates; value-added tax (VAT) that would have been collected if the merchandise had not been exported was added to selling price. Foreign market value (FMV) was based on packed prices charged to unrelated customers in the home market, with adjustments for inland freight, packing costs, and differences in circumstances of sale.

² In reaching this determination, Commerce found no outstanding antidumping orders on sulfur dyes, including sulfur vat dyes, from the United Kingdom, and thus no history of dumping. Moreover, because the final dumping margins were less than 25 percent, Commerce could not impute U.S. importer knowledge that the exporter was selling the subject merchandise at LTFV.

³ USPs were based on purchase prices calculated from packed c.i.f. prices from the respective trading companies to unrelated customers, with appropriate deductions for insurance, freight, and trade discounts. FMV was based on factors of production utilized in producing the merchandise as valued in India and Pakistan, as Commerce determined that there was insufficient basis for finding a market oriented sulfur dye industry in China.

Footnotes continued on following page.

⁶³ Commerce's period of investigation was Nov. 1, 1991, through Apr. 30, 1992.

--Footnotes continued from previous page.

⁴ Regarding Sinochem Shandong, Sinochem International Chemicals, and Kwong Fat Chemicals, the dumping margins found were all over 25 percent and, accordingly, Commerce imputed U.S. importer knowledge that the exporter was selling the subject merchandise at LTFV. Commerce found that critical circumstances exist for (a) Sinochem Shandong, in that their imports increased massively (over 15 percent) between the period November 1, 1991 through March 31, 1992 and the period April 1 through August 31, 1992; for (b) Kwong Fat Chemicals, because the firm did not provide monthly shipment information, and Commerce found that its imports were massive based on BIA; and for (c) "all other" firms, because imports increased massively for at least two Chinese firms. For Sinochem International Chemicals, Commerce found that the firm's imports increased by less than 15 percent between the comparison periods, and thus had not increased massively.

⁵ Based on best information available (BIA) as contained in the petition.

⁶ For its preliminary determination Commerce treated Kwong Fat Chemicals as an intermediate country reseller and calculated FMV based on packed f.o.b. prices charged to unrelated customers in Hong Kong, resulting in a 4.92 percent preliminary dumping margin. During its final investigation Commerce determined that Kwong Fat's sales to the United States were clearly transshipments which did not enter the commerce of Hong Kong, and used the methodology outlined in footnote 3 to calculate FMV.

⁷ USPs were based on purchase prices calculated from c.i.f. prices to unrelated customers, with adjustments for foreign inland freight, foreign brokerage and handling, ocean freight, and marine insurance; central excise tax and sales tax that would have been collected if the merchandise had not been exported; and import duty that was rebated or not collected by reason of exportation. FMV was based on packed ex-factory prices charged to unrelated customers in the home market.

⁸ Commerce found that there have not been massive imports of the subject merchandise from India since the filing of the petition, and, therefore, preliminarily determined that critical circumstances do not exist with respect to imports of the subject sulfur dyes from India.

⁹ Hickson & Dadajee did not wish to participate in the Commerce proceedings and was assigned a dumping rate calculated from BIA as contained in the petition.

THE U.S. MARKET

Apparent U.S. Consumption

Table 2 presents data on apparent U.S. consumption of the subject sulfur dyes,⁶⁴ as well as consumption of other groupings of synthetic dyes.⁶⁵

⁶⁴ Quantity data for subject sulfur dyes are presented in this report in terms of the weight of the finished, liquid form, except where noted otherwise. (The exceptions are quantity data for C.I. solubilized sulfur powders, which need not be converted to a liquid form prior to use by end users, and sulfur vat paste).

⁶⁵ Data in table 2 on the subject sulfur dyes were compiled from the questionnaire responses; data on other dye classifications are based on

(continued...)

Table 2

Dyes: Estimated apparent U.S. consumption, by groupings of dyes, 1989-91¹

Item	1989	1990	1991
	Quantity (1,000 pounds)		
* * *	*	*	*
Total	412,489	339,261	355,760
	Value (1,000 dollars)		
* * *	*	*	*
Total	1,268,853	1,210,808	1,548,639

Source: Data on subject dyes compiled from responses to questionnaires of the U.S. International Trade Commission in the final investigations. All other data were compiled from the U.S. International Trade Commission's publication, Synthetic Organic Chemicals, and official trade statistics, or were calculated by difference.

Apparent U.S. consumption of the subject sulfur dyes increased steadily from 1989 to 1991, rising by *** percent. The trends in apparent consumption of sulfur dyes are largely determined by the demand for cotton fabric, particularly black denim. Additional information on the market and its determinants is presented in the section of this report titled "Factors Affecting Demand." Estimated apparent U.S. consumption of all dye classes shown in table 2 fell from 412.5 million pounds in 1989 to 355.8 million pounds in 1991, or by 13.7 percent. On a quantity basis, the subject sulfur dyes accounted for *** percent of all such dye classes in 1991; on a value basis the comparable share was *** percent.

U.S. Producer and Finishers

The U.S. dye industry has existed since before World War I. It developed mainly in the northeastern states because of their proximity to refineries and chemical plants and early textile mills (in New Jersey), and in the southeastern states because of their proximity to the major modern

⁶⁵ (...continued)

shipment data published in Synthetic Organic Chemicals and official trade statistics. However, classifications in trade statistics (imports/exports) do not exactly parallel the production/sales classifications in Synthetic Organic Chemicals. Some dyes are also used as, or made into, pigments, chemical reagents, or chemical indicators, which usage is not fully differentiated in the available statistics. Accordingly, data and totals for non-subject dyes should be regarded as estimates, although the differences are believed to be small.

textile-producing states (North Carolina, South Carolina, and Georgia) and companies that provide raw materials to the dye industry. Table 3 shows the current U.S. producers and finishers of the subject sulfur dyes, the locations of their plants, position on the petition, and their share of 1991 total production of the subject products. As the sole integrated producer of the subject sulfur dyes, Sandoz is part of Sandoz Ltd., Switzerland, a diversified chemical company producing a variety of chemicals in addition to dyes.

In contrast, U.S.-owned finishers are relatively small chemical companies whose main products are dyes.⁶⁶ The firms are described below.

Company Profiles

Integrated producer

The petitioner, Sandoz Chemicals Corp., and its predecessor, Southern Dyestuff Co., have been the leading producers of sulfur dyes in the United States since approximately 1936.⁶⁷ In addition to the subject sulfur dyes, Sandoz also produces other types of dyes, including non-sulfur vat dyes, acid dyes, direct dyes, disperse dyes, fiber reactive dyes, and fluorescent brightening agents in three U.S. facilities.

Sandoz is part of a Swiss-based multinational corporation, Sandoz Ltd., which produces a wide range of chemicals, pharmaceuticals, agro products (e.g., fungicides), seeds, food products, and materials used in construction. On a worldwide basis, Sandoz Ltd.'s chemical group produces dyes for textiles, leather, and paper, along with paper optical brighteners and pigments.

⁶⁶ There is little integration back to the synthesis of dyestuffs in the domestic industry because, in most cases, the cost involved to build dye manufacturing facilities subject to stringent environmental regulation is not economically feasible.

⁶⁷ Currently, Sandoz is the only integrated U.S. producer of sulfur dyes in the United States. Prior to 1987, there were at least six additional U.S. manufacturers: Allied Chemical Co., American Cyanamid Co., Augusta Chemical Co., E.I. du Pont de Nemours & Co., Mobay Chemical Corp., and Sou Tex Chemical Co. Allied, Augusta, Du Pont, and Sou Tex stopped manufacturing in the early 1970s. In 1977, American Cyanamid sold its sulfur dye production facilities to Mobay, which then shut down production in the spring of 1986. Sandoz testified at the Commission's conference that these firms ceased operations due to the capital investment that would be required for them to meet new environmental controls. Preliminary TR, pp. 50-51.

There is one new domestic dye production plant under construction: CIBA-GEIGY's St. Gabriel, LA, facility. However, the plant (which is scheduled to produce acid, direct, disperse, and reactive dyes) will not manufacture sulfur dyes. Petition, pp. 5-6.

Table 3

Subject sulfur dyes: U.S. producer and finishers, location of producing/finishing facility, position on petition, and share of production in 1991

Firm	Location	Position on petition ¹	Share of U.S. production		
			Sulfur	Sulfur vats	Total
			-----Percent-----		
Sandoz Chemicals Corp. ²	Mt. Holly, NC Martin, SC	S	***	***	***
C.H. Patrick & Co. ³	Taylors, SC Greenville, SC	O	***	***	***
Southern Dye & Chemical Co. ⁴	(5)	O	***	***	***
Share of total and total.....	-	-	***	***	100.0

¹ S=supports and O=opposes.

² Sandoz Chemicals Corp. (Sandoz) is the only integrated producer of the subject sulfur dyes in the United States. Sandoz is *** percent owned by Sandoz Corp., New York, NY, which, in turn, is *** percent owned by Sandoz Ltd., Basel, Switzerland. Sandoz Ltd. is a worldwide producer of sulfur dyes. The firm owns *** percent of Rioquima, S.A., Rio de Janeiro, Brazil; *** percent of Sulcolor, S.A., Salvatierra, Mexico; *** percent of Sandoz S.A.E., Barcelona, Spain; and *** percent of Sandoz Dongkook, Ltd., Seoul, Korea.

³ C.H. Patrick is *** percent owned by Graniteville Co., Graniteville, SC.

⁴ Not owned, in whole or in part, by any other firm.

⁵ Southern Dye's *** dyes are ***.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The firm produces sulfur dyes in several countries in addition to the United States--specifically Brazil, Mexico, Spain, and Korea.⁶⁸

Dyestuff finishers

As previously described, there are also firms that are dyestuff finishers which purchase what is sometimes referred to as a raw material (unreduced or partially reduced liquid or powder sulfur dyes) and fully reduce and standardize the product for resale in the United States. Information on the value added by their finishing activities is presented in the section of the report entitled "Financial Experience of the U.S. Producer and Finishers."

There are currently two large-scale finishers in the United States: C.H. Patrick and Southern Dye.

⁶⁸ Sandoz testified at the preliminary conference that no imports from these plants enter the United States. ***. (Dec. 1 and 4, 1992, supplemental responses to the Commission's producer's questionnaire).

C.H. Patrick & Co. -- C.H. Patrick began operating in the 1940s as a producer of specialty chemicals, including catalysts and water repellents.⁶⁹ In 1969, Graniteville Co., a manufacturer of denim and industrial fabrics, purchased C.H. Patrick ***. C.H. Patrick began sulfur dye production in 1988, and in September 1989 purchased the sulfur dye operations of Burris Chemicals, Inc., which had also been a dyestuff finisher.

Southern Dye & Chemical Co. -- Southern Dye, a privately-held company, began operations in late 1989, when it introduced the first environmentally safer dye ever marketed.⁷⁰

Miscellaneous finishing operations. -- During these final investigations, ***.⁷¹

An industry perspective on the nature of the U.S. synthetic dye industry has been provided in a chemical industry report, wherein as part of a discussion of U.S. producers of synthetic dyes in general, the authors characterized the U.S. industry as follows:

****.⁷²

U.S. Importers

During 1989-91, most of the imports of sulfur dyes from China, India, and the United Kingdom were either imported directly by U.S. dyestuff finishers (i.e., Burris, C.H. Patrick, and Southern Dye) or were imported by specialty chemical distributors.⁷³ The names and locations of the distributors (and the countries from which they sourced) are provided in the following tabulation:

* * * * *

Costs Associated with Importing Activities

During these final investigations, ***. The firm reported that:

"Factors that were taken into account when the *** was set are; interest expense, cost of new containers (nearly 100% of all imports must be repackaged due to damage in transit and customer demand for U.S. size containers), subsequent disposal of the original containers, laboratory costs including quality control, standards maintenance and amortization

⁶⁹ C.H. Patrick also sells disperse and vat dyes (including indigo). ***.

⁷⁰ Preliminary TR, p. 129. Bulk shipments of Sandozol black 4G-RDT, the environmentally safer sulfur dye produced by the petitioner, began in ***.

⁷¹ ***.

⁷² ***.

⁷³ Commission staff has identified *** importers of less significant quantities of the subject product, principally from ***.

of expensive laboratory equipment, freight charges, remote warehouse storage charges, handling charges, and internal warehouse labor and supervisor cost for re-packaging and handling."⁷⁴

*** incorporating the above factors, accounted for *** percent of total reported import value during ***.

The majority of imports of C.I. sulfur and C.I. leuco sulfur dyes, as well as sulfur vat dyes, enter into the United States through the Charleston, SC, Customs District.

Channels of Distribution

*** domestic sales of sulfur dyes by Sandoz go directly to end users. *** percent of these dyes are sold to textile producers and the remaining *** percent go to producers of paper, leather, and ink. Sandoz ships most of its dyes to the textile industry in a water-soluble liquid form,⁷⁵ whereas its shipments to paper, leather, and ink producers are in either a water-soluble liquid or powdered form. *** percent of Sandoz's sales of the subject sulfur dyes are made to purchasers located within 1,000 miles of its plant in Mount Holly, NC.

Most of the imported subject sulfur dyes are eventually used by the textile industry; however, the imported sulfur dyes destined for use in textiles are mostly in an unfinished form and must undergo further processing before they can be used by the textile mills. C.H. Patrick and Southern Dye⁷⁶ are the only two known domestic firms currently engaged in finishing the subject imported sulfur dyes used by the textile industry. Patrick, the larger of the two companies, uses unfinished powdered dyes from China and India and unfinished or concentrated liquid dyes from the United Kingdom. Patrick buys the Chinese and British dyes from ***⁷⁷ and *** Indian dyes as well as some of the Chinese product. Patrick reports that it mixes the dyes from all three countries and finishes them so that the dye is in a form that can be used by textile mills. Most of Patrick's sales go directly to end users.⁷⁸ Sales to Graniteville, Patrick's parent company and only related customer, accounted for *** percent of its total sales in 1991.

⁷⁴ ***.

⁷⁵ Sandoz has several textile customers that use C.I. solubilized dyes in powdered form, but these customers represent *** percent of Sandoz's total sulfur dye sales.

⁷⁶ Burriss Chemical imported and finished sulfur dyes from China prior to September 1989, at which time it sold its business to C.H. Patrick.

⁷⁷ The liquid unfinished sulfur dyes from the United Kingdom are purchased through ***. The unfinished sulfur dye powder from China is purchased through ***.

⁷⁸ ***.

Southern Dye buys unfinished powdered dyes from *** through ***.⁷⁹ Southern Dye ***. Southern Dye sells to both distributors and end users in the southeast and on the west coast of the United States.

Biddle Sawyer Corp. and Keystone Aniline Corp. import C.I. solubilized sulfur dye powders that are used exclusively in the leather industry. Biddle Sawyer purchases its C.I. solubilized powders from Atul Products in India and sells all of this product to ***, which resells its sulfur dyes ***. *** sells to end users in the leather industry. Keystone buys its dyes from James Robinson Ltd. in the United Kingdom and resells to distributors and end users in the leather industry.

CONSIDERATION OF MATERIAL INJURY TO AN INDUSTRY IN THE UNITED STATES

In the majority opinion for the preliminary investigations, the Commission found that U.S. finishers (solubilizers) are part of the domestic industry, but determined that circumstances existed regarding those firms' importing activities such that they should be excluded from the domestic industry as related parties. Therefore, discussions of the data in the following sections will concentrate on Sandoz's activities, but tables will present complete information on the subject sulfur dye operations for each of the U.S. producers and finishers, separately and combined, for three possible like-product industries as follows:⁸⁰

- I. The subject sulfur dyes.--The products and industry as defined by the Commission in its majority opinion for the preliminary investigations.
- II. Intermediate and finished dyes.--The two separate products and industries as defined by Commissioner Brunsdale in her concurring and dissenting views for the preliminary investigations.
- III. C.I. solubilized and other subject sulfur dyes.--The two separate products and industries as argued by counsel for the Indian respondent.

U.S. Production, Capacity, and Capacity Utilization

Data for the U.S. production, capacity, and capacity utilization of the U.S. producer's and finishers' operations producing the subject sulfur dyes are presented in table 4. For Sandoz, capability to manufacture the subject sulfur dyes remained constant from 1989 to 1990, and then increased by *** percent from 1990 to 1991.⁸¹ Sandoz's production of the subject finished sulfur dyes declined by *** percent from 1989 to 1990, then increased by *** percent in the next year, for a net increase in annual production during the

⁷⁹ ***.

⁸⁰ See also app. G for summary data relating to the subject sulfur dyes.

⁸¹ Questionnaire data indicate that capacity ***. (See Sandoz Dec. 1, 1992, supplemental submission.)

period. Production increased by *** percent during January-September 1992 when compared with production during the comparable period of 1991. Sandoz's capacity utilization followed the same general trend as production, and reached its highest level for the period of investigation, *** percent, during January-September 1992.⁸²

Table 4

Subject sulfur dyes: U.S. producer's and finishers' capacity, production, and capacity utilization, by types, 1989-91, January-September 1991, and January-September 1992

* * * * * * *

U.S. Producer's and Finishers' U.S. Shipments

Data for the U.S. producer's and finishers' U.S. shipments of the subject sulfur dyes, by types of product, are presented in table 5. The quantity of Sandoz's U.S. shipments of the subject finished sulfur dyes increased slightly from 1989 to 1990, then increased by *** percent in 1991; shipments increased by *** percent during January-September 1992 compared with those in the like period of 1991.

Table 5

Subject sulfur dyes: U.S. producer's and finishers' U.S. shipments, by types, 1989-91, January-September 1991, and January-September 1992

* * * * * * *

In its petition, Sandoz attributed the overall increase in the firm's U.S. shipments in 1991 to rising sales of its lower-priced Deniblack 4G, stating:

Although introduced only three years ago, sales of Deniblack 4G now comprise *** of Petitioner's primary Sulfur Black 1 sales. Unfortunately, it is anticipated that the continued marketing success of Deniblack 4G will come at the expense of Petitioner's Sodyesul Black 4GCF, resulting in a *** of Petitioner's Sulfur Black sales revenue.⁸³ (Petition, p. 72.)

⁸² In the petition, Sandoz stated that its export sales of sulfur dyes to its related firms "constitute a stop-gap measure to maintain some semblance of reasonable capacity utilization," adding that "as the bulk of these sales were to foreign affiliates who have since upgraded their own production facilities, they do not guarantee future sales for export." Petition, p. 75.

⁸³ ***.

The average 1991 unit sale value of Deniblack 4G *** was *** than that of Sodyesul Black 4GCF ***. Sales of Sodyesul Black 4GCF *** from 1989 to 1991, whereas sales of Deniblack 4G *** percent of sulfur black 1 sales in 1989 to *** percent in 1991 (if the new environmentally safer product is excluded).⁸⁴

U.S. Producer's and Finishers' Exports

Data for the U.S. producer's and finishers' exports of the subject sulfur dyes, by types of product, are presented in table 6. Sandoz exports a *** percentage of its production, primarily to its affiliates in ***. However, as noted earlier, petitioner has stated that it cannot continue to rely on revenue from such exports as its affiliates develop their own capability to produce sulfur dyes. Sandoz's exports of finished dyes declined from *** million pounds (or *** percent of its total shipments) in 1989 to *** million pounds (or *** percent of its total shipments) in 1990, increased by *** percent to *** million pounds in 1991, and then decreased by *** percent during January-September 1992 as compared to the same period in 1991. As shown in tables 5 and 6, the unit values of such export shipments were *** than the unit values of domestic sales to unrelated firms. ***.⁸⁵

Table 6

Subject sulfur dyes: U.S. producer's and finishers' export shipments, by types, 1989-91, January-September 1991, and January-September 1992

* * * * *

U.S. Producer's and Finishers' Inventories

End-of-period inventories for the U.S. producer and finishers are shown in table 7. As shown, Sandoz's inventories decreased by *** percent from 1989 to 1990, remained stable during 1991, and rose by *** percent during January-September 1992 over the similar period in 1991.

Table 7

Subject sulfur dyes: U.S. producer's and finishers' end-of-period inventories, by types, 1989-91, January-September 1991, and January-September 1992

* * * * *

⁸⁴ The overall increase in petitioner's sales is also due to the 1990 introduction of its new environmentally safer product, Sandozol Black 4G-RDT. In 1991 Sandozol Black 4G-RDT accounted for *** percent of total sulfur dye sales by Sandoz in the United States.

⁸⁵ Staff interview with John Galvin, attorney for Sandoz, Apr. 29, 1992.

U.S. Employment, Wages, and Productivity

Table 8 presents data on employment, productivity, and unit labor costs for the U.S. sulfur dye producer and finishers. The number of Sandoz's workers producing the subject sulfur dyes remained relatively constant from 1989 to 1991,⁸⁶ although hours worked and wages paid declined. Average hourly wages paid to Sandoz's production and related workers producing the subject sulfur dyes increased from *** in 1989 to *** in 1990, and then decreased to *** in 1991.⁸⁷ None of the workers at Sandoz are represented by a union.

Table 8

Average number of U.S. production and related workers producing all sulfur dyes, hours worked, total compensation paid, hourly wages, productivity, and unit labor costs, by types of sulfur dyes, 1989-91, January-September 1991, and January-September 1992

* * * * * * *

Financial Experience of the U.S. Producer and Finishers

Three firms submitted separate financial data for (1) the overall operations of their establishments in which sulfur dyes and sulfur vat dyes are produced and/or finished, (2) their sulfur dye operations, and (3) their sulfur vat dye operations. Income-and-loss data for the individual intermediate and final sulfur dye and sulfur vat dye products are presented in appendix H. The firms are: (1) Sandoz,⁸⁸ the petitioner and the only vertically integrated producer, (2) C.H. Patrick, a firm that purchases intermediate products for further processing into finished sulfur dyes at its U.S. facilities,⁸⁹ and (3) Southern Dye, a company that ***.⁹⁰

⁸⁶ In response to a question in the Commission's questionnaire, Sandoz reported that it had not been forced to reduce the number of production and related workers producing sulfur dyes (including sulfur vat dyes) by at least 5 percent or 50 workers during any of the period Jan. 1, 1989, to Sept. 30, 1992.

⁸⁷ *** in hourly wage data when compared with Sandoz's response to the preliminary questionnaires have been attributed to *** (see Sandoz's Dec. 1, 1992, supplemental response).

⁸⁸ As indicated in the petition, Sandoz Chemicals Corp. (Sandoz) is a New York corporation organized in 1983 and wholly owned by Sandoz Corp. which, in turn, is wholly owned by Sandoz Ltd. of Basle, Switzerland. Petitioner is a major domestic manufacturer of dyes, pigments, and coloring matter. Sandoz employs *** persons overall and *** workers at its sulfur dye production facilities at the Holly Hill plant in Charlotte, NC (petition, p. 5).

⁸⁹ As indicated previously, in September 1989 C.H. Patrick purchased the sulfur dye operations of Burris Chemicals, Inc., which had been a dyestuff finisher.

⁹⁰ Southern Dye ***.

On-site verifications were performed on the data of Sandoz and C.H. Patrick. As a result, Sandoz's data were adjusted for ***. C.H. Patrick's data were adjusted to: ***.

Overall Establishment Operations

Income-and-loss data of the three firms on the overall operations of their establishments in which sulfur dyes and sulfur vat dyes are produced and/or finished are shown in table 9. The subject dyes accounted for approximately *** percent of the total sales by these establishments in 1991. Other products produced by Sandoz, the major producer, at its Mt. Holly plant and their respective shares of total net sales by this establishment in the firm's most recent fiscal year⁹¹ are shown in the following tabulation:

* * * * *

Table 9

Income-and-loss experience of the U.S. producer and finishers on the overall operations of their establishments in which sulfur dyes and sulfur vat dyes are produced and/or finished, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Combined Operations on Sulfur Dyes and Sulfur Vat Dyes

Income-and-loss data for the three firms on their combined sulfur dye and sulfur vat dye operations are shown in table 10. Separate income-and-loss data for sulfur dyes and sulfur vat dyes are shown in tables 11 and 12, respectively. Operations on sulfur dyes represent the vast majority of the combined operations, with reported net sales of \$***, or *** percent, of the combined net sales of \$*** in 1991. Sandoz's data represent *** percent of the combined total net sales of the subject dyes by the three firms in 1991.

Selected income-and-loss for the respective firms on their combined sulfur dye and sulfur vat dye operations are shown in the following tabulation (in thousands of dollars, except where noted):

* * * * *

⁹¹ Sandoz's fiscal year ends ***.

Table 10

Income-and-loss experience of the U.S. producer and finishers on their sulfur dye and sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table 11

Income-and-loss experience of the U.S. producer and finishers on their sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table 12

Income-and-loss experience of the U.S. producer and finishers on their sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

The combined results are strongly influenced by Sandoz's C.I. leuco sulfur dye operations. ***. Although combined net sales increased steadily during 1989-91, operating income exhibited an opposite trend, with decreasing margins during the period. A major factor was ***, which were related to ***.

Sandoz believes the *** of DNCB are related to a change in accounting for ***. According to Sandoz, the ***.⁹² Additionally, ***. The on-site verification proved this to be essentially true since the accounting changes were reclassifications from *** and did not affect total cost of goods sold; thus, neither operating income nor net income before taxes was affected. DNCB in a recent batch analysis (1992) was determined to be approximately *** of the total cost for sulfur black.

Cost of Goods Sold and SG&A Expenses for Sandoz

Cost of goods sold detail available for Sandoz on its combined sulfur dye and sulfur vat dye operations is presented in table 13. The *** are related to *** in production volume and the *** are related to *** as the

⁹² The Sandoz information was provided by ***, in telephone conversations with staff on Dec. 2 and 7, 1992, with additional information provided in a telefax received on Dec. 9, 1992.

result of Sandoz's ***. The respective depreciation expenses for the combined sulfur products by Sandoz and C.H. Patrick are shown in the following tabulation (in thousands of dollars):

* * * * *

Table 13

Cost of goods sold and selling, general, and administrative expenses for Sandoz on its sulfur dye and sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Most of the *** in Sandoz's SG&A expenses are directly related to ***.

There are *** sales to affiliates by Sandoz and C.H. Patrick. C.H. Patrick's affiliated sales *** its unaffiliated sales; however, Sandoz's affiliated sales generally have *** according to information obtained in the preliminary investigations. In those investigations, Sandoz indicated that its export sales were primarily to affiliates in *** at *** than the average domestic net sales prices because the export price is ***. Although Sandoz did not show any company transfers in its financial data, an approximation of respective unit values can be made based on export shipments reported in the questionnaire.

Differences in average unit values for Sandoz's domestic and export shipments of the subject sulfur dyes are shown in the following tabulation (in dollars per pound):

* * * * *

If ***. As a share of Sandoz's total shipments of the subject dyes, exports represented *** percent of the total converted pounds shipped. At the on-site verification, it was determined that the difference in unit values in domestic and foreign shipments is due primarily to ***.

Value Added

The firms included in the data presented in tables 9-12 have vastly different operations, not only when comparisons are made between the vertically integrated producer, Sandoz, and the finishers, but between the finishers as well. Whereas Sandoz produces the final product entirely from its own production facilities without using purchased concentrate, C.H.

Patrick purchases the unfinished concentrate and performs additional processing to obtain the final product. Its conversion costs, SG&A expenses, and total value added percentages are shown in the following tabulation for C.H. Patrick's two sulfur dye product categories (in percent):

* * * * *

Southern Dye ***. Adding to the disparate nature of the respective operations are the apparent differences in the concentrates produced by Sandoz and the multiple forms purchased by the finishers, which require different levels of processing.

Differences in value added to the purchased concentrate on a cost basis by the finishers for common sulfur dye products are presented in table 14.

Table 14

Value added by U.S. finishers on sulfur dye and sulfur vat dye products, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Capital Expenditures

Capital expenditures of Sandoz and C.H. Patrick for their establishments in which the subject sulfur dyes are produced and/or finished and for their operations on such dyes are shown in table 15. ***.⁹³

Table 15

Capital expenditures by Sandoz and C.H. Patrick, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Investment in Productive Facilities

The investment in productive facilities and the annual return on total assets for Sandoz and C.H. Patrick are presented in table 16 for their overall establishment, sulfur dye, and sulfur vat dye operations. ***.⁹⁴

⁹³ ***.

⁹⁴ ***.

Table 16

Value of assets and return on assets of Sandoz and C.H. Patrick for their overall establishment, sulfur dye, and sulfur vat dye operations as of the end of fiscal years 1989-91, September 30, 1991, and September 30, 1992

* * * * *

Research and Development Expenses

Research and development expenses for Sandoz and C.H. Patrick for their establishments in which the subject sulfur dyes are produced and for their operations on these dyes are shown in table 17. ***.⁹⁵

Table 17

Research and development expenses of Sandoz and C.H. Patrick, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

The respective levels of investment for fixed assets at original cost and capital expenditures of the combined sulfur dye and sulfur vat dye operations of Sandoz and C.H. Patrick are shown in the following tabulation (in thousands of dollars):

* * * * *

During the Sandoz verification, it was noted that ***. Sandoz personnel indicated that ***. If ***. The differences are shown in the following tabulation (in thousands of dollars):

* * * * *

***.

On the other hand, C.H. Patrick ***. ***.

⁹⁵ ***.

Environmental Expenses

Sandoz's and C.H. Patrick's reported environmental expenses for their establishments in which sulfur dyes and sulfur vat dyes are produced and/or finished, and for their operations in producing such dyes are shown in table 18; ***.⁹⁶ Aggregate environmental expenses for the subject dyes were equivalent to *** percent of net sales in 1989, *** percent in 1990, *** percent in 1991, *** percent in interim 1991, and *** percent in interim 1992.

Table 18
Environmental expenses of Sandoz and C.H. Patrick, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Impact of Imports on Capital and Investment

The Commission requested the U.S. producer and finishers to describe any actual or potential negative effects of imports of the subject sulfur dyes from China, India, or the United Kingdom on their growth, development and production efforts, investment, and ability to raise capital (including efforts to develop a derivative or improved version of the product). Comments from the companies are presented in appendix J.

**CONSIDERATION OF THE QUESTION OF
THREAT OF MATERIAL INJURY**

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) provides that--

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the merchandise, the Commission shall consider, among other relevant economic factors⁹⁷--

- (I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

⁹⁶ ***.

⁹⁷ Section 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

(IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 706 or 736, are also used to produce the merchandise under investigation,

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.⁹⁸

⁹⁸ Section 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against (continued...)

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Products and Material Injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of Material Injury to an Industry in the United States." Item (I), regarding subsidies, and item (IX), regarding agricultural products, are not relevant in these investigations.

Parties and staff are unaware of any dumping findings in third countries concerning sulfur dyes. The following section presents available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); and any other threat indicators, if applicable (item (VII) above).

U.S. Importers' and Finishers' Import Inventories

Information on end-of-period inventories of imports of the subject sulfur dyes held in the United States by U.S. importers or U.S. finishers was compiled from responses to the Commission's questionnaires, and is presented in table 19. As shown, end-of-period inventories of the subject sulfur dyes reported by U.S. importers and finishers *** by *** percent from 1989 to 1990, and then *** by *** percent from 1990 to 1991. During January-September 1992 inventories were *** than in the same period of 1991, accounted for by ***. As a share of imports, inventories accounted for *** percent in 1991 and *** percent during January-September 1992.

Table 19

Subject sulfur dyes: U.S. importers'/purchasers' end-of-period inventories, and ratios of inventories to imports, by sources, 1989-91, January-September 1991, and January-September 1992

* * * * *

Ability of Foreign Producers to Generate Exports and Availability of Export Markets Other Than the United States

Information presented in this section of the report has generally been provided by counsel for the responding foreign firms. Available information provided by U.S. embassies in the countries under investigation has also been presented, as appropriate.

⁹⁸ (...continued)

the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

The Industry in China

Several producers in China are believed to independently manufacture various subject sulfur dyes (including sulfur vat blues) for export to the United States. Export sales to the United States are made through trading companies or import-export corporations in China and Hong Kong and through the China National Chemicals Import & Export Corporation (SINOCHEM), a government-controlled foreign trade corporation. The petitioner estimates current annual sulfur dye production in China to be approximately *** pounds.⁹⁹ There is believed to be a large home market in China for sulfur-dyed black cotton fabric used in wearing apparel.

Information on capacity, production, and shipments of the subject sulfur dyes for six of the known manufacturers/exporters in China was provided by counsel and the data are presented in table 20. In a posthearing brief submitted on behalf of respondents, the following data were provided for Chinese operations on sulfur black dye (in 1,000 pounds):¹⁰⁰

* * * * *

Although the total amounts of reported exports to the United States in table 20 track fairly closely with data on U.S. imports of the subject sulfur dyes, discrepancies in individual factory data were identified, but remained unresolved during these investigations.¹⁰¹ Factory specific discrepancies are presented in the following tabulation (in 1,000 actual pounds):

* * * * *

The Industry in India

The petition stated that there are two manufacturers of sulfur dyes in India, Atul Products, Ltd. (Atul) of Gujarat State, and Hickson & Dadajee,

⁹⁹ In comparison, Sandoz's U.S. production in 1991 was about *** million pounds.

¹⁰⁰ Posthearing brief on behalf of respondents C.H. Patrick & Co., Inc., *et al.*, app. 3, statement by Tongyuan Qi. The exports to the United States shown in the above tabulation are smaller than those reported by the 6 firms that supplied the data shown in table 20, in 1990 and 1991, even when exports by Wuhan through Hong Kong are netted out. As noted in respondents' brief, "As a result of the market economic reform, producers no longer report to the Ministry. The above numbers are collected by the China Dyestuff Association as provided by members (emphasis added) producing sulfur black."

¹⁰¹ Counsel for Chinese respondents reported that Chinese trading companies provided export data and production and related data for their suppliers, and *** (see Jan. 22, 1993 supplemental submissions of McNair Law Firm, and Miller, Canfield, Paddock and Stone).

Table 20

C.I. sulfur dye operations in China: Capacity, production, capacity utilization, and shipments, 1989-91, January-September 1991, and January-September 1992¹

Item	1989	1990	1991	Jan.-Sept.--	
				1991	1992
<u>Quantities (1,000 actual pounds)</u>					
Capacity.....	42,765	50,468	54,441	40,832	43,053
Production.....	33,365	36,918	38,595	28,532	36,151
Inventories.....	566	649	3,112	2,895	4,805
Shipments:					
Home market.....	18,388	20,634	19,675	14,128	17,080
United States ^{2,3}	2,278	4,148	3,711	2,704	3,815
All other markets.....	12,847	12,053	12,677	9,391	13,566
Total.....	33,513	36,835	36,053	26,223	34,461
<u>Ratios (in percent)</u>					
Capacity utilization.....	78.0	73.2	70.9	69.9	84.0
Inventories/production.....	1.7	1.8	8.1	7.6	10.0
Share of total shipments:					
Home market.....	54.9	56.0	54.6	53.9	49.6
United States.....	6.8	11.3	10.3	10.3	11.1
All other exports.....	38.3	32.7	35.2	35.8	39.4

¹ Counsel for respondents have provided data for six factories/exporters in China that supply U.S. requirements. Those factories include Tianjin, Handan (Hebei), Dalian, Linfen, YiFong, and Wuhan. No data were received for *** factories; these factories supplied *** percent of U.S imports of the subject sulfur dyes during ***. *** did not provide a response to the Commission's request for information, but its U.S. brokerage firm reported that ***.

² Includes exports of Chinese-produced sulfur dyes by the Wuhan Factory through Kwong Fat Chemicals in Hong Kong. *** in 1989, *** in 1990, *** in 1991, *** during January-September 1991, and *** during January-September 1992.

³ Based on available evidence, it would appear that exports to the United States of Chinese-produced sulfur dyes by ***.

Note.--Items may not add to totals due to rounding.

Source: Compiled from data submitted by counsel for Chinese respondents.

Ltd., (Hickson) of Bombay. In response to a request for information from the Commission during the preliminary investigations, the U.S. consulate in Bombay identified four additional producers: Amar Dye-Chem, Ltd., Bombay; Atic Industries, Gujarat State (and Arlabs Ltd., Bombay); Indian Dyestuff Industries, Bombay; and Rainbow Dyestuff Ltd., Bombay. The dyestuff industry in India is based primarily in the western Indian states of Gujarat and

Maharashtra.¹⁰² It began in 1940 with the manufacturing of synthetic organic dyes by Associated Research Laboratories. This company was acquired by the Lalbhai Group which, in turn, established Atul in the late 1940s.

Production of sulfur dyes in India has historically been oriented towards the large domestic market for textiles, in which the product is usually purchased as a soluble powder. (In contrast to production in the United States, textiles are produced in India by a widespread cottage industry, which is better able to use the powdered form than the pre-reduced liquid dyes purchased in the United States.)¹⁰³ Data supplied by the U.S. consulate during the preliminary investigations for the six identified Indian producers are presented in the following tabulation:¹⁰⁴

<u>Item</u> ¹	<u>Fiscal</u> <u>year</u> <u>1988-89</u>	<u>Fiscal</u> <u>year</u> <u>1989-90</u>	<u>Fiscal</u> <u>year</u> <u>1990-91</u>
Production (1,000 pounds) ²	3,560	3,693	3,726
Exports (1,000 U.S. dollars) ³ ..	2,477	4,451	4,905

¹ No information on capacity, home market shipments, and inventories was available.

² The form in which the data are presented is presumably the form in which the product is manufactured and shipped. According to the U.S. consulate, 60 percent of home market shipments in India are of the powder form; liquid dyes account for 20 to 25 percent; presscake for 10 percent; and pastes for the remaining 5 to 10 percent. Exports are usually powder or liquid.

³ Trade sources show that over 30 percent of exports are for the U.S. market, followed by an estimated 25 percent to the European market. An additional 20 percent are shipped to the Far East.

As shown in the preceding tabulation, production and total exports increased by 4.7 percent and 98.0 percent, respectively, during the last 3 years. Industry sources expect additional increases in sulfur dye (and sulfur

¹⁰² In addition to sulfur dyes (and sulfur vat dyes), acid dyes, azoic dyes, basic dyes, disperse dyes, reactive dyes, and naphthols, fast-colored bases, organic pigments, and optical brightening agents are produced in India. Production of all dyes is equally divided between large-scale, organized producers (of which there are currently 48) and approximately 900 smaller producers. Due to the substantial capital investment required, all manufacturing of sulfur dyes in India is by large-scale producers.

¹⁰³ Staff conversation with ***.

¹⁰⁴ In a response to a "fax message sent by Mr. William Silverman, Rogers & Wells" seeking clarification of the above information, the embassy in Bombay cabled information to the Department of Commerce indicating that Atul and Hickson-Dadajee are the major producers, that Atul is probably the only exporter, and that the expected demand figures were reported in a Government of India publication. Although the cable was addressed to "USITC W.T. Hart," the Commission's Office of Executive Liaison never received the cable, and, therefore, staff was not aware of this cable until provided in respondents' prehearing briefs.

vat dye) production, projecting manufacturing levels of 10.2 million pounds during 1994-95 and 12.9 million pounds during 1999-2000. A constraint on the production of sulfur dyes (and other synthetic dyes) in India is the availability of the chemical intermediates, specifically DNCB.¹⁰⁵ Also, the Indian dyestuff industry is encountering several major problems; namely, the need to upgrade its technology in the areas of filtration, drying, automation, material handling, and pollution control.

Atul provided an individual response to a Commission inquiry for information.^{106,107} Data for its subject sulfur dye operations are presented in table 21. As shown, Atul *** and projects ***. The *** of Atul's production is consumed by the home market.

Table 21

Subject sulfur dye operations of Atul: Capacity, production, capacity utilization, inventories, and shipments, 1989-91, January-September 1991, and January-September 1992

* * * * *

The Industry in the United Kingdom

Available information indicates that there is only one manufacturer of sulfur dyes in the United Kingdom, James Robinson Ltd. (Robinson), Huddersfield. Robinson has produced sulfur dyes since 1913. In its most recent fiscal year, sulfur dyes accounted for approximately *** of its total sales.¹⁰⁸ As shown in table 22, *** of the subject sulfur dyes produced by James Robinson are exported to countries other than the United States, such as ***.¹⁰⁹ Exports of the subject sulfur dyes to the United States *** percent from 1989 to 1990, *** percent in 1991, and *** percent during January-September 1992 compared to the same period in 1991. Overall production has ***. The capacity to produce ***. Capacity utilization for the subject sulfur dyes *** percent in 1989 to *** percent in 1991; capacity utilization was at *** percent during January-September 1992.

¹⁰⁵ Staff conversation with ***.

¹⁰⁶ Sulfur dyes accounted for approximately *** percent of Atul's sales in its latest fiscal year. Atul also produces other types of dyes. However, products other than sulfur dyes cannot be produced on the equipment and machinery used in the production of sulfur dyes.

¹⁰⁷ An individual response to a Commission inquiry for information was also supplied by Hickson. Hickson stated ***.

¹⁰⁸ Robinson also manufactures other specialty chemicals, including one disperse dye, and cosmetic colors.

¹⁰⁹ ***.

Table 22

Subject sulfur dye operations of James Robinson: Capacity, production, capacity utilization, and shipments, 1989-91, January-September 1991, and January-September 1992

* * * * *

Expected Imports

In its questionnaires, the Commission requested that U.S. importers list any expected (or actual) deliveries of sulfur dyes from China, India, and the United Kingdom after September 30, 1992. Data received in response to this request are presented in the following tabulation (in thousands of pounds):

* * * * *

CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE SUBJECT PRODUCTS AND MATERIAL INJURY

U.S. Imports

Data on U.S. imports of the subject sulfur dyes will be presented in two ways: (a) based on responses to the Commission's questionnaires, and (b) based on official import statistics.

Questionnaire Data

U.S. imports based on responses to the Commission's questionnaires are presented in table 23 and figures 2 and 3. The principal source of U.S. imports of the subject dyes is China, which accounted for large and increasing shares of the subject imports based on quantity; *** percent of imports in 1989 and *** percent during January-September 1992.¹¹⁰

¹¹⁰ Quantities have been converted to the finished form equivalent weight, normalized to 100 percent of standard. Raw material characteristics vary from factory to factory and from country to country depending upon the characteristics (i.e., the size and distribution of dye molecules, concentration, solubility, tinctorial value, and impurities) and age of the raw material. (Responses by *** to the Commission's questionnaire.) A summary of the conversion ratios follows:

* * * * *

Table 23

Subject sulfur dyes: Importers' and finishers' U.S. imports, by subject countries and by types of sulfur dyes, 1989-91, January-September 1991, and January-September 1992

* * * * *

Figures 2 & 3

Sulfur dyes: Imports by type and source

* * * * *

The quantity of U.S. imports of the subject sulfur dyes from China increased sharply, nearly doubling from *** million pounds in 1989 to *** million pounds in 1990, and decreasing to *** million pounds in 1991, or by *** percent.¹¹¹ U.S. imports from China increased to *** million pounds, or by *** percent during January-September 1992, when compared to the same period in 1991. *** the quantity of U.S. imports of the subject sulfur dyes from India *** during the period. U.S. imports from the United Kingdom of the subject products *** by *** percent in 1990, then *** in 1991 (by *** percent). The trends in imports are broadly determined by the same factors that affect overall consumption (i.e., demand for cotton and, specifically, denim). However, more narrowly, the dye blends or recipes currently in use (and the amount of specific dye blends being sold) by C.H. Patrick, the principal finisher of imported subject sulfur dyes, will determine the amounts that are imported from each source.¹¹²

Average unit values of U.S. imports varied according to product type and source. Imports of the subject sulfur dyes ranged from \$*** per pound (for imports from China in 1991) to \$*** (for imports from the United Kingdom in 1991). U.S. imports of sulfur vat dyes from China were \$*** per pound in 1991, while British-produced sulfur vat dyes were imported into the United States at \$*** per pound.

Official Import Statistics

The Commission's ability to rely on official import statistics for analysis of data has been tainted by two factors: (a) transshipments of Indian-produced sulfur dyes through Europe,¹¹³ and (b) misclassification of

¹¹¹ The decline between 1990 and 1991 is partially explained by ***.

¹¹² For example, the increased imports from China are reportedly due ***.
Staff conversation with attorney for C.H. Patrick, May 11, 1992.

¹¹³ See app. K for letter from *** identifying imports of the subject sulfur black dyes from Switzerland as sulfur dyes of Indian origin.

black sulfur dyes.¹¹⁴ Nonetheless, the following tabulation presents data on imports of sulfur black dye under HTS No. 3204.19.30¹¹⁵ as compiled from official Commerce statistics:

Source	1989	1990	1991	Jan.-Sept.--	
				1991	1992
<u>Quantity (1,000 actual pounds)</u>					
China.....	1,910	3,335	3,158	2,565	3,310
Hong Kong.....	406	1,000	164	84	60
Subtotal.....	2,316	4,335	3,322	2,650	3,370
India.....	35	196	77	33	143
Switzerland.....	453	573	206	103	35
Subtotal.....	488	769	283	136	178
United Kingdom.....	1,858	2,168	1,228	863	771
Subtotal subject countries.....	4,662	7,272	4,832	3,649	4,319
All other.....	0	122	0	0	14
Total.....	4,662	7,394	4,832	3,649	4,332
<u>Value (1,000 dollars)¹</u>					
China.....	1,933	2,835	2,438	1,951	2,195
Hong Kong.....	539	1,133	147	68	54
Subtotal.....	2,472	3,968	2,585	2,019	2,249
India.....	69	233	97	43	178
Switzerland.....	871	977	304	162	45
Subtotal.....	940	1,210	401	206	223
United Kingdom.....	1,531	1,729	980	690	638
Subtotal subject countries.....	4,943	6,907	3,966	2,915	3,109
All other.....	0	127	0	0	14
Total.....	4,943	7,034	3,966	2,915	3,124
<u>Unit value (per pound)</u>					
China.....	\$1.01	\$0.85	\$0.77	\$0.76	\$0.66
Hong Kong.....	1.33	1.13	.90	.80	.91
Subtotal.....	1.07	.92	.78	.76	.67
India.....	1.94	1.19	1.26	1.31	1.24
Switzerland.....	1.92	1.70	1.48	1.57	1.30
Subtotal.....	1.92	1.57	1.42	1.51	1.25
United Kingdom.....	.82	.80	.80	.80	.83
Subtotal subject countries.....	1.06	.95	.82	.80	.72
All other.....	(2)	1.04	(2)	(2)	1.05
Total.....	1.06	.95	.82	.80	.72

¹ Landed, duty paid.

² Not applicable.

¹¹⁴ See app. L for letters from *** acknowledging misclassification of sulfur black dyes as "other" dyes. Information as to the existence of such misclassification, known and communicated to ***, was provided by *** in response to a request for information on discrepancies between ***.

¹¹⁵ Black sulfur dyes accounted for approximately *** percent of the total subject sulfur dye imports during 1991.

Critical Circumstances Considerations

In its antidumping investigation concerning China, Commerce made critical circumstances determinations for all Chinese manufacturers/producers/exporters, with the exception of Sinochem International Chemicals (Handan factory). Commerce determined that imports have been massive over a relatively short period of time following the filing of the petition.¹¹⁶ Because the dumping margins exceeded 25 percent, Commerce determined that importer knowledge of dumping existed, and found that critical circumstances exist with respect to the subject sulfur dyes from China (except imports from Handan factory). Data representing month by month imports of the subject Chinese sulfur dyes for the 5 months before (November 1991-March 1992) and the 5 months after (April-August 1992) the filing of the petition, as compiled from responses to the Commission's questionnaires, are presented below (in 1,000 converted pounds):

* * * * * * *

U.S. Market Penetration by Imports

Data on penetration by subject imports into the U.S. market are presented in table 24. As shown, the share of apparent consumption held by shipments of imports from China increased sharply from 1989 to 1990 (in terms of both quantity and value), then declined slightly from 1990 to 1991; the share of apparent consumption was *** during January-September 1992 when compared to the same period in 1991. Shares of apparent consumption held by shipments of imports from India *** from 1989 to 1991, and *** during January-September 1992. Shares of apparent consumption held by shipments of imports from the United Kingdom *** from 1989 to 1991 and *** during January-September 1992.

Shares of apparent consumption based on quantity and value for Sandoz, C.H. Patrick, Southern Dye, all other subject imports, and other imports, are presented in the following tabulation (in percent) and in figure 4:

* * * * * * *

¹¹⁶ In making its critical circumstances determination, Commerce considers the following factors in determining whether imports have been massive over a short period of time: (1) The volume and value of imports; (2) seasonal trends (emphasis added) (if applicable); and (3) the share of domestic consumption accounted for by imports (Commerce final antidumping determination concerning China, p. 13).

Figure 4
Sulfur dyes: Market shares

* * * * *

Table 24
Subject sulfur dyes: Apparent U.S. consumption and market penetration of subject imports, by sources and by types of sulfur dyes, 1989-91, January-September 1991, and January-September 1992

Item	1989	1990	1991	Jan.-Sept.--	
				1991	1992
<u>Quantity (1,000 pounds)</u>					
Subject sulfur dyes:					
* * * * *					
By C.I. classification:					
* * * * *					
<u>Value (1,000 dollars)</u>					
* * * * *					
<u>Share of consumption, quantity (in percent)</u>					
* * * * *					
<u>Share of consumption, value (in percent)</u>					
* * * * *					

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Factors Affecting Demand

The demand for the subject sulfur dyes depends upon sales of certain textiles, primarily cotton, and to a lesser extent, of leather and colored paper. This demand has increased significantly in recent years, largely as a result of the increased popularity of black denim and other cotton fabrics. Approximately *** percent of the subject sulfur dyes produced by Sandoz, and approximately *** percent of the dyes that contain the subject imported dye are used on denim. Prior to the 1980s virtually all denim was dyed blue with indigo dyes. However, in recent years the demand for other colors of denim, particularly black, has grown rapidly and all denim colors with the exception of indigo are produced using sulfur dyes. Total annual denim production in colors other than indigo increased by 51.6 percent during 1988-91 and production increased by 17.4 percent from the first half of 1991 to the first half of 1992 (see figure 5).

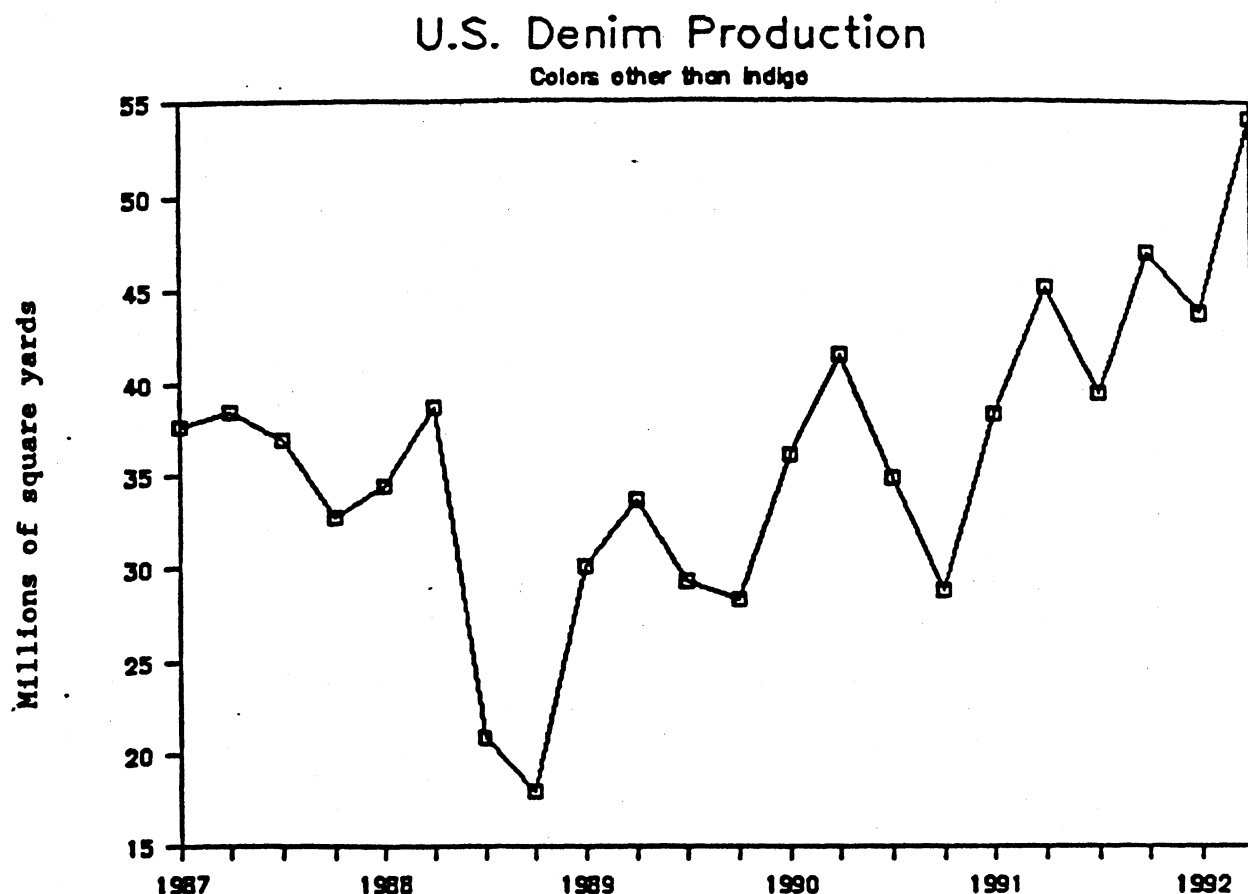
Both Sandoz and C.H. Patrick have reported aggressive research and development efforts in recent years to produce sulfur dyes and dye pre-treatments that will give black denim a "stone washed look" or a "distressed look" and allow the material to maintain certain shade characteristics as it fades after repeated washings. These developments, combined with a strong marketing campaign for these dyes and techniques, have resulted in increasing sales. Sulfur black dyes currently represent approximately *** percent of the subject sulfur dyes produced entirely in the United States and approximately *** percent of the finished sulfur dyes produced from imports used by the U.S. textile industry.¹¹⁷

Demand for sulfur dyes for use in leather has also increased in recent years. Keystone (an importer) states that this increase in demand has resulted from the introduction of new colors offered by importers. According to Keystone, these colored sulfur dyes have replaced premetallized acid dyes that are primarily imported from Germany.

The production and use of sulfur dyes have created some environmental problems that have posed some limits on the growth in sales of sulfur dyes. Sulfur dye production creates waste products which must be treated before they can be discharged into rivers and the atmosphere. In recent years Sandoz has made modifications in its plant in order to treat these waste products and thereby to comply with local environmental regulations. Textile mills have also had to meet pollution requirements regarding effluents and air pollution. The sulfur dye industry has responded to these problems by introducing products that eliminate some or all of the problems mentioned above. Sandoz now produces a line of sulfur dyes that reportedly contain reduced amounts of sulfides and thus lower the levels of this contaminant in the wastewater. This line of dyes accounted for *** percent of Sandoz's total subject sulfur dye sales in 1991. Patrick reports that it has had limited options for the production of environmentally safer sulfur dyes because of an ongoing patent dispute with Sandoz. However, it claims that it has eliminated the problem of

¹¹⁷ Black sulfur dyes classified by the Colour Index as Sulfur Black 1 represent approximately *** percent of the dyes produced entirely in the U.S. and *** percent of the finished sulfur dyes produced from imports.

Figure 5



Source: Current Industrial Reports, U.S. Bureau of the Census, U.S. Department of Commerce.

"free sulfur"¹¹⁸ and that its sulfur dyes are now environmentally safer than previously because it more rigidly controls excessive sulfides in its dyes. Southern Dye is the only U.S. supplier of C.I. leuco sulfur dyes that reports to have completely eliminated the use of sulfides in the dye reduction process. Consequently, it is safer for workers in the textile plant and less treatment of the plant's wastewater is required. All sulfur dyes produced by Southern Dye are reported to be environmentally safer than conventional sulfur dyes.

The growth of the sulfur dye market in recent years, especially for C.I. Sulfur Black 1, as well as increased competition among suppliers has brought other new products on the market. New black sulfur dyes reportedly have been introduced not only to provide more competitively priced sulfur dyes, but also to create special effects sought by the fashion industry, and to provide specialized dyes that perform better using specific application methods.

¹¹⁸ Free sulfur is reported to be a cause of skin irritations for textile workers in plants which use sulfur dyes.

Sandoz began offering a new sulfur black liquid in July 1989 (Deniblack) as a lower priced alternative to its popular Sulfur Black 4GCF that it continues to sell. Sandoz describes Deniblack as ***.¹¹⁹ Sandoz reports that it sells Deniblack ***.

C.H. Patrick began finishing imported sulfur dyes and marketing a product (Patcosul Black 4RB) that is similar to Sandoz's 4GCF in the latter part of 1988. When Burris stopped finishing sulfur dyes in 1989, Patrick acquired its sulfur dye plant and continued to produce the Burris Sulfur Black 1 under the name Patcosul Black B-4G. Patrick has since introduced Patcosul Black 4R-MD and Patco Denim Black 2000. Patrick reports that its 4RB is compatible with all types of dyeing applications, while its newer, less expensive black dyes are recommended for specific application methods. For example, Patrick reports that its B-4G is designed primarily for exhaust dyeing and it recommends Denim Black 2000 for ball warp dyeing;¹²⁰ however, each of these dyes is used by purchasers in application methods other than those recommended. Southern Dye began selling a Sulfur Black 1 dye in 1989, and in late 1991 introduced another one which it reported was environmentally safer and more expensive than its first sulfur black. Southern Dye reports that its dyes are significantly different from the environmentally safer dyes produced by either Sandoz or C.H. Patrick, and that its customers buy its products because they meet special environmental and health concerns.

Despite the efforts of Sandoz, C.H. Patrick, and Southern Dye to introduce new lower priced products tailored to specialized end uses, some large customers are unwilling to risk changing the appearance of their product for a small saving in the cost of dye. These customers continue to buy a familiar product when the same dye producer offers a less expensive alternative that is designed specifically for the same end use. For example, Avondale Mills, a textile producer, continues to use C.H. Patrick's higher priced 4RB even though Patrick promises the same results with its Denim Black 2000.¹²¹ Cone Mills (the largest domestic manufacturer of denim) uses Sandoz's Black 4GCF despite the cheaper alternative (Deniblack) that Sandoz reports has an identical effect on denim.¹²²

Prices

Marketing Characteristics

The market for sulfur dyes consists of a single integrated U.S. producer, importers, distributors, domestic finishers of the subject imports, and end users.¹²³ The majority of the subject sulfur dyes are imported in an unfinished form and require further processing prior to application in their

¹¹⁹ ***.

¹²⁰ Ball warp dyeing is the dye application process used for denim.

¹²¹ Preliminary TR, p. 178.

¹²² Ibid, p. 71.

¹²³ In its preliminary determination, the Commission found that U.S. finishers (solubilizers) are part of the domestic industry, but determined that the importing activities of these firms supported their exclusion from the domestic industry as related parties. (USITC Pub. 2514, May 1992, p. 14.)

intended end uses.¹²⁴ Consequently, U.S. importers sell most of their sulfur dyes to domestic finishers,¹²⁵ who reduce and standardize the product for sale to end users in the textile, leather, and paper industries.

Sandoz and C.H. Patrick sell their sulfur dyes almost exclusively to end users in the textile industry;¹²⁶ Southern Dye sells to both distributors and end users in the textile industry.¹²⁷ Sales are generally made through direct contacts between sales representatives from the dye companies and purchasing agents at the textile mills. However, when new dyes or dye pretreatments create novel effects, the marketing staff of a dye company may produce sample fabrics that display these effects and contact designers and garment manufacturers rather than the textile mill. If a designer is interested in the new product, the dye producer can create what is known as a "pull-through" sale, whereby the garment manufacturer places an order with the textile company specifying both the fabric and the dye. Both Sandoz and C.H. Patrick report that they quote prices to their major customers in response to the estimated quantity that the customer anticipates using during a given period of time. These are generally verbal agreements that are renegotiated approximately every 6 months. Southern Dye sells only on a spot-sale basis.

Sandoz publishes a price list that specifies a discount of \$0.01 per pound for drum shipments exceeding 10,000 pounds and \$0.04 per pound for tank truck shipments exceeding 30,000 pounds. Sandoz's questionnaire responses indicate that in the first quarter of 1992 it gave additional discounts of as much as *** percent to its largest purchasers of Sulfur Black 4GCF. One of Sandoz's least expensive and largest selling sulfur dyes (Deniblack 4G) does not appear on its price lists. Sandoz quotes its prices on a delivered basis for most of its customers, but its price list specifies surcharges for delivery to certain parts of the country outside of the southeastern United States.

C.H. Patrick publishes a price list that allows volume discounts similar to those of Sandoz. Patrick reported adhering to the list prices until the first half of 1989, when the introduction of a less expensive line of sulfur black dyes from Sandoz necessitated additional discounts. Patrick also quotes prices on a delivered basis in the southeastern United States, where most of its customers are located, while sales to other parts of the country include a surcharge for delivery. Southern Dye does not publish a price list; prices are established through negotiation with its customers.

¹²⁴ Sulfur dyes generally must be transformed to a water-soluble (reduced) form prior to application. During the sulfur dye reduction process, chemical reagents break the numerous sulfur-sulfur bonds, placing the dye in a water soluble form. After application, the dyes are returned to water-insoluble form (by chemical oxidation) and thus attached or "fixed" to the substrate.

¹²⁵ During 1991, *** percent and *** percent of the subject imports were unfinished and finished product, respectively. (Staff report, table 23.)

¹²⁶ Sandoz sells *** percent of its sulfur dyes to end users in the paper, leather, and ink industries. C.H. Patrick sells exclusively to the textile industry. Approximately *** percent of its sales are directly to end users and the remaining *** percent are to ***.

¹²⁷ See section entitled "Channels of Distribution" of this report.

Most of the major textile mills are located in the southeastern United States and freight costs are relatively low compared with the finished cost of the dye. Transportation costs were therefore reported not to be a major factor by Sandoz, C.H. Patrick, or Southern Dye. Sandoz reported transportation costs to be approximately *** percent of the total delivered cost of its product; Patrick reported this cost to be between *** percent; and Southern Dye reported *** percent.

The major consumers of sulfur dyes within the textile industry are producers of woven and knit cellulosic fabrics,¹²⁸ yarn mills which sell to these fabric producers, and commission finishers which provide a dyeing service to fabric producers or purchasers. The leather industry uses C.I. solubilized sulfur dyes to color leather used in shoes, boots, upholstery, garments, or other products that require complete dye penetration.¹²⁹ Most sulfur dye users in both the textile and leather industries reported that they sell to manufacturers that in turn produce a finished product with the dyed fabric or leather.

The majority of end users that had purchased sulfur dyes from Sandoz during 1991 reported that the Sandoz and subject company products¹³⁰ were of comparable quality; the remainder stated that the subject company dyes were of superior quality. All end users reported that both the Sandoz and subject company sulfur dyes were employed in the same range of uses. The majority of end users reported that there was no significant difference in the sulfur dyes available from the various suppliers. However, three textile end users indicated differences between Sandoz's and Southern Dye's products. Two of these end users indicated that the Southern Dye product contained fewer polysulfides, and the other end user indicated that usage of the Southern Dye product resulted in less odor, required less time and water usage, and gave the yarn a better feel than did the Sandoz product. Separately, one textile end user indicated that Patrick's product imparted a deeper color and had better fastness than Sandoz's.

End users were asked to report differences between Sandoz's and the subject companies' terms of sale, service, warranties, sales techniques or other marketing efforts. Most of those responding stated that Sandoz and the subject companies' efforts were the same or similar in each of these areas.¹³¹ However, five end users stated that the subject companies had better terms of sale either because Sandoz doesn't prepay freight on smaller orders whereas the competing subject company does or because the subject companies give extended payment terms. Five textile firms reported that Patrick provided

¹²⁸ Cellulosic fabrics include cotton, linen, and viscose rayon.

¹²⁹ Sandoz reported that *** percent of its C.I. solubilized sulfur dye shipments in 1991 were to the leather industry. *** of the C.I. solubilized sulfur dyes imported into the United States in 1991 were sold to the leather industry.

¹³⁰ The importers and finishers of the subject sulfur dyes (Patrick, Southern Dye, Burris, Keystone, Colorants, and Twilight) were referred to collectively in the end user questionnaire as the "subject companies".

¹³¹ Seventeen of 22 end users replied that Sandoz's terms of sale were the same as or similar to those of the subject companies. This reply was given by 10 of 17 regarding service, 16 of 17 regarding warranties, and 18 of 25 regarding sales technique.

better service than Sandoz, and five of nine firms in the leather industry replied that the service of the subject companies was superior.¹³² Three end users in the textile industry and four in the leather industry stated that the sales techniques of the subject companies were superior to those of Sandoz, and five of these seven end users reported that the subject companies contacted them more frequently than Sandoz did. In addition, *** reported that Sandoz has a larger variety of sulfur dyes than the subject companies have.

According to questionnaire data, "quality" is considered the most important sourcing factor for sulfur dye end users followed by price, availability, service, and traditional supplier. End users most frequently ranked application requirements as "very important," followed in decreasing order by price, fastness, wash characteristics, shades, environmental characteristics, and speed of dyeing. Style preference was most frequently listed as "not important" followed by minimum quantity requirements.

Questionnaire Price Data

The Commission requested net delivered prices from importers for sales of four different sulfur dyes: Sulfur Black 1, Sulfur Blue 7, Vat Blue 43 (a sulfur vat dye), and C.I. Solubilized Sulfur Black 1. Direct comparisons between the imported and the domestic products were possible only for imports of C.I. Solubilized Sulfur Black 1 from the United Kingdom.¹³³ Most of the other sulfur dyes are imported in either an unfinished or a concentrated form which must be further processed before they can be applied to a substrate. Sales of C.I. solubilized sulfur dyes imported from India were also reported; however, they were only to a U.S. distributor that resells to another distributor that in turn sells to the end user. The second distributor's sales prices to end users and margins of under/(over)selling have been included in appendix M. The U.S. producer of C.I. Solubilized Sulfur Black 1 (Sandoz) sells only to end users.

U.S. Producer's and Importers' Prices

The delivered price of Sulfur Black 1 imported from China ranged from \$*** to \$*** per pound during January 1989-September 1992 (table 25). The price increased from \$*** to \$*** during the first 5 quarters of the period, then generally decreased, ending the period examined at \$*** per pound, an overall decrease of *** percent. The delivered price for Chinese-produced Vat Blue 43 was \$*** per pound during the 1 quarter in 1989 and the 2 quarters in 1990 for which data were reported. The delivered price of Sulfur Blue 7 imported from China was \$*** for the 3 quarters in 1989 and 1990 for which data were reported, and was \$*** during the third quarter of 1992.

Table 25

Weighted-average delivered prices for sales of certain unfinished sulfur dyes from China, by products and by quarters, January 1989-September 1992

* * * * *

¹³² One textile company reported that Sandoz has more technical service available although Patrick is faster.

¹³³ ***.

Delivered prices of U.S.-produced C.I. Solubilized Sulfur Black 1 ranged from \$*** to \$*** per pound during the period January 1989-September 1992 (table 26). The price *** from \$*** per pound during the first quarter of the period to \$*** per pound during the first quarter of 1991 and *** to \$*** per pound during the third quarter of 1992. The price *** somewhat but *** percent throughout the period. The delivered price of the British dye ranged from \$*** during January-March 1989 to \$*** during the second and third quarters of 1992. Overall, prices for the British product *** percent during the period examined. The British product undersold the U.S. product in 13 of 15 quarters by margins ranging from *** to *** percent. In *** instances the Sandoz product was priced higher than the British product by margins of *** and *** percent.

Table 26

Delivered prices to end users by the U.S. producer and the importer of British-produced C.I. Solubilized Sulfur Black 1 and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

The delivered price of British-produced Sulfur Black 1 ranged from \$*** to \$*** per pound during January 1989-September 1992 (table 27). The price *** per pound between ***. Prices thereafter *** the following quarter and held at this price through the remainder of the period. The delivered price of British-produced Vat Blue 43 ranged from \$*** to \$*** per pound during the 15 quarter period. Prices were \$*** per pound during the first quarter of the period, then ***. Prices were \$*** per pound during the ***, the last period for which data were reported.

Table 27

Delivered prices for sales of unfinished sulfur dyes from the United Kingdom, by products and by quarters, January 1989-September 1992

* * * * *

Delivered prices of Indian-produced Sulfur Black 1 were \$*** per pound during the *** for which data were reported (table 28). The delivered price of C.I. Solubilized Sulfur Black 1 was \$*** per pound during the 4 quarters for which data were reported between ***, and *** to \$*** per pound during ***.

Table 28

Delivered prices for sales of certain sulfur dyes from India, by products and by quarters, January 1989-September 1992

* * * * *

U.S. Producer's and Finishers' Prices

The Commission requested net delivered prices for the largest quarterly sale of six sulfur dyes produced by Sandoz, five sulfur dyes produced by Patrick, and two sulfur dyes produced by Southern Dye. Usable pricing data were obtained from all three firms. However, Patrick reported that it blends unfinished imported dyes from China, India, and the United Kingdom in producing its finished sulfur dyes.¹³⁴ Thus, Patrick was unable to break out a separate series on finished products made from imports from each country. Southern Dye imported exclusively from China and was able to provide a series on finished dyes comprising imports only from China.

Each sulfur dye supplier produces more than one Sulfur Black 1 and each of these dyes competes with the others in some applications. The staff selected for comparison the Sulfur Black 1 dyes that appeared to compete most closely with each other based on factors such as dye characteristics and purchasers' perceptions.¹³⁵

There was no apparent overall trend among the dyes selected for comparison although the prices for individual dyes showed both upward and downward trends. In 30 of 35 instances where comparisons were made the Patrick Sulfur Black 1 dyes were priced less than the comparable Sandoz products by margins ranging from *** to *** percent.¹³⁶ The Southern Dye Sulfur Black 1 dyes were priced less than the comparable Sandoz products in all 13 possible comparisons by margins ranging from *** to *** percent. Patrick's navy blue sulfur dye (Navy GIFN) and its blue sulfur vat dye (Blue N Paste) were collectively priced *** Sandoz's comparable products in 3 of 18 instances by margins ranging from *** to *** percent. Patrick's products were priced *** than the comparable Sandoz products in the remaining 15 instances by margins ranging from *** to *** percent.

The delivered price of Sandoz's 4GCF ranged from \$*** to \$*** per pound during January 1989-September 1992 (table 29). The price was \$*** per pound during the *** of the period then *** per pound during *** and held for the ***. Prices *** the following quarter but had *** per pound by ***. Delivered prices for Patrick's 4RB *** per pound during the period examined, but showed a *** through the 15-quarter period. The Patrick product was

¹³⁴ ***.

¹³⁵ Counsel for petitioner and respondents, in response to the Commission's price comparisons, generally disagree. Counsel for respondents asserts that comparisons of the U.S. producer's and finishers' selling prices are impermissible since the finishers add value to the imported product. Conversely, counsel for the petitioner has stated that comparison of petitioner's prices and those of the U.S. finishers is appropriate, as is also a comparison of theoretical transfer prices of the petitioner's unreduced product and those of the unreduced subject imports sold to U.S. finishers. (TR, pp. 69-74 and 118.) Constructed prices of certain Sandoz unreduced (unsolubilized) sulfur dye products as requested by Commission staff are presented in app. N.

¹³⁶ Three Sandoz Sulfur Black 1 dyes were compared separately to 3 dyes produced by Patrick and to 2 dyes produced by Southern Dye; consequently these 35 instances are not mutually exclusive comparisons.

Table 29

Delivered prices for sales to end users of Sandoz's Sodyesul Black 4GCF and Patrick's Patcosul Black 4RB and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

priced less than the Sandoz product in 14 of 15 quarters, by margins ranging from *** to *** percent. During *** the prices of the two products were the same.

The delivered price of Sandoz's Deniblack 4G ranged from \$*** to \$*** per pound during the period of investigation (table 30). Delivered prices *** per pound during ***, then *** per pound by *** and remained at this level during the remainder of the period examined.

Table 30

Delivered prices for sales to end users of Sandoz's Deniblack 4G and Patrick's Patco Denim Black 2000 and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

Delivered prices of Patrick's Denim Black 2000 ranged between \$*** and \$*** during ***. Prices for Patrick's product remained at \$*** per pound between their introduction in the fourth quarter of 1990 and the same quarter in 1991, and ended *** per pound by the final quarter of the period. The Patrick product was priced less than the Sandoz product during all 8 quarters in which comparisons were possible by margins ranging from *** to *** percent.

The delivered price of Patrick's B-4G ranged from \$*** to \$*** per pound during October 1989-September 1992 (table 31). The price held at \$*** per pound from the fourth quarter of 1989 (when Patrick first began shipping the product) until ***, then *** per pound for the following ***, before *** per pound for *** of the period. The price of the Patrick product was lower than the Sandoz product during 8 of 12 quarters in which comparisons were possible, by margins of *** to *** percent. The price of the Patrick product was higher than the Sandoz product in *** quarters by a margin of *** percent.

Table 31

Delivered prices for sales to end users of Sandoz's Deniblack 4G and Patrick's Patcosul Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

The delivered price of Sandoz's 4G-RDT ranged from \$*** to \$*** per pound during the period from the product's introduction in July 1990 to the *** (table 32). Prices *** during the first 5 quarters that product was available, then *** per pound during *** and remained at this level, *** percent during the period for which prices were reported. Southern Dye's B-4G ranged from \$*** to \$*** per pound during the period July 1989-September 1992. These prices *** from ***, then *** per pound by July-September 1992. Overall, prices *** percent during the 13 quarters for which price data were reported. The price of the Southern Dye product was less than the Sandoz product during all 9 quarters for which comparisons were possible, by margins ranging from *** percent.

Table 32
Delivered prices for sales to end users of Sandoz's 4G-RDT and Southern Dye's "Free Sulfur Free" Sulfur Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

The delivered price of Southern Dye's Megasulfur Black was \$*** per pound during the 4 quarters for which prices were reported (table 33). The price of the Southern Dye product was lower than the Sandoz product in all 4 quarters in which comparisons were possible by margins ranging from *** percent.

Table 33
Delivered prices for sales to end users of Sandoz's 4G-RDT and Southern Dye's "Megasulfur Black Liquid" and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

Data on U.S. producer's and finishers' prices and sales of selected black products, are graphically presented in figures 6 through 8.

Figure 6
Sulfur black 1
Delivered prices to end users

* * * * *

Figure 7
Sulfur black dyes
Sandoz sales to end users

* * * * *

Figure 8
Sulfur black dyes
C.H. Patrick sales to end users

* * * * *

The delivered price of Sandoz's Navy GICF ranged from \$*** to \$*** per pound during the period of the investigation (table 34). Prices *** between \$*** per pound during ***. Thereafter, prices *** during ***, but *** per pound during January-September 1992. Patrick reported prices for its Navy GIFN for *** quarters during the period of investigation. The delivered price of the Patrick product was \$*** per pound during *** and \$*** per pound during ***. The price of the Patrick product was lower than the Sandoz product in 1 of the 4 quarters in which comparisons were possible by *** percent. The Patrick product was priced higher than the Sandoz product by a margin of *** percent in the remaining 3 quarters.

Table 34
Delivered prices for sales to end users of Sandoz's Sodyesul Liquid Navy GICF and Patrick's Patcosul Navy GIFN Liquid and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

The delivered price of Sandoz's Blue N Paste ranged from \$*** to \$*** per pound during the period examined (table 35). During 1989 prices were *** per pound, then *** by ***. Through 1991, prices *** per pound, but were *** during the final *** of the period. Delivered prices for Patrick's Blue N Paste ranged from \$*** to \$*** per pound during the 15 quarters of the investigation. During the first *** quarters prices *** per pound; they then *** per pound during the *** quarters, before *** per pound for the final *** of the period. The price of the Patrick product was lower than the Sandoz product during 2 of 14 quarters in which comparisons were possible by a margin of *** percent. The Patrick product was priced higher than the Sandoz product in the remaining 12 quarters by margins of *** percent.

Table 35

Delivered prices for sales to end users of Sandoz's Sodyevat Blue N Paste and Patrick's Patco Econovat Blue N Paste and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * * * *

End Users' Prices

The Commission requested net delivered prices from end users for the largest quarterly purchases of six sulfur dyes produced by Sandoz, five sulfur dyes produced by Patrick, and two sulfur dyes produced by Southern Dye. Thirty-eight end users of sulfur dyes from the textile and leather industries provided usable price data for January 1989-September 1992, but not necessarily for each product or for each quarter of the period.¹³⁷ There was no apparent overall trend among prices reported, although the prices for individual dyes showed both upward and downward trends. In 20 of 28 instances where comparisons were made the Patrick dye was priced lower than Sandoz's dye and in all 9 instance where comparisons where made the Southern Dye product was priced lower than the Sandoz product.

Weighted-average delivered purchase prices for Sandoz's black 4GCF reported by end users *** per pound, but *** percent over the period examined (table 36). Prices for Patrick's 4RB dye ranged between \$*** per pound during the period examined. During ***, the price was \$*** per pound, on quantities of *** pounds. Thereafter, prices *** per pound on *** quantities sold during the remaining quarters examined. Price comparisons were possible between Sandoz's and Patrick's product in 13 of the 15 quarters examined. In 12 of 13 instances the Patrick product was priced below the Sandoz product by margins ranging from ***. The Patrick product was priced higher than the Sandoz product *** by *** percent.

Table 36

Delivered purchase prices for Sandoz's Sodyesul Black 4GCF and Patrick's Patcosul Black 4RB and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * * * *

The delivered purchase price of Sandoz's Deniblack 4G ranged from \$*** per pound during *** to \$*** per pound during *** (table 37). Delivered

¹³⁷ The textile industry accounted for *** percent of total sulfur dye consumption (by quantity) in 1991 and the remainder was consumed by producers of leather, paper, and ink.

Table 37

Delivered purchase prices of Sandoz's Deniblack 4G and Patrick's Patcosul Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

prices *** per pound during ***, then *** throughout the remainder of the period examined.

End users' delivered purchase price of Patrick's B-4G ranged from \$*** to \$*** per pound during the period examined (table 37). The price generally *** per pound from the first quarter of 1989 until ***, then *** per pound by the final quarter of the period. The price of the Patrick product was lower than the Sandoz product during 8 of 15 quarters in which comparisons were possible, by margins ranging from *** percent. The price of the Patrick product was lower than the Sandoz product in 7 quarters by a margins ranging from *** percent.

End users' reported delivered purchase prices of Sandoz's 4G-RDT ranged from \$*** to \$*** per pound during the period from the product's introduction in July 1990 to *** (table 38). Prices *** per pound during ***, then remained at this level until *** per pound during ***. The following quarter prices *** per pound, remaining at this level through the final quarter of the period. Southern Dye's B-4G ranged from \$*** to \$*** per pound during the period July 1989-September 1992. These prices *** during July-September 1989 through ***, then *** per pound during the final *** quarters of the period. Overall, prices *** percent during the 13 quarters for which price data were reported. The price of the Southern Dye product was lower than the Sandoz product in *** quarters where pricing comparison were possible, by a margins ranging from *** to *** percent.

Table 38

Delivered purchase prices of Sandoz's 4G-RDT and Southern Dye's "Free Sulfur Free" Sulfur Black B-4G and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

Lost Sales and Lost Revenues

In these final investigations, Sandoz submitted an additional 10 lost sale allegations totalling *** million pounds and valued at \$***. In all, Sandoz alleged *** million pounds of lost sales valued at \$*** of the subject product. No additional lost revenues were alleged by Sandoz in the final investigations. The Commission's staff was able to contact 10 of the 17

purchasers listed in the allegations. The following are reports of the conversations between Commission staff and those purchasers who could be reached and were willing to discuss their buying practices in these final investigations.

Sandoz alleged that due to competition from the subject imports, it lost sales to *** valued at \$*** since ***. *** could not recall the specific sale cited in the allegation. ***'s questionnaire data show that the firm's purchases of sulfur dyes from Burris, C.H. Patrick, and Southern Dye between *** and September 1992 totaled \$***; and purchases from Sandoz totaled \$*** during the same period.

Sandoz cited an alleged lost sale of sulfur black 4GCF to ***, valued at \$*** since *** due to the subject imports. *** stated that the firm has *** sulfur black 4GCF from Sandoz, but currently buys Sandoz's Deniblack 4G because his customer prefers the product's reddish-black shade rather than Patrick's B-4G, which has a bluish-green shade. *** further stated that Sandoz's initial price quotes for Deniblack 4G are often higher at the time of purchase and that Patrick's sales representatives visit more frequently, providing superior service.

Sandoz alleged two separate instances of lost sales to ***. Sandoz stated that the *** value of the sales exceeded \$*** in ***. *** could not specifically comment on the quantities and values of either allegation but confirmed replacing purchases of Sandozol Black R with Patrick's Pactosul Black RS in *** due to sourcing delays from Sandoz. *** continues to purchase ***'s product due to quality and favorable handling costs.¹³⁸ *** also stated that in 1989 the firm made a conscious decision to source from both Sandoz and Southern Dye, regardless of price, for denim applications. Since 1989, the firm has increasingly shifted sulfur dye purchases from *** in an attempt to foster the growth of an alternative dye supplier.

An alleged lost sale to *** valued at \$*** was reported for *** by Sandoz. *** could not confirm the allegation, but stated that *** currently buys *** from ***. *** stated that some customers request ***'s product because of its greener shade, while others require the redder shade imparted by the *** product.

Sandoz submitted 12 lost sale allegations totalling *** million pounds valued at \$*** in the preliminary investigations. In addition, 11 instances of lost revenues were alleged totalling \$*** for the period January 1989 to ***.

Sandoz reported *** for alleged sales lost to ***. Sandoz stated that the *** value of the sales exceeded \$*** and were awarded to ***. The Commission staff contacted ***.¹³⁹ *** said that, although they have purchased some of their sulfur dyes from *** since ***, this decision was not based on price. He stated that the primary reason that they bought from *** was to maintain a second source of supply and because they had encountered delivery problems from Sandoz in previous years.

¹³⁸ ***.

¹³⁹ ***.

*** said that the value of sales cited by Sandoz for *** seemed about right; however, he thought that Sandoz's lost sales allegation for *** was too high. He also reported that they still buy approximately *** percent of their sulfur black dye from Sandoz and, although delivery problems from Sandoz still arise, service from Sandoz has been better since the arrival of *** into the market. *** had bought Sandoz's Sulfur Black 4GCF and *** in ***, but then switched to Sandoz's Deniblack 4G and *** when these less expensive products were introduced. *** stated that Sandoz introduced its Deniblack at a lower price before the introduction of ***.

Sandoz alleged that sales of sulfur dyes to *** valued at \$*** had been lost to imported dyes since ***. The Commission's staff contacted ***. *** stated that *** has bought a large percentage of their sulfur dyes from *** in recent years, not for differences in price but because they feel that it is very important to have a second source of supply and because of delivery problems with Sandoz. *** said that he could not confirm the value of lost sales alleged by Sandoz.

Sandoz alleged that sales of sulfur dyes to ***, valued at \$***, were lost to imported dyes since ***. The Commission contacted ***, who reported that values of lost sales reported by Sandoz seemed reasonably accurate. *** stated that price was not a factor in his decision to buy from *** because the prices of the products that he uses from Sandoz and *** are reasonably close. *** said that they switched the bulk of their sulfur dye purchases to *** because of the technical support they receive from *** and because they wanted a second source of sulfur dye. As an example, he reported that *** has encountered a number of problems with some new dyeing processes that it was developing and *** requested help from both Sandoz and ***. *** responded to these problems and developed a dyestuff for their needs, but Sandoz did not respond at all. *** still buys approximately *** percent of their sulfur dyes from Sandoz.

Sandoz alleged that sales of sulfur dyes to ***, since *** valued at \$*** have been lost to imports. Staff contacted ***, who said that Sandoz's allegations of lost sales from *** seemed about right. *** stated that they now buy their sulfur blacks solely from *** and that this decision is based on price alone. *** stated that *** still buys other dyes from Sandoz. *** had requested bids for Sandoz's *** and *** in *** and ***'s price was lower. In ***, due to ***. *** requested bids for Sandoz's *** and ***. Again, *** was the low bidder and was awarded the sale.

Sandoz alleged that sales of sulfur dyes to ***, valued at \$*** were lost to imported dyes since ***. The staff contacted ***. *** stated that, although in recent years *** has been buying some of its black sulfur dyes from ***, he thought that Sandoz had overestimated the value of these sales. *** stated that price is a big factor in its purchasing decisions and that they use the least expensive product that will do the job. However, while Sandoz's Deniblack works well on its denim fabric, it does not produce satisfactory results in its finishing plant where *** has been used in recent years. *** feels that the service and the support of Sandoz and *** are comparable.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that the currencies of two of the three countries subject to these investigations fluctuated widely in relation to the U.S. dollar over the period from January-March 1989 through July-September 1992 (table 39).^{140, 141} The nominal value of the Indian currency depreciated by 41 percent while the British currency appreciated 9 percent. When adjusted for movements in producer price indexes in the United States and the specified countries, the real value of the Indian currency depreciated by 18.9 percent. During the same period the British currency showed an appreciation of 21.6 percent.

Table 39

Exchange rates:¹ Indexes of nominal and real exchange rates of selected currencies, and indexes of producer prices in those countries,² by quarters, January 1989-September 1992

Period	U.S.	India			United Kingdom		
	producer price index	Producer price index	Nominal exchange rate index	Real exchange rate index ³	Producer price index	Nominal exchange rate index	Real exchange rate index ³
1989:							
Jan.-Mar.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Apr.-June.....	101.8	103.4	94.9	96.4	101.3	93.1	92.7
July-Sept.....	101.4	106.7	92.0	96.8	102.5	91.3	92.3
Oct.-Dec.....	101.8	107.9	90.4	95.8	103.8	90.7	92.5
1990:							
Jan.-Mar.....	103.3	108.6	89.7	94.4	105.4	94.8	96.8
Apr.-June.....	103.1	112.5	88.1	96.2	107.6	95.8	100.0
July-Sept.....	104.9	116.2	87.1	96.4	108.6	106.5	110.3
Oct.-Dec.....	108.1	119.3	84.5	93.3	109.8	111.3	113.1
1991:							
Jan.-Mar.....	105.9	123.5	81.2	94.8	111.9	109.3	115.5
Apr.-June.....	104.8	126.3	74.4	89.7	114.0	97.7	106.2
July-Sept.....	104.7	134.2	59.3	76.1	114.6	96.4	105.6
Oct.-Dec.....	104.8	136.2	59.1	76.7	115.2	101.5	111.6
1992:							
Jan.-Mar.....	104.6	139.9	59.0	78.9	116.9	101.3	113.2
Apr.-June.....	105.6	142.1	59.0	79.4	118.1	103.3	115.6
July-Sept.....	106.1	145.9 ⁴	59.0	81.1 ⁴	118.4 ⁵	109.0	121.6 ⁵

¹ Exchange rates expressed in U.S. dollars per unit of foreign currency.

² Producer price indexes--intended to measure final product prices--are based on period-average quarterly indexes presented in line 63 of the International Financial Statistics.

³ The real exchange rate is derived from the nominal rate adjusted for relative movements in producer prices in the United States and the specified countries.

⁴ Derived from Indian price data reported for July-August only.

⁵ Derived from British price data reported for July-August only.

Note.--January-March 1989 = 100. The real exchange rates, calculated from precise figures, cannot in all instances be derived accurately from previously rounded nominal exchange rate and price indexes.

Source: International Monetary Fund, International Financial Statistics, November 1992.

¹⁴⁰ International Financial Statistics, November 1992.

¹⁴¹ The value of the currency of the People's Republic of China is determined by the Government of China rather than the free market. Therefore, an accurate analysis of movements in the Chinese exchange rate cannot be presented.

APPENDIX A

FEDERAL REGISTER NOTICES

Notices

Federal Register

Vol. 57, No. 175

Wednesday, September 9, 1992

On August 24, 1992, counsel for petitioner made a timely request for a thirty day postponement of the Department's preliminary determination in the above-referenced investigation. On August 28, 1992, counsel for Atal Products Limited, respondent in this investigation, submitted comments in opposition to petitioner's request. We determined that respondent's arguments did not provide compelling reason to deny petitioner's request. Therefore, pursuant to 19 CFR 353.15(c), we are postponing the date of the preliminary determination in this investigation until not later than October 19, 1992. The U.S. International Trade Commission is being advised of this postponement in accordance with section 733(f) of the Tariff Act of 1930, as amended (the Act).

This notice is published pursuant to section 733(c)(2) of the Act and 18 CFR 353.15(d).

Dated: September 1, 1992.

Rolf Th. Lundberg, Jr.,
Deputy Assistant Secretary for Import
Administration.

[FR Doc. 92-21578 Filed 9-8-92; 9:45 am]
BILLING CODE 3810-02-M

DEPARTMENT OF COMMERCE

(A-533-805)

**Postponement of Preliminary
Antidumping Duty Determination:
Sulfur Dyes, including Sulfur Vat Dyes,
From India**

AGENCY: Import Administration,
International Trade Administration,
Commerce.

FOR FURTHER INFORMATION CONTACT:
Stefanie Amadeo, Office of Antidumping
Investigations, Import Administration,
International Trade Administration, U.S.
Department of Commerce, 14th street
and Constitution Avenue, NW.,
Washington, DC 20230, at (202) 377-
1174.

POSTPONEMENT: On April 30, 1992, the
Department of Commerce (the
Department) initiated an antidumping
duty investigation on sulfur dyes,
including sulfur vat dyes, from India.
The notice stated that we would issue
our preliminary determination on or
before September 17, 1992 (57 FR 19600,
May 7, 1992).

EFFECTIVE DATE: September 24, 1992.

FOR FURTHER INFORMATION CONTACT: Shawn Thompson, Office of Antidumping Investigations, Investigations, Import Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-1776.

PRELIMINARY DETERMINATION: We preliminarily determine that sulfur dyes, including sulfur vat dyes, from the United Kingdom are being, or likely to be, sold in the United States at less than fair value, as provided in section 733 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice. We also preliminarily determine that critical circumstances do not exist.

Case History

Since the notice of initiation on April 30, 1992 (57 FR 19600, May 7, 1992); the following events have occurred.

On May 26, 1992, the International Trade Commission (ITC) issued an affirmative preliminary determination.

On June 1, 1992, the Department presented its questionnaire to James Robinson Limited (JR), which accounted for at least 60 percent of sales to the United States during the period of investigation (POI), in accordance with 19 CFR 353.42(b).

JR submitted a response to section A of the questionnaire on June 15, 1992, and a response to sections B and C of the questionnaire on July 20, 1992. On August 5 and 28, we issued supplemental questionnaires to JR. We received the responses to these questionnaires on August 19 and September 3, 1992.

On August 31, 1992, JR requested that the Department determine that there are two classes or kinds of merchandise under investigation, solubilized sulfur dyes and conventional sulfur dyes. JR further requested that the Department rescind the investigation with respect to solubilized sulfur dyes, because petitioner has not made a less than-fair-value allegation regarding this category of merchandise, or, at a minimum, calculate a separate deposit rate for each category. Due to the late date on which these requests were received, however, we were unable to adequately consider them for our preliminary determination. However, we will make a determination on these matters by the time of the final determination.

Scope of Investigation

The merchandise subject to this investigation is sulfur dyes, including

sulfur vat dyes. Sulfur dyes are synthetic, organic, coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro or amino groups, or by reaction of sulfur and/or alkaline sulfide with aromatic hydrocarbons. For purposes of this investigation, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms. The sulfur dyes subject to this investigation of classifiable under subheadings 3204.15.10, 3204.15.20, 3204.15.30, 3204.15.35, 3204.15.40, 3204.15.50, 3204.19.30, 3204.19.40 and 3204.19.50 of the Harmonized Tariff Schedule of the United States (HTS). Although the HTS subheadings are provided for convenience and customs purposes our written description of the scope of this proceeding is dispositive.

Period of Investigation

The POI is November 1, 1991, through April 30, 1992.

Such or Similar Comparisons

We have determined for purposes of the preliminary determination that the product covered by this investigation comprises a single category of "such or similar" merchandise. Where there were no sales of identical merchandise in the home market to compare to U.S. sales, we made similar merchandise comparisons on the basis of: (1) Category (*i.e.*, conventional or vat); (2) color; (3) color index number; (4) type; (5) form; and (6) strength. We made adjustments for differences in the physical characteristics of the merchandise, in accordance with section 773(a)(4)(C) of the Act.

Fair Value Comparisons

To determine whether sales of sulfur dyes, including sulfur vat dyes, from the United Kingdom to the United States were made at less than fair value, we compared the United States price (USP) to the foreign market value (FMV), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price

We based USP on purchase price, in accordance with section 772(b) of the

International Trade Administration
(A-412-809)

Preliminary Determination of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, From the United Kingdom

AGENCY: Import Administration,
International Trade Administration,
Department of Commerce.

¹ The caption of the Order was corrected by an Order dated July 9, 1992 and published on July 22, 1992 in the Federal Register, (57 FR 32320).

Act, because the subject merchandise was sold to unrelated purchasers in the United States prior to importation and because exporter's sales price methodology was not otherwise indicated.

We reclassified certain sales to a UK-based trading company, reported in the home market sales listing, as U.S. sales because JR had knowledge that the ultimate destination of the merchandise was the United States.

We calculated purchase price based on packed prices to unrelated customers. We made deductions, where appropriate, for foreign inland freight and air freight to the customer's destination. We also made deductions, where appropriate, for rebates.

In accordance with section 772(d)(1)(C) of the Act, we added to the USP the amount of value-added tax (VAT) that would have been collected if the merchandise had not been exported. Regarding the reclassified sales, JR claimed that it did not receive a rebate of the VAT amounts actually collected on those sales. Accordingly, we made no adjustment for VAT in those instances because we determined that no adjustment was called for under section 772(d)(1)(C) of the Act.

Finally, in accordance with section 772(d)(1)(B) of the Act, JR claimed an adjustment to USP for the amount of U.K. customs duty not collected on imports of dinitrochlorobenzene (DNCEB), a material used to make sulfur dyes, by reason of exportation of the finished product. However, we find that no duty on imports of DNCEB was actually paid, whether used for merchandise sold in the home market or for export. Accordingly, there was no actual liability for the duty. Thus, this was not a duty which was rebated or not collected by reason of exportation, and, accordingly, it does not qualify as an adjustment under section 772(d)(1)(B) of the Act.

Foreign Market Value

In order to determine whether there were sufficient sales of sulfur dyes, including sulfur vat dyes, in the home market to serve as viable basis for calculating FMV, we compared the volume of home market sales of sulfur dyes, including sulfur vat dyes, to the volume of third country sales of the same products, in accordance with section 773(a)(1)(B) of the Act. JR had a viable home market with respect to sales of sulfur dyes, including sulfur vat dyes, during the POI.

In accordance with 19 CFR 353.58, we compared U.S. sales to home market sales made at the same level of trade, where possible.

We calculated FMV based on packed prices charged to unrelated customers in the home market. We made deductions, where appropriate, for inland freight. We deducted home market packaging costs and added U.S. packing costs, in accordance with section 773(a)(1) of the Act.

Pursuant to 19 CFR 353.56, we made circumstance-of-sale adjustments, where appropriate, for differences in credit expenses and credit insurance expenses. We recalculated home market credit expense for those sales for which payment had not been received as of the filing of the August 19 deficiency response using the short-term interest rate reported by JR.

In addition to imputed credit expense on the sale, JR reported an imputed credit expense related to the prepayment of VAT in the United Kingdom. We disallowed an adjustment for this expense because it is not the Department's practice to analyze each opportunity cost involved in maintaining receivables and payables in the ordinary course of a company's business. We also made a circumstance-of-sale adjustment for differences in the amount of VAT, where appropriate. Further, we made an adjustment for physical differences in the merchandise, where appropriate, in accordance with 19 CFR 353.57.

Finally, before submitting its questionnaire response, JR requested that it be allowed to provide abbreviated sales data for home market products which it claimed were too dissimilar to be matched to U.S. sales. Based on this claim, we instructed JR to report only the total quantity and average price of each home market product which would not be matched, as well as the product characteristics coding for each of these products. We requested the product characteristics coding in order to ensure that JR and correctly reported its matches as well as its home market sales of similar merchandise.

After receiving this information, we found that JR had incompletely reported both its product matches and its home market sales. Specifically, we found that for five of the products sold in the U.S. market, there were several home market products which were equally similar with respect to the criteria set forth in Appendix V of the questionnaire; JR had matched in its concordance only one of these home market products to each of the U.S. products in question and had reported only the sales of the products in its concordance in its home market sales listing.

JR submitted a revised product concordance and home market sales

listing in September 3, 1992. However, we determined that this information was received too late to use in this preliminary determination. Accordingly, we have used best information available (BIA) to determine the FMV for these home market sales. As BIA, we used the average price reported for each of these products in question, reduced by the lowest amount of each charge or adjustment reported in the home market sales listing. We determined that this amount would represent the minimum amount of selling expenses that JR would have incurred on these sales. Also as BIA, we added to FMV the highest difference in merchandise adjustment for any of the sales reported.

Currency Conversion

We made currency conversions based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank.

Verification

As provided in section 776(b) of the Act, we will verify the information used in making our final determination.

Critical Circumstances

Petitioner alleges that "critical circumstances" exist with respect to imports of sulfur dyes, including sulfur vat dyes, from the United Kingdom. Section 733(e)(1) of the Act provides that critical circumstances exist if we determine that there is a reasonable basis to believe or suspect that:

(A) (i) There is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation, or

(ii) The person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than its fair value, and

(B) There have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

We normally consider either an outstanding antidumping order in the United States or elsewhere on the subject merchandise, or margins of 25 percent or more sufficient to impute knowledge of dumping under section 733(e)(1)(A) of the Act. Since there are no outstanding antidumping orders on sulfur dyes, including sulfur vat dyes, from the United Kingdom, and the preliminarily-determined dumping margin for JR and all other exporters is less than 25 percent, we cannot impute knowledge under section 733(e)(1)(A) of the Act. Since the criteria necessary to

find the existence of critical circumstances under section 733(e)(1)(A) are not present, we do not need to determine whether imports of subject merchandise have been massive over a relatively short period.

Therefore, in accordance with section 733(e)(1)(A) of the Act, we preliminarily determine that critical circumstances do not exist with respect to imports of sulfur dyes, including sulfur vat dyes, from the United Kingdom.

Suspension of Liquidation

In accordance with section 733(d)(1) of the Act, we are directing the Customs Service to suspend liquidation of all entries of sulfur dyes, including sulfur vat dyes, from the United Kingdom that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated preliminary dumping margins, as shown below. The suspension of liquidation will remain in effect until further notice. The weighted-average dumping margins are as follows:

Manufacturer/producer/exporter	Weighted-average margin percentage
James Robinson Limited	19.93
All others	19.93

ITC Notification

In accordance with section 733(f) of the Act, we have notified the ITC of our determination.

If our final determination is affirmative, the ITC will determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry before the later of 120 days after the date of this preliminary determination or 45 days after our final determination.

Public Comment

In accordance with 19 CFR 353.38, case briefs or other written comments in at least ten copies must be submitted to the Assistant Secretary for Import Administration no later than October 26, 1992, and rebuttal briefs no later than November 2, 1992. In accordance with 19 CFR 353.38(b), we will hold a public hearing, if requested, to give interested parties an opportunity to comment on arguments raised in case or rebuttal briefs. Tentatively, the hearing will be held on November 6, 1992, at 9:30 a.m. at the U.S. Department of Commerce, Room 3708, 14th Street and Constitution

Avenue, NW., Washington, DC 20230. Parties should confirm by telephone the time, date, and place of the hearing 48 hours before the scheduled time.

Interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, Room B-099, within ten days of the publication of this notice in the Federal Register. Requests should contain: (1) The party's name, address, and telephone number; (2) the number of participants; and (3) a list of the issues to be discussed. In accordance with 19 CFR 353.38(b), oral presentations will be limited to issues raised in the briefs.

This determination is published pursuant to section 733(f) of the Act (19 U.S.C. 1673b(f)) and 19 CFR 353.15.

Dated: September 17, 1992.

Rolf Th. Lundberg, Jr.,

Acting Assistant Secretary for Import Administration.

[FR Doc. 92-23249 Filed 9-23-92; 8:45 am]

BILLING CODE 3510-05-M

[A-570-818]

Preliminary Determination of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, From the People's Republic of China

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: September 24, 1992.

FOR FURTHER INFORMATION CONTACT: Stefanie Amadeo, Office of Antidumping Investigations, Import Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-1174.

SUPPLEMENTARY INFORMATION: We preliminarily determine that sulfur dyes, including sulfur vat dyes, from the People's Republic of China (PRC) are being, or are likely to be, sold in the United States at less than fair value, as provided in section 733 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice. We have also determined that critical circumstances exist...

Case History

Since the notice of initiation on April 30, 1992 (57 FR 19600, May 7, 1992), the following events have occurred.

On May 22, 1992, we sent letters to the PRC government requesting a list of all known exporters of the subject merchandise.

On May 22, 1992, we sent a letter to the PRC embassy and petitioner requesting that they address the issue of: (1) Whether we should continue to treat the PRC as a non-market economy country (NME), or (2) whether available information would permit the Department to determine foreign market value (FMV) under section 773(a) of the Act.

On May 26, 1992, the International Trade Commission (ITC) issued an affirmative preliminary determination.

On June 23, 1992, the Department presented its questionnaire to the Ministry of Foreign Economic Relations & Trade, in the PRC who, as a responsible representative of the PRC government, was deemed the proper recipient of the questionnaire. The Government of the PRC has not responded to this questionnaire.

On July 2, 1992, Kwong Fat Hong Chemicals, Ltd., (KFC), a Hong Kong company, requested a questionnaire in the above-referenced investigation. On July 7, 1992, Sinochem Shandong Import and Export Corp. (Shandong) and Sinochem International Chemicals Company, Ltd. (SICC), also requested copies of the Department's June 23, 1992 questionnaire and requested an extension for the submission of questionnaire responses. All three companies stated that they qualified for separate antidumping duty margins. Based on these requests, we specified that each company would be considered as an independent respondent only if it could demonstrate that it qualified for separate rates in the test enunciated in the *Final Determination of Sales at Less Than Fair Value: Sparklers from the People's Republic of China*, 56 FR 2056 (May 6, 1991) ("*Sparklers*"). Moreover, we stated that we would consider these three companies as voluntary respondents because the Government of the PRC was the primary respondent to our June 23, 1992, questionnaire. We further stated that as voluntary respondents, we would only consider the responses of the three companies to the extent possible.

On July 8, 1992, the Department extended the due date for KFC's response to August 10, 1992, and for Shandong and SICC to August 17, 1992.

KFC submitted a response to Section A, B, C, and D, and Attachments I and II of the Department's questionnaire on August 11, 1992. KFC resubmitted a revised Section D and Attachment II of the Department's questionnaire on August 12, 1992. On August 13, 1992, KFC submitted a revised narrative portion to Section A of its August 11, 1992, response. Shandong and SICC

submitted their responses to Sections A, C, and D, and Attachments I and II of the Department's questionnaire on August 17, 1992. On August 18, 1992, SICC submitted revised pages on its Sections C and D August 17, 1992, responses.

On August 19, 1992, Dalian Chemicals Import and Export Corporation (Dalian) requested that it be a respondent in the above-referenced investigation and on August 24, 1992, submitted a response. On August 28, 1992, we returned Dalian's unsolicited August 24, 1992, submission. We stated that we would not consider Dalian a voluntary respondent for the purposes of the above-reference investigation because (1) it was too late in the investigation to consider another respondent and (2) the administrative burden would be too great.

On August 21, 1992, KFC submitted revised Sections B and C Appendices for its August 11, 1992, response. On August 21, 1992, we issued a supplemental questionnaire to KFC. On August 24, 1992, we issued supplemental questionnaires to Shandong and SICC. We received KFC's responses to the supplemental questionnaire on August 28, and September 4, 1992. On September 8, 1992, we received SICC's and Shandong's responses to the supplemental questionnaires, respectively.

On August 28, 1992, we issued another supplemental questionnaire to KFC, Shandong, and SICC. We received the response to this questionnaire on September 4, 1992. On September 3, 1992, KFC submitted comments regarding its status as an intermediate-country exporter.

On August 31, 1992, we provided all interested parties in this investigation the opportunity to submit any publicly available published information (published material) for the Department to consider using to value factors of production in this investigation.

On September 3, 1992, the Department requested information from the PRC government regarding the Issue of government control of the sulfur dyes industry.

Scope of Investigation

The merchandise subject to this investigation is sulfur dyes, including sulfur vat dyes. Sulfur dyes are synthetic, organic, coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro or amino groups, or by reaction of sulfur and/or alkaline sulfide with aromatic hydrocarbons. For purposes of this

investigation, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms. The sulfur dyes subject to this investigation are classifiable under subheadings 3204.15.10, 3204.15.20, 3204.15.30, 3204.15.35, 3204.15.40, 3204.15.50, 3204.19.30, 3204.19.40 and 3204.19.50 of the Harmonized Tariff Schedule of the United States (HTS). Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

Period of Investigation

The POI is November 1, 1991, through April 30, 1992.

Separate Rates

In their August 17, 1992, submissions, SICC and Shandong argued that separate, company-specific rates should be calculated in this investigation. SICC and Shandong stated that there is no central government control of either company and that each is an independent legal entity that has control over its own pricing decisions. Furthermore, both respondents stated that, as independent legal organizations, each conduct its own operations, is responsible for its own profits and losses, and possesses its own management, business, and finances independent from all other companies, including China National Chemicals Import and Export Corp. SICC also stated that it maintains its own financial statements and pays corporate taxes based on its own revenue.

As stated in *Sparklers*, we will issue separate rates if a respondent can demonstrate both a *de jure* and *de facto* absence of central control. Evidence supporting, though not requiring, a finding of *de jure* absence of central control would include: (1) An absence of restrictive stipulations associated with an individual exporter's business and export licenses; and (2) any legislative enactments devolving central control with respect to export trading companies. Evidence supporting a finding of *de facto* absence of central control with respect to exports would include: (1) Whether each exporter sets its own export prices independently of the government and other exporters; and (2) whether each exporter can keep the proceeds from its sales.

When we apply these four criteria, the evidence in the record submitted by respondents supports a finding that both SICC and Shandong are entitled to their own rates. Therefore, for purposes of the preliminary determination, we have calculated company-specific rates for SICC and Shandong.

However, our final decision on the separate rate issue will depend upon successful verification of the factual assertions made by respondents and relied upon here. (For our analysis of the information on the record, see our *Concurrence Memorandum*, dated September 17, 1992.)

We preliminarily determined that KFC is covered under 19 CFR 353.47, concerning intermediate country of exportation, and thus is a separate respondent with a separate antidumping duty margin (See below).

Since SICC and Shandong were the only exporters of the subject merchandise in the PRC to respond to our questionnaire, we have no evidence that any of the other known exporters are independent from either each other or the government. Unless a respondent demonstrates entitlement to a separate, company-specific rate pursuant to the test enunciated in *Sparklers*, we presume that all respondents are related and subject to a single rate. See, e.g., *Preliminary Determination of Sales at Less Than Fair Value: Certain Carbon Steel Butt-Weld Pipe Fittings From the People's Republic of China*, 56 FR 66831 (December 26, 1991). Because the PRC government did not respond to our questionnaire, for purposes of the preliminary determination, in accordance with section 776(c) of the Act, we used the best information available (BIA) when calculating the "All Other" rate.

In determining what rate to use as BIA, the Department follows a two-tiered methodology, whereby the Department may assign lower rates for those respondents who cooperated in an investigation and rates based on more adverse assumptions for those respondents who did not cooperate in an investigation. See, e.g., *Final Determination of Sales at Less Than Fair Value: Aspheric Ophthalmoscopy Lenses from Japan*, 57 FR 6703, 6704 (February 27, 1992). According to the Department's two-tiered BIA methodology outlined in the *Final Determination of Sales at Less Than Fair Value: Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, Italy, Japan, Romania, Sweden, Thailand, and the United Kingdom*, 54 FR 18992, 19033 (May 3,

1989), when a company refuses to provide the information requested in the form required, or otherwise significantly impedes the Department's investigation, it is appropriate for the Department to assign to that company the higher of (1) the margin alleged in the petition, or (2) the highest calculated rate of any respondent in the investigation. The dumping margin calculated for SICC was higher than 117.18 percent, the recalculated petition rate. Therefore, as BIA, the dumping margin assigned to all other exporters who did not cooperate in this investigation is the rate calculated for SICC, which is 210.35 percent, the highest calculated rate for any respondent in this investigation.

Fair Value Comparisons

To determine whether sales of sulfur dyes, including sulfur vat dyes, from the PRC to the United States were made at less than fair value, we compared the United States price (USP) to the foreign market value (FMV), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price

We based USP on purchase price, in accordance with section 772(b) of the Act, because the subject merchandise was sold to unrelated purchasers in the United States prior to importation and because exporter's sales price methodology, in those instances, was not otherwise indicated.

For Shandong and SICC, we calculated purchase price based on packed c.i.f. prices from the respective trading companies to unrelated customers. We made deductions, where appropriate, for foreign inland freight, ocean freight, and marine insurance. We also made deductions for a trade discount. Since neither Shandong nor SICC indicated what mode of transportation was used for foreign inland freight from the factory to the port, as BIA, we used the highest inland freight amount in the PRC calculated for the distances from factory to port for Shandong and SICC, respectively. The inland freight expense was based on a quoted truck freight rate contained in a public, June 1992, cable from the U.S. Embassy in India.

For KFC, we calculated purchase price based on packed c.i.f. prices from KFC to unrelated customers. We deducted foreign inland freight, ocean freight, marine insurance, drayage, other expenses, and a third party surcharge. Since KFC did not report its inland freight expense, as BIA, we used the inland freight amount used in the petition for this investigation.

Foreign Market Value

Section 773(c)(1) of the Act provides that the Department shall determine FMV using a factors of production methodology if (1) the merchandise is exported from an NME, and (2) the information does not permit the calculation of FMV using home market prices, third country prices, or constructed value under section 773(a) of the Act.

In past cases (e.g., *Final Determination of Sales at Less Than Fair Value: Chrome-Plated Lug Nuts from the People's Republic of China*, 56 FR 46153 (September 10, 1991) (*Lug Nuts*), and *Sparklers*), and indeed in every case conducted by the Department involving the PRC, the PRC has been treated as an NME. In this case, none of the parties to this proceeding has suggested that the PRC is no longer an NME. However, respondents claim that their raw material and labor inputs used in the production of subject merchandise are market driven, and, therefore, that the sulfur dyes, including sulfur vat dyes, industry in the PRC is a market-oriented industry.

The Department has previously interpreted section 773(c)(1)(B) of the Act to mean that FMV can be based on the NME exporter's prices or costs, despite the fact that the country may otherwise be considered an NME, if sufficient market forces are at work (see, *Lug Nuts* and *Final Determination of Sales at Less Than Fair Value: Oscillating Fans and Ceiling Fans from the People's Republic of China*, 56 FR 55271 (October 25, 1991) (*Fans*)).

However, as stated in our recent notices of initiation for two countervailing duty investigations (see, *Initiation of Countervailing Duty Investigation: Oscillating Fans and Ceiling Fans from the People's Republic of China*, 56 FR 57616 (November 13, 1991) and *Initiation of Countervailing Duty Investigation: Chrome-Plated Lug Nuts from the People's Republic of China*, 57 FR 877 (January 9, 1992)), the Department determined that it must reconsider the appropriateness of the specific approach established in *Lug Nuts* and *Fans*. In the *Amendment to Final Determination of Sales at Less than Fair Value and Amendment to Antidumping Duty Order: Chrome-Plated Lug Nuts from the People's Republic of China*, 57 FR 15052 (April 24, 1992), we developed the following criteria for determining whether a market-oriented industry exists in an economy which will otherwise be considered non-market:

- For merchandise under investigation, there must be virtually no government involvement in setting prices or amounts to be produced. For example, state-required production of the merchandise, whether for export or domestic consumption in the non-market economy country would be an almost insuperable barrier to finding a market-oriented industry.
- The industry producing the merchandise under investigation should be characterized by private or collective ownership. There may be state-owned enterprises in the industry but substantial state ownership would weigh heavily against finding a market-oriented industry.
- Market-determined prices must be paid for all significant inputs, whether material or non-material, and for an all but insignificant proportion of all the inputs accounting for the total value of the merchandise under investigation. For example, an input price will not be considered market-determined if the producers of the merchandise under investigation pay a state-set price for the input or if the input is supplied to the producers at government direction. Moreover, if there is any state-required production in the industry producing the input, the share of state-required production must be insignificant.

If these conditions are not met, pursuant to 19 CFR 353.52, the producers of the merchandise under investigation will be treated as non-market economy producers, and FMV will be calculated by using prices and costs from a surrogate country, in accordance with section 773(c) (3) and (4) of the Act.

Respondents maintain that the prices at which the factories purchase their inputs for sulfur dyes are not subject to state control and are market-driven. Respondents state that there are no restrictions on any of the inputs used to make the subject merchandise, that prices and quantities are freely negotiated for all inputs, and that there are no ceiling or guidance prices for any of the inputs. Respondents claim that their suppliers retain their profits, that factor decisions are not subject to review by any government entity, that loans are obtained at market rates, and that there are no restrictions on labor.

Neither Shandong nor SICC supplied the prices at which Handan and Tainjin, their suppliers, purchase their inputs in time to be considered for purposes of the preliminary determination. Furthermore, respondents have not adequately described the pricing policies and possible government restrictions on their sources of energy: Water, electricity, and coal. Neither respondent submitted pricing information with regard to energy inputs in a timely fashion for use in the preliminary determination. Also, we require further substantiation for several

of respondents' assertions, specifically, suppliers' business licenses, pricing information on the factor inputs, documentation on the government's role regarding labor, documentation on the newly-instated export licenses, and information from the PRC government.

As noted above, we continue to find that the PRC is an NME. Therefore, the presumption remains that the inputs used by the sulfur dye producers which are sources in the PRC are not purchased at market prices. A respondent asserting that it purchase inputs at market-oriented prices must provide significant documentary evidence and also show that market prices are at work to overcome this presumption. An absence of government control alone is not sufficient to warrant a conclusion that prices for inputs are market-driven. We must also conclude by application of the criteria outlined above that market forces are at work in determining the prices of these inputs within the PRC. Therefore, respondents' assertions, without sufficient documentary support, are not enough to establish market behavior with respect to input prices.

We do not have any information from the PRC government which would assist us in determining whether or not there is a lack of state control or a presence of market forces with respect to the factories' input costs and their respective supplier prices. We have requested information from the PRC government to determine whether there is any government control in the chemical sector, sulfur dyes industry, or in inputs used to produce sulfur dyes. The information submitted by the PRC government and respondents will be subject to verification, all of which will be taken into account in making our final decision on the PRC input prices issue.

Therefore, in accordance with section 773(c) of the Act, the Department is required to determine FMV on the basis of factors of production utilized in producing the merchandise, as valued in a surrogate country for all companies in the PRC.

Section 773(c) of the act requires the Department to value the factors of production, to the extent possible, in one or more market economy countries that are at a level of economic development comparable to that of the NME and that are significant producers of comparable merchandise. The Department has determined that India and Pakistan are the most comparable to the PRC in terms of overall economic development, based on per capita gross national product (GNP), the national distribution of labor, and growth rate in per capita

GNP. (See memorandum from the Office of Policy to David L. Binder, dated August 6, 1992.) Because India fulfills both requirements outlined in the statute, India is the preferred surrogate country for purposes of calculating the factors of production used in producing the subject merchandise. We have resorted to Pakistan for surrogate values only if Indian values were not obtainable.

We have used the values for the factors of production, as appropriate, from both countries. We valued the factors of production in accordance with the a hierarchy for preferred input values set forth in the notice of *Final Determination of Sales at Less Than Fair Value: Certain Carbon Steel Butt-Weld Pipe Fittings From the People's Republic of China*, 57 FR 21058 (May 18, 1992). We first used Indian published material before resorting to unclassified information contained in U.S. government cables or to petitioner's cost information.

We calculated FMV based on factors of production reported by the factories which produced the subject merchandise for respondents. The factors used to produce sulfur dyes include materials, labor, and energy.

To value dinitrochlorobenzene, sodium sulphide, and sulfur, we used published, publicly available information from the Monthly Statistics of the Foreign Trade of India (March 1988). To value sodium hydroxide, we used the average undelivered price obtained from the U.S. consulate in Pakistan, because there were no published material prices for sodium hydroxide and the U.S. embassy in India could not obtain values for this input. We adjusted the factor values to the POI using wholesale price indices published by the International Monetary Fund.

To value labor rates, we used unskilled and skilled labor rates, including benefits, obtained from the U.S. embassy in India. Since we have no indication of the size of the factories in the PRC, we used the unskilled labor rate provided by the U.S. embassy in India that was applicable for a medium size plant operation. We adjusted the unskilled wage rate to account for the number of hours in an Indian work week based on information contained in the published source, Country Reports on Human Rights Practices for 1990, which was submitted to the U.S. Senate Committee on Foreign Relations in February 1991.

To value coal, we used the published source, Monthly Statistics of the Foreign Trade of India (September 1990), and a 1990 Indian coal price as published in the Organization of Economic

Cooperations and Development International Energy Agency Statistics (OECD IEA Statistics). We calculated an average undelivered f.o.b. coal price based on the values derived from these two sources. We adjusted the value for the POI by using wholesale price indices published by the International Monetary Fund.

To value electricity, we used the publicly available Indian electricity rate for 1985, published in the OECD IEA Statistics, and adjusted the value for the POI by using wholesale price indices published by the International Monetary Fund.

To value water, we used the water rates obtained from the public December 1989 cable from the U.S. embassy in India, for a producer of comparable merchandise, because there were not published material prices for this material. We adjusted the factor values to the POI using wholesale price indices published by the International Monetary Fund.

We used an average percentage for factory overhead, based on Indian producers' experience, which we obtained from the U.S. embassy in India. Pursuant to section 773(e)(1)(B), we then added an amount higher than the statutory ten percent minimum for selling, general and administrative expenses, and an amount higher than the statutory eight percent minimum for profit, based on Indian chemical producers' experience, which was obtained from the U.S. embassy in India. We also added, where appropriate, an amount for packing labor based on the appropriate Indian skilled and unskilled wage rates, and an amount for packing materials based on Indian prices obtained from the public record of the concurrent investigation of sulfur dyes, including sulfur vat dyes, from India, in order to arrive at a constructed FMV for one metric ton of sulfur dye. We made no adjustments for selling expenses. (For a complete analysis of surrogate values, see our *Concurrence Memorandum* dated September 17, 1992.)

For KFC, in accordance with 19 CFR 353.47, concerning exports from an intermediate country, we calculated FMV based on sales in the intermediate country rather than sales in the PRC. We have preliminarily determined that KFC meets the provisions of 19 CFR 353.47 since (1) KFC is a Hong Kong reseller of the subject merchandise; (2) the producer in the PRC who supplied KFC was unaware of the countries to which KFC intended to resell the merchandise; (3) the merchandise entered the commerce of the

intermediate country but was not substantially transformed in that country; and (4) the subject merchandise was subsequently exported to the United States.

In order to determine whether there were sufficient sales of the sulfur dyes, including sulfur vat dyes, in Hong Kong to serve as a basis for calculating FMV, we compared the volume of home market sales of the such or similar category to the aggregate volume of third country sales, in accordance with section 773(a)(1)(B) of the Act. Since the volume of home market sales was greater than five percent of the aggregate volume of third country sales, we determined that home market sales constitute a viable basis for calculating FMV in accordance with 19 CFR 353.48.

In accordance with 19 CFR 353.58, we compared U.S. sales to home market sales made at the same level of trade, where possible.

We calculated FMV based on packed f.o.b. prices charged to unrelated customers in Hong Kong. We deducted home market packing costs and added U.S. packing costs, in accordance with section 773(a)(1) of the Act. Because KFC did not report any packing cost information, as BIA we used the packing materials cost calculated for Shandong and SICC. For packing labor cost, we used an average of SICC's and Shandong's skilled and unskilled packing labor hours from the August 18, 1992, public versions of SICC's and Shandong's questionnaire responses. Since no credit expenses were reported, we imputed credit for both home market and U.S. sales, using an average POI short term borrowings rate obtained from the New York office of the Hong Kong & Shanghai Bank. Because all comparisons involved purchase price sales, we made a circumstance of sale adjustment, where appropriate, for differences in credit expenses, in accordance with 19 CFR 353.56.

Currency Conversion

We made currency conversions based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank.

Verification

As provided in section 776(b) of the Act, we will verify the information used in making our final determination.

Critical Circumstances

Petitioner alleges that "critical circumstances" exist with respect to imports of sulfur dyes, including sulfur vat dyes, from the United Kingdom. Section 773(e)(1) of the Act provides that critical circumstances exist if we

determine that there is a reasonable basis to believe or suspect that:

(A)(i) There is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation, or

(ii) The person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than its fair value, and

(B) There have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

In determining history or importer knowledge of dumping, we normally consider either an outstanding antidumping order in the United States or elsewhere on the subject merchandise, or margins of 25 percent or more as sufficient to impute knowledge of dumping under section 773(e)(1)(A) of the Act. See, e.g., *Heavy Forged Hand Tools, Finished or Unfinished, With or Without Handles, from the People's Republic of China*, 56 FR 241 (January 3, 1991.)

Pursuant to 19 CFR 353.16(f), we generally consider the following factors in determining whether imports have been massive over a short period of time: (1) The volume and value of the imports; (2) seasonal trends (if applicable); and (3) the share of domestic consumption accounted for by imports. If imports during the period immediately following the petition increase by at least 15 percent over imports during a comparable period immediately preceding the filing of a petition, we consider them massive.

All three of the respondents failed to provide company-specific information on their exports, as requested in the Department's questionnaire. Consequently, as BIA, we determine that imports have been massive over a relatively short period of time.

For SICC and Shandong, because the dumping margins exceed 25 percent, we determine that importer knowledge of dumping exists for sulfur dyes, including sulfur vat dyes, from the PRC. Because imports have been massive, in accordance with section 773(e) of the Act, we find that critical circumstances exist with respect to exports of sulfur dyes, including sulfur vat dyes, by SICC and Shandong.

However, as regards KFC, since there are no outstanding dumping orders on sulfur dyes, including sulfur vat dyes, from the PRC, and the preliminary-determined dumping margin for KFC is less than 25 percent, we cannot impute knowledge under section 773(e)(1)(A) of the Act for KFC. Therefore, in

accordance with section 773(e)(1)(A) of the Act, we preliminarily determine that for KFC, critical circumstances do not exist with respect to import of the subject merchandise from the PRC.

With respect to firms covered by the "All Other" rate, because the dumping margin is sufficient to impute knowledge of dumping, and because we have determined that imports of sulfur dyes, including sulfur vat dyes, have been massive over a relatively short time, we determine that critical circumstances also exist for those firms.

Suspension of Liquidation

In accordance with section 733(d)(1) of the Act, we are directing the Customs Service to suspend liquidation of all entries of sulfur dyes, including sulfur vat dyes, exported from the PRC by SICC, Shandong, and all other producers/manufacturers/exporters, that are entered, or withdrawn from warehouse, for consumption on or after the date which is 90 days prior to the date of publication of this notice in the Federal Register.

In accordance with section 733(d)(1) of the Act, for KFC, we are directing the Customs Service to suspend liquidation of entries of sulfur dyes, including sulfur vat dyes, exported from the PRC by KFC, that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated preliminary dumping margins as shown below. The suspension of liquidation will remain in effect until further notice. The weighted-average dumping margins are as follows:

Manufacturer/producer/exporter	Weighted-average margin percentage
Sinochem Shandong Import and Export Corp./Tianjin Bohai Chemical Dyes Factory.....	100.0
Sinochem International Chemicals Company, Ltd./Handan Chemical Dyes Factory.....	210.0
Kwong Fat Hong Chemicals, Ltd./Wuhan Dyes Factory.....	4.1
All Others.....	210.0

ITC Notification

In accordance with section 733(f) of the Act, we have notified the ITC of our determination.

If our final determination is affirmative, the ITC will determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry before the later of 120

days after the date of this preliminary determination or 45 days after our final determination.

Public Comment

In accordance with 19 CFR 353.38, case briefs or other written comments in at least ten copies must be submitted to the Assistant Secretary for Import Administration no later than November 16, 1992, and rebuttal briefs no later than November 23, 1992. In accordance with 19 CFR 353.38(b), we will hold a public hearing, if requested, to give interested parties an opportunity to comment on arguments raised in case or rebuttal briefs. Tentatively, the hearing will be held on November 25, 1992, at 1 p.m. at the U.S. Department of Commerce, room 3708, 14th Street and Constitution Avenue, NW., Washington, DC 20230. Parties should confirm by telephone the time, date, and place of the hearing 48 hours before the scheduled time.

Interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, Room B-099, within ten days of the publication of this notice in the Federal Register. Requests should contain: (1) The party's name, address, and telephone number; (2) the number of participants; and (3) a list of the issues to be discussed. In accordance with 19 CFR 353.38(b), oral presentations will be limited to issues raised in the briefs.

This determination is published pursuant to section 733(f) of the Act (19 U.S.C. 1673b(f)) and 19 CFR 353.15.

Dated: September 17, 1992.

Rolf Th. Lundberg, Jr.,

Acting Assistant Secretary for Import Administration.

[FR Doc. 92-23250 Filed 9-23-92; 8:45 am]

BILLING CODE 9510-06-M

subheadings 3204.15, 3204.19.30, 3204.19.40, and 3204.19.50 of the Harmonized Tariff Schedule of the United States.

For further information concerning the conduct of these investigations, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: September 21, 1992.

FOR FURTHER INFORMATION CONTACT: Diane J. Mazur (202-205-3184), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

SUPPLEMENTARY INFORMATION:

Background. These investigations are being instituted as a result of affirmative preliminary determinations by the Department of Commerce that imports of sulfur dyes from China and the United Kingdom are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigations were requested in a petition filed on April 10, 1992, by Sandoz Chemicals Corporation, Charlotte, NC.

Participation in the investigations and public service list. Persons wishing to participate in the investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules, not later than twenty-one (21) days after publication of this notice in the Federal Register. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an

containing hydroxy, nitro, or amino groups or by reaction of sulfur or alkaline sulfide with aromatic hydrocarbons. For purposes of these investigations, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms.

[Investigations Nos. 731-TA-548 and 551 (Final)]

Sulfur Dyes from China and the United Kingdom

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of final antidumping investigations.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigations Nos. 731-TA-548 and 551 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from China and the United Kingdom of sulfur dyes,¹ provided for in

¹ Sulfur dyes are synthetic organic coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material

administrative protective order (APO) and BPI service list. Pursuant to § 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in these final investigations available to authorized applicants under the APO issued in the investigations, provided that the application is made not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff report. The prehearing staff report in these investigations will be placed in the nonpublic record on November 20, 1992, and a public version will be issued thereafter, pursuant to § 207.21 of the Commission's rules.

Hearing. The Commission will hold a hearing in connection with these investigations beginning at 9:30 a.m. on December 9, 1992, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before November 30, 1992. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on December 2, 1992, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by §§ 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules.

Written submissions. Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of § 207.22 of the Commission's rules; the deadline for filing is December 4, 1992. Parties may also file written testimony in connection with their presentation at the hearing, as provided in § 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of § 207.24 of the Commission's rules. The deadline for filing posthearing briefs is December 16, 1992; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigations may submit a written statement of information pertinent to the subject of the investigations on or before December 16, 1992. All written submissions must conform with the provisions of § 201.8 of the Commission's rules; any submissions

that contain BPI must also conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigations must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate to service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules.

Issued: September 28, 1992.

By order of the Commission.

Paul R. Bardos,

Acting Secretary.

[FR Doc. 92-24340 Filed 10-6-92; 8:45 am]

BILLING CODE 7020-02-M

Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482-1776.

POSTPONEMENT: On October 2, 1992, Kwong Fat Hong Chemicals, Ltd., Sinochem Shandong Import/Export Corporation, and Sinochem International Chemical Company, Ltd., respondents in the antidumping duty investigation of sulfur dyes, including sulfur vat dyes, from the People's Republic of China (PRC), requested that the Department postpone the final determination in that investigation 60 days in order to ensure that the Department has adequate time to conduct verification and to consider fully all the issues in the case, in accordance with section 735(a)(2)(A) of the Tariff Act of 1930, as amended (the Act) (19 U.S.C. 1673d(a)(2)(A)). In addition, on October 8, 1992, James Robinson Limited, respondent in the antidumping duty investigation of sulfur dyes, including sulfur vat dyes, from the United Kingdom, requested that the Department postpone the final determination in that investigation 30 days in order to consider fully the issues in the case, in accordance with section 735(a)(2)(A) of the Act.

We find no compelling reasons to deny the requests and are, accordingly, postponing the dates of the final determinations until February 1, 1993, for the PRC and until December 31, 1992, for the United Kingdom. 19 CFR 353.20(b)(1).

This notice is published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)) and 19 CFR 353.20(b)(2).

Dated: October 18, 1992.

Rolf Th. Lundberg, Jr.,

Acting Assistant Secretary for Import Administration.

[FR Doc. 92-25796 Filed 10-22-92; 8:45 am]

BILLING CODE 3510-05-M

[A-570-618, A-412-809]

Postponement of Final Antidumping Duty Determinations of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, From the People's Republic of China and the United Kingdom

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: October 23, 1992.

FOR FURTHER INFORMATION CONTACT: Shawn Thompson, Office of Antidumping Investigations, Import

International Trade Administration

(A-533-805)

**Preliminary Determination of Sales at
Less Than Fair Value: Sulfur Dyes,
Including Sulfur Vat Dyes, From India**

AGENCY: Import Administration,
International Trade Administration,
Department of Commerce.

EFFECTIVE DATE: October 26, 1992.

FOR FURTHER INFORMATION CONTACT:
Kimberly Hardin, Office of Antidumping
Investigations, Office of Investigations,
Import Administration, U.S. Department
of Commerce, 14th Street and
Constitution Avenue NW., Washington,
DC 20230; telephone (202) 482-0371.

Preliminary Determination

We preliminarily determine that sulfur
dyes, including sulfur vat dyes, from
India are being, or likely to be, sold in
the United States at less than fair value.

as provided in section 733 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice. We also preliminarily determine that critical circumstances do not exist.

Case History

Since the notice of initiation on April 30, 1992 (57 FR 19600, May 7, 1992), the following events have occurred.

On May 28, 1992, the International Trade Commission (ITC) issued an affirmative preliminary determination.

On June 1, 1992, the Department presented its questionnaire to Atul Products Limited (Atul) and Hickson and Dadajee, Limited (Hickson) who, together, accounted for at least 60 percent of sales to the United States during the period of investigation (POI), in accordance with 19 CFR 353.42(b).

On June 12, 1992, Atul requested an extension for the submission of its response to Section A of the Department's questionnaire. We granted Atul the requested extension until June 24, 1992, on which it submitted a response to Section A of the questionnaire. On June 19, 1992, Hickson submitted a letter to the Department stating that it had not exported the subject merchandise to the United States during the POI.

On July 9, 1992, Atul requested an extension for the submission of its Sections B and C response of the Department's questionnaire. On July 9, 1992, we granted Atul the requested extension until July 20, 1992. On July 16, 1992, Atul requested an extension for the submission of portions of its Sections B and C response. On July 17, 1992, we granted Atul's July 16, 1992, extension request for the submission of portions of its B and C response until July 29, 1992.

On July 17, 1992, we issued a Section A deficiency response to Atul. On July 20, 1992, Atul submitted its Sections B and C response to the Department's questionnaire. On July 23, 1992, Atul requested an extension for the submission of its Section A deficiency response. On July 24, 1992, we granted Atul an extension for the submission of its Section A deficiency response until July 29, 1992. On July 28, 1992, Atul submitted the remaining portions of its Sections B and C response and its response to the Department's Section A deficiency letter.

On August 4, 1992, we issued a Sections B and C deficiency letter to Atul. On August 18, 1992, we received Atul's Sections B and C deficiency response. On August 20, 1992, Atul

submitted the computer diskettes to its August 18, 1992, response.

On August 21, 1992, we requested sales information from two customers of one of Atul's customers. On August 31, 1992, we received a response from one customer of Atul's customer.

On August 21, 1992, petitioner requested a thirty-day postponement of the preliminary determination and submitted a sales below the cost of production (COP) allegation. On September 1, 1992, we postponed the preliminary determination in the above-referenced investigation until October 19, 1992 (57 FR 41125, September 8, 1992). Based on petitioner's August 21, 1992, sales below the COP allegation, we initiated a COP investigation on September 4, 1992. (See COP memorandum dated September 4, 1992.)

On September 17, 1992, we sent a letter to Hickson and Dadajee in order to arrange a verification of Hickson's questionnaire response. We notified Hickson that, if its response is not verified, for purposes of the final determination, the best information available may be used. On September 18, 1992, we contacted the U.S. consulate in Bombay, instructing that the U.S. consulate contact Hickson regarding verification. On September 22, 1992, Hickson informed the U.S. consulate in Bombay that they did not desire to participate in this investigation.

Possible Transshipment

Based on information submitted in Atul's Section A response and information submitted by petitioner, on July 2, 1992, we requested Atul and Hickson to provide information regarding possible transshipment of the subject merchandise. On July 13, 1992, Atul submitted its response to our July 2, 1992, transshipment questionnaire.

On July 31, 1992, we requested sales information from two of Atul's customers. On August 7, 1992, we received responses from Atul's two customers. On September 15, 1992, we requested further sales information from Atul, one of Atul's customers, and two customers of Atul's customer. On September 24, 1992, we sent questionnaires to Atul, a U.S. importer, and three European trading companies with reference to the issue of transshipments.

We have not yet received sufficient data to analyze possible transshipments for purposes of the preliminary determination.

Scope of Investigation

The merchandise subject to this investigation is sulfur dyes, including

sulfur vat dyes. Sulfur dyes are synthetic, organic, coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro or amino groups, or by reaction of sulfur and/or alkaline sulfide with aromatic hydrocarbons. For purposes of this investigation, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms. The sulfur dyes subject to this investigation are classifiable under subheadings 3204.15.10, 3204.15.20, 3204.15.30, 3204.15.35, 3204.15.40, 3204.15.50, 3204.19.30, 3204.19.40 and 3204.19.50 of the Harmonized Tariff Schedule of the United States (HTS). The HTS subheadings are provided for convenience and customs purposes. Our written description of the scope of this investigation is dispositive.

Period of Investigation (POI)

The POI is November 1, 1991, through April 30, 1992.

Such or Similar Comparisons

We have determined for purposes of the preliminary determination that the product covered by this investigation comprises a single category of "such or similar" merchandise. Where there were no sales of identical merchandise in the home market to compare to U.S. sales, we made similar merchandise comparisons on the basis of: (1) Category (*i.e.*, conventional or vat); (2) color; (3) color index number; (4) type; (5) form; and (6) strength. We made adjustments for differences in the physical characteristics of the merchandise, in accordance with section 773(a)(4)(C) of the Act.

Fair Value Comparisons

To determine whether sales of sulfur dyes, including sulfur vat dyes, from India to the United States were made at less than fair value, we compared the United States price (USP) to the foreign market value (FMV), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price

For Atul, we based USP on purchase price, in accordance with section 772(b) of the Act, because the subject

merchandise was sold to unrelated purchasers in the United States prior to importation and because exporter's sales price methodology was not otherwise indicated.

We calculated purchase price based on packed c.i.f. prices to unrelated customers. We made deductions, where appropriate, for foreign inland freight, foreign brokerage and handling, ocean freight, and marine insurance.

In accordance with section 772(d)(1)(C) of the Act, we added to the USP the amount of the Central Excise Tax and Sales Tax that would have been collected if the merchandise had not been exported.

Finally, in accordance with section 772(d)(1)(B) of the Act, we made an addition to USP for an import duty which was rebated or not collected by reason of exportation.

Foreign Market Value

In order to determine whether there were sufficient sales of sulfur dyes, including sulfur vat dyes, in the home market to serve as a viable basis for calculating FMV for Atul, we compared the volume of home market sales of sulfur dyes, including sulfur vat dyes, to the volume of third country sales of the same products, in accordance with section 773(a)(1)(B) of the Act. Atul had a viable home market with respect to sales of sulfur dyes, including sulfur vat dyes, during the POI.

Petitioner alleged that Atul was selling in the home market at prices below the COP. Based on petitioner's allegation, we requested data on the production costs of Atul. Atul's cost data were not submitted in time to be considered for the preliminary determination. However, Atul's submitted cost data will be examined at verification and will be analyzed for purposes of our final determination.

In accordance with 19 CFR 353.58, we compared U.S. sales to home market sales made at the same level of trade, where possible.

We calculated FMV based on packed ex-factory prices charged to unrelated customers in the home market. We deducted the quantity discount expense from the home market price. We deducted a cash discount from home market sales that met the cash discount terms. We deducted home market packing costs and added U.S. packing costs, in accordance with section 773(a)(1) of the Act.

Pursuant to 19 CFR 353.58, we made circumstance-of-sale adjustments, where appropriate, for differences in credit expenses. We recalculated home market and U.S. credit expenses using as the credit period the time between

the date of shipment and date of payment and the interest rate in effect during the POI, as reported in Atul's response. We calculated home market credit expense on gross price less discounts. We recalculated home market credit expense, using the average credit period, on those sales for which payment had not been received as of the filing of the August 18 deficiency response. We did not deduct the cash discount from these sales because the calculated average credit days for these sales exceeded the credit terms reported for these sales. We deducted the advertising expense from the home market sales price.

We did not deduct the claimed warehousing expense from Atul's home market gross unit price as a direct selling expense since this expense appears to be a pre-sale warehousing expense as opposed to a post-sale warehousing expense. Further, Atul has not adequately shown that the warehousing expense is directly related to sales.

We made an upward adjustment to the tax-exclusive home market prices for the taxes we computed for USP. Further, we made an adjustment for physical differences in the merchandise, where appropriate, in accordance with 19 CFR 353.57.

Finally, in accordance with section 353.56(b)(1) of the Department's regulations, we deducted commissions from the home market prices and added U.S. indirect selling expenses to home market price capped by the amount of home market commissions.

We are currently investigating the possibility of sales of Indian sulfur dyes to the United States via third countries. We will make a determination regarding these alleged sales for purposes of the final determination.

As noted in the "Case History" section of this notice, Hickson informed the U.S. consulate in Bombay that they did not desire to participate in this investigation. Accordingly, for purposes of the preliminary determination, in accordance with section 776(c) of the Act, we used the best information available (BIA) when calculating the rate for Hickson.

In determining what rate to use as BIA, the Department follows a two-tiered methodology, whereby the Department may assign lower rates for those respondents who cooperated in an investigation and rates based on more adverse assumptions for those respondents who did not cooperate in an investigation. See, e.g., Final Determination of Sales at Less Than Fair Value: Aspheric Ophthalmoscopy Lenses from Japan, 57 FR 6703, 6704

(February 27, 1992). According to the Department's two-tiered BIA methodology outlined in the Final Determination of Sales at Less Than Fair Value: Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, Italy, Japan, Romania, Sweden, Thailand, and the United Kingdom, 54 FR 18992, 19033 (May 3, 1989), when a company refuses to provide the information requested in the form required, or otherwise significantly impedes the Department's investigation, it is appropriate for the Department to assign to that company the higher of 1) the margin alleged in the petition, or 2) the highest calculated rate of any respondent in the investigation. The dumping margin calculated for Atul was lower than the Department's recalculated petition rate of 17.55 percent which was used for purposes of initiation. Therefore, as BIA, the dumping margin assigned to Hickson for purposes of this preliminary determination is 17.55 percent.

Currency Conversion

We made currency conversions based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank.

Verification

As provided in section 776(b) of the Act, we will verify the information used in making our final determination.

Critical Circumstances

Petitioner alleges that "critical circumstances" exist with respect to imports of sulfur dyes, including sulfur vat dyes, from India. Section 733(e)(1) of the Act provides that critical circumstances exist if we determine that there is a reasonable basis to believe or suspect that:

(A) (i) There is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation, or

(ii) The person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than its fair value, and

(B) There have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

In determining history or importer knowledge of dumping, we normally consider either an outstanding antidumping order in the United States or elsewhere on the subject merchandise, or margins of 25 percent or

more as sufficient to impute knowledge of dumping under section 733(e)(1)(A) of the Act. See, e.g., Heavy Forged Hand Tools, Finished or Unfinished, With or Without Handles, from the People's Republic of China, 56 FR 241 (January 3, 1991.)

Pursuant to 19 CFR 353.16(f), we generally consider the following factors in determining whether imports have been massive over a short period of time: (1) The volume and value of the imports; (2) Seasonal trends (if applicable); and (3) The share of domestic consumption accounted for by imports. If imports during the period immediately following the petition increase by at least 15 percent over imports during a comparable period immediately preceding the filing of a petition, we consider them massive.

Since there are no outstanding dumping orders on sulfur dyes, including sulfur vat dyes, from India, and the preliminarily-determined dumping margin for Atul and Hickson and Dadajee is less than 25 percent, we cannot impute knowledge under section 773(e)(1)(A) of the Act for these companies. Because we cannot impute knowledge of dumping, we need not examine whether there have been massive imports. Therefore, in accordance with section 773(e)(1)(A) of the Act, we preliminarily determine that, for Atul and Hickson, there is no reasonable basis to believe or suspect that critical circumstances exist with respect to import of the subject merchandise from India.

With respect to firms covered by the "All Other" rate, because the dumping margin is insufficient to impute knowledge of dumping, and because we have not determined that imports of sulfur dyes, including sulfur vat dyes, have been massive over a relatively short time, we preliminarily determine that there is no reasonable basis to believe or suspect that critical circumstances exist for those firms.

Suspension of Liquidation

In accordance with section 733(d)(1) of the Act, we are directing the Customs Service to suspend liquidation of all entries of sulfur dyes, including sulfur vat dyes, from India that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the **Federal Register**. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated preliminary dumping margins, as shown below. The suspension of liquidation will remain in effect until further notice. The weighted-average dumping margins are as follows:

Manufacturer/producer/exporter	Weighted-average margin percentage
Atul Products Limited.....	2.69
Hickson and Dadajee Limited.....	17.55
All Others.....	10.12

ITC Notification

In accordance with section 733(f) of the Act, we have notified the ITC of our determination.

If our final determination is affirmative, the ITC will determine whether these imports are materially injuring, or threaten material injury to, the U.S. industry before the later of 120 days after the date of this preliminary determination or 45 days after our final determination.

Public Comment

In accordance with 19 CFR 353.38, case briefs or other written comments in at least ten copies must be submitted to the Assistant Secretary for Import Administration no later than December 7, 1992, and rebuttal briefs no later than December 9, 1992. In accordance with 19 CFR 353.38(b), we will hold a public hearing, if requested, to give interested parties an opportunity to comment on arguments raised in case or rebuttal briefs. Tentatively, the hearing will be held on December 14, 1992, at 9:30 a.m. at the U.S. Department of Commerce, room 3708, 14th Street and Constitution Avenue NW., Washington, DC 20230. Parties should confirm by telephone the time, date, and place of the hearing 48 hours before the scheduled time.

Interested parties who wish to request a hearing must submit a written request to the Assistant Secretary for Import Administration, U.S. Department of Commerce, room B-099, within ten days of the publication of this notice in the **Federal Register**. Requests should contain: (1) The party's name, address, and telephone number; (2) the number of participants; and (3) a list of the issues to be discussed. In accordance with 19 CFR 353.38(b), oral presentations will be limited to issues raised in the briefs.

This determination is published pursuant to section 733(f) of the Act (19 U.S.C. 1673b(f)) and 19 CFR 353.15(a)(4).

Dated: October 19, 1992.

Rolf Th. Lundberg, Jr.

Acting Assistant Secretary for Import Administration.

[FR Doc. 92-25918 Filed 10-23-92; 8:45 am]

BILLING CODE 3510-05-M

[Investigations Nos. 731-TA-548 and 551 (Final)]

Sulfur Dyes From China and the United Kingdom

AGENCY: United States International Trade Commission.

ACTION: Revised schedule for the subject investigations.

EFFECTIVE DATE: October 22, 1992.

FOR FURTHER INFORMATION CONTACT: Diane J. Mazur (202-205-3184), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

SUPPLEMENTARY INFORMATION: On September 21, 1992, the Commission instituted the subject investigations and established a schedule for their conduct (57 FR 46195, October 7, 1992). Subsequently, the Department of Commerce extended the date for its final determinations in the investigations from December 1, 1992 to December 31, 1992 for the United Kingdom and to February 1, 1993 for China. The Commission, therefore, is revising its schedule in the Investigations to conform with Commerce's new schedule.

The Commission's new schedule for the investigations is as follows: requests to appear at the hearing must be filed with the Secretary to the Commission not later than December 30, 1992; the prehearing conference will be held at the U.S. International Trade Commission Building on January 4, 1993; the prehearing staff report will be placed in the nonpublic record on December 18, 1992; the deadline for filing prehearing briefs is January 5, 1993; the hearing will be held at the U.S. International Trade Commission Building on January 13, 1993; the deadline for filing posthearing briefs is January 21, 1993; and the deadline for filing supplemental briefs providing comments regarding Commerce's final

determination with respect to China is February 5, 1993.

For further information concerning these investigations see the Commission's notice of investigations cited above and the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules.

Issued: November 6, 1992.

By order of the Commission.

Paul R. Bardos,

Acting Secretary.

[FR Doc. 92-27367 Filed 11-10-92; 8:45 am]

BILLING CODE 7020-02-40

[Investigation No. 731-TA-550 (Final)]

Sulfur Dyes From India

AGENCY: United States International Trade Commission.

ACTION: Institution and scheduling of final antidumping investigation.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-550 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from India of sulfur dyes,¹ provided for in subheadings 3204.15, 3204.19.30, and 3204.19.50 of the Harmonized Tariff Schedule of the United States.

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part

¹ Sulfur dyes are synthetic organic coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro, or amino groups, or by reaction of sulfur or alkaline sulfide with aromatic hydrocarbons. For purposes of these investigations, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms.

201), and part 207, subparts A and C (19 CFR part 207).

EFFECTIVE DATE: October 23, 1992.

FOR FURTHER INFORMATION CONTACT:

Diane J. Mazur (202-205-3184), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of sulfur dyes from India are being sold in the United States at less than fair value within the meaning of section 733 of the Act (19 U.S.C. 1673b). The investigation was requested in a petition filed on April 10, 1992, by Sandoz Chemicals Corporation, Charlotte, NC.

Participation in the Investigation and Public Service List

Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in section 201.11 of the Commission's rules, not later than twenty-one (21) days after publication of this notice in the *Federal Register*. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to § 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this final investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than twenty-one (21) days after the publication of this notice in the *Federal Register*. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Staff Report

The prehearing staff report in this investigation will be placed in the

nonpublic record on December 18, 1992, and a public version will be issued thereafter, pursuant to § 207.21 of the Commission's rules.

Hearing

The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m. on January 13, 1993, at the U.S. International Trade Commission Building. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission on or before December 30, 1992. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the hearing. All parties and nonparties desiring to appear at the hearing and make oral presentations should attend a prehearing conference to be held at 9:30 a.m. on January 5, 1993, at the U.S. International Trade Commission Building. Oral testimony and written materials to be submitted at the public hearing are governed by §§ 201.6(b)(2), 201.13(f), and 207.23(b) of the Commission's rules.

Written Submissions

Each party is encouraged to submit a prehearing brief to the Commission. Prehearing briefs must conform with the provisions of § 207.22 of the Commission's rules; the deadline for filing is January 5, 1993. Parties may also file written testimony in connection with their presentation at the hearing, as provided in § 207.23(b) of the Commission's rules, and posthearing briefs, which must conform with the provisions of § 207.24 of the Commission's rules. The deadline for filing posthearing briefs is January 21, 1993; witness testimony must be filed no later than three (3) days before the hearing. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before January 21, 1993. All written submissions must conform with the provisions of § 201.8 of the Commission's rules; any submissions that contain BPI must also conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules.

Issued: November 6, 1992.

By order of the Commission.

Paul R. Bardos,

Acting Secretary.

[FR Doc. 92-27368 Filed 11-10-92; 8:45 a.m.]

BILLING CODE 7020-02-M

FOR FURTHER INFORMATION CONTACT: Kim Hardin, Office of Antidumping Investigations, Import Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482-0371.

Postponement

On October 30, 1992, Atul Products Limited, a respondent accounting for a significant portion of exports in the antidumping duty investigation of sulfur dyes, including sulfur vat dyes, from India, requested that the Department postpone the final determination in this investigation until February 1, 1993, in accordance with section 735(a)(2)(A) of the Tariff Act of 1930, as amended (the Act) (19 U.S.C. 1672d(a)(2)(A)), in order to ensure that the Department has adequate time to conduct verification and to consider fully all the issues in the case.

We find no compelling reasons to deny this request and are, accordingly, postponing the date of the final determination until February 1, 1993.

This notice is published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)) and 19 CFR 353.20(b)(2).

Dated: November 20, 1992.

Alan M. Dann,

Assistant Secretary for Import Administration.

[FR Doc. 92-29629 Filed 12-4-92; 8:45 am]

BILLING CODE 3510-06-M

[A-533-805]

Postponement of Final Antidumping Duty Determinations of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, From India

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: December 7, 1992.

International Trade Administration

[A-412-809]

Final Determination of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, From the United Kingdom

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: January 8, 1993.

FOR FURTHER INFORMATION CONTACT: Shawn Thompson, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone: (202) 482-1776.

FINAL DETERMINATION: We determine that sulfur dyes, including sulfur vat dyes, from the United Kingdom are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (the Act). The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Case History

Since the publication of our affirmative preliminary determination on September 24, 1992 (57 FR 44163), the following events have occurred:

We received requests for a public hearing from Sandoz Chemicals Corporation, the petitioner, on October 2, 1992, and from James Robinson Limited (JR), the respondent, on October 5, 1992.

From October 5 through October 8, 1992, we conducted verification in the United Kingdom of JR's responses to the Department's questionnaire.

On October 8, 1992, JR requested a postponement of the final determination. We granted this request, and on October 16, 1992, we postponed the final determination until not later than December 31, 1992 (57 FR 48356 (Oct. 23, 1992)).

Both petitioner and JR filed case briefs on November 17, 1992, and rebuttal briefs on November 25, 1992. A public hearing was held on December 2, 1992.

Class or Kind of Merchandise

On August 31, 1992, respondent requested that the Department of Commerce (the Department) determine that there are two separate classes or kinds of merchandise under investigation—conventional sulfur dyes and solubilized sulfur dyes. Respondent further requested that the Department either rescind the investigation with respect to solubilized sulfur dyes, as

there was no less-than-fair value (LTFV) allegation in the petition regarding this type of dye, or, at a minimum, calculate separate dumping margins for each type of dye. For the reasons outlined below, we determine that conventional and solubilized sulfur dyes do not constitute separate classes or kinds of merchandise.

In past cases where the Department has been called upon to determine the number of classes or kinds of merchandise under investigation, we have based our analysis on the criteria set forth by the Court of International Trade in *Diversified Products v. United States*, 6 CIT 155, 572 F. Supp. 883 (1983) ("*Diversified Products*"). According to *Diversified Products*, the Department may rely upon the following factors in determining whether products belong to the same class or kind of merchandise: (1) The general physical characteristics of the merchandise; (2) the ultimate use of the merchandise; (3) the expectations of the ultimate purchaser; (4) the channels of trade in which the product is sold; and (5) the manner in which the product is advertised and displayed. (See, e.g., *Final Determinations of Sales at Less Than Fair Value: Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From the Federal Republic of Germany*, 54 FR 18992 (May 3, 1989)).

Regarding four of the five *Diversified Products* criteria (i.e., ultimate use, expectations of the ultimate purchasers, channels of trade, and manner of advertising), we find that there is significant overlap between the two types of dyes. Although it is true that one type of solubilized sulfur dye (the type formulated to dye leather) cannot be used in the same applications as conventional sulfur dyes (and vice versa), we find that another type (the type formulated to dye textiles) can be, and is ultimately used in the same applications (i.e., to dye textiles). Accordingly, we find that the ultimate use and expectations of the ultimate purchasers for one type of solubilized sulfur dye are similar to the use of, and expectations for, conventional sulfur dyes. Moreover, it appears that the type of solubilized sulfur dye formulated to dye textiles moves in the same channels of trade as conventional sulfur dyes. Along the same lines, we find that advertising for this type of solubilized sulfur dye, like that for conventional sulfur dyes, is directed towards textile dyers.

Regarding the remaining *Diversified Products* criterion (the general physical characteristics of the merchandise), we note that, when examining differences

in physical characteristics in the context of a class or kind analysis, the Department looks for clear dividing lines between product groups, not merely the presence or absence of physical differences between certain products. In this specific instance, although there are physical differences between certain types of solubilized sulfur dyes (*i.e.*, those formulated for use on leather) and conventional sulfur dyes, we find that the physical differences between the two product groups in question (*i.e.*, conventional sulfur dyes and solubilized sulfur dyes taken as a whole) are not so great or so clearly delineated as to form the sole basis for determining that they fall within separate classes or kinds of merchandise. In other words, physical differences among these products alone are not *ipso facto* proof of different classes or kinds.

In making its arguments that separate classes or kinds of merchandise exist, respondent relies heavily on a recent determination issued by the Department. (See, *Pure and Alloy Magnesium From Canada: Final Affirmative Determination; Rescission of Investigation and Partial Dismissal of Petition*, 57 FR 30,939, (July 13, 1992) ("Magnesium").) In that determination, the Department found not only that the two products in question had clearly defined differences in physical characteristics, but also that they were ultimately used for distinctly different purposes by purchasers who had completely different expectations. We find that respondent's reliance on Magnesium is misplaced, however, because in this investigation we find no clearly defined differences in any of the five *Diversified Products* criteria.

In sum, our analysis of conventional and solubilized sulfur dyes in light of the *Diversified Products* criteria supports a finding that these products should not be separate classes or kinds of merchandise. Accordingly, we have not rescinded the investigation with respect to solubilized sulfur dyes. In addition, in accordance with the Department's practice of calculating one weighted-average margin for the class or kind of merchandise, we have calculated a single margin for solubilized and conventional sulfur dyes. (For a more detailed discussion of this issue, see Memorandum from David L. Binder, Acting Director, Office of Antidumping Investigations, to Richard W. Moreland, Acting Deputy Assistant Secretary for Investigations, dated December 22, 1992.)

Scope of Investigation

The merchandise subject to this investigation is sulfur dyes, including sulfur vat dyes. Sulfur dyes are synthetic, organic, coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro or amino groups, or by reaction of sulfur and/or alkaline sulfide with aromatic hydrocarbons. For purposes of this investigation, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, presscake, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms. The sulfur dyes subject to this investigation are classifiable under subheadings 3204.15.10, 3204.15.20, 3204.15.30, 3204.15.35, 3204.15.40, 3204.15.50, 3204.19.30, 3204.19.40 and 3204.19.50 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

Period of Investigation

The period of investigation (POI) is November 1, 1991, through April 30, 1992.

Such or Similar Comparisons

We have determined that all the products covered by this investigation constitute a single category of such or similar merchandise. Where there were no sales of identical merchandise in the home market to compare to U.S. sales, we made comparisons on the basis of: (1) Category; (2) color; (3) color index number; (4) type; (5) form; and (6) strength. We made adjustments for differences in the physical characteristics of the merchandise, in accordance with section 773(a)(4)(C) of the Act.

Fair Value Comparisons

To determine whether sales of sulfur dyes, including sulfur vat dyes, from the United Kingdom to the United States were made at less than fair value, we compared the United States price (USP) to the foreign market value (FMV), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price

We calculated USP using the methodology described in the preliminary determination, with the following exception: We disregarded U.S. sample sales in our analysis, because these sales accounted for a very small percentage of U.S. sales by volume. (For further discussion, see *Comment 5* in the "Interested Party Comments" section of this notice.)

Foreign Market Value

We calculated FMV using the methodology described in the preliminary determination, with the following exceptions:

1. We excluded from our analysis one large volume sale, as we determined that this sale was made outside the ordinary course of trade. (For further discussion, see *Comment 3*.)
2. We reclassified payments to one of respondent's customers, characterized by respondent as post-sale rebates, as commission expenses because the payments in question were made in return for the customer's performance of the functions of a sales agent (including the function of finding buyers). Because JR neither reported U.S. indirect selling expenses nor paid commissions in the U.S. market, we used best information available (BIA) to determine the amount of the commission offset for these sales. As BIA, we used the amount of the commission itself. (For further discussion, see *Comment 9*.)
3. We corrected JR's reported difference in merchandise adjustments (difmers) for errors found at verification. In addition, for one product comparison we excluded sales of one product from the calculation of FMV, as we find that the variable cost difference between the product sold in the home market and that sold in the United States is too large to allow a reasonable price-to-price comparison (*i.e.*, the revised difmer for this product comparison exceeded 20 percent of the cost of manufacture (COM) of the product sold in the United States, and no party to this proceeding provided any basis to depart from the 20 percent guideline).
4. We made a circumstance-of-sale adjustment for credit expenses using revised U.S. credit expenses. We recalculated these expenses using respondent's home market interest rate, because this was the rate that respondent actually used to finance its U.S. accounts receivables. (See *Comment 7*.) In our recalculation, we also used updated payment information for certain U.S. sales, provided at verification.

5. We added to FMV an additional U.S. packing expense, based on our findings at verification.

Currency Conversion

We made currency conversions in accordance with 19 CFR 353.60(a) based on the official exchange rates in effect on the dates of the U.S. sales as certified by the Federal Reserve Bank.

Verification

As provided in section 776(b) of the Act, we verified information provided by respondent by using standard verification procedures, including the examination of relevant sales and financial records, and selection of original source documentation containing relevant information.

Critical Circumstances

Petitioner alleges that "critical circumstances" exist with respect to imports of sulfur dyes, including sulfur vat dyes, from the United Kingdom. Section 735(a)(3) of the Act provides that critical circumstances exist if we determine that there is a reasonable basis to believe or suspect that:

(A)(i) There is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation, or

(ii) The person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than its fair value, and

(B) There have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

With respect to the first criterion, we note that there are no outstanding antidumping orders on sulfur dyes, including sulfur vat dyes, from the United Kingdom, and, thus, no history of dumping. Moreover, because the final dumping margin for JR and all other exporters is less than 25 percent, we cannot impute knowledge under section 735(a)(3)(A)(ii) of the Act. Since the criteria necessary to find the existence of critical circumstances under section 735(a)(3)(A) are not present, we do not need to determine whether imports of subject merchandise have been massive over a relatively short period, in accordance with section 735(a)(3)(B) of the Act.

Accordingly, we determine that critical circumstances do not exist with respect to imports of sulfur dyes, including sulfur vat dyes, from the United Kingdom. (For further discussion of this issue, see *Comment 10*.)

Interested Party Comments

Comment 1

Petitioner alleges that JR incorrectly calculated its adjustments for differences in the physical characteristics of the merchandise. According to petitioner, JR's use of direct labor costs as a basis for allocating overhead constitutes the least accurate method of measuring overhead, as JR's production involves a highly capital-intensive, low-labor manufacturing process. Petitioner maintains that the individual elements comprising JR's variable overhead costs will increase or decrease proportionally with the amount of goods produced, while the amount of labor will not necessarily vary at all. Consequently, petitioner argues that the most accurate basis of allocating variable overhead costs is the volume of goods produced. To this end, petitioner provided the Department with recalculated overhead amounts, as well as revised dimmers.

Respondent contends that its method of allocating overhead costs on the basis of labor is the best method available for measuring the work necessary to take raw materials through to finished products, because its factory is not automated and still is relatively labor-intensive. According to respondent, using petitioner's suggested methodology of reallocating overhead costs based on production volume is inappropriate in this investigation because JR's processes and product range is so diverse (*i.e.*, each unit produced by JR does not require the same amount of overhead inputs).

Respondent asserts that the Department has accepted this allocation methodology in other investigations, citing *Television Receivers, Monochrome & Color, From Japan: Final Results of Antidumping Duty Administrative Review*, 56 FR 34177 (July 26, 1991) and *Final Determination of Sales at Less than Fair Value: Cell Site Transceivers From Japan*, 49 FR 43080 (Oct. 26, 1984). Finally, respondent notes that the Department verified JR's overhead costs and allocations and found no significant discrepancies.

DOC Position

We agree with respondent and have accepted JR's allocation methodology for purposes of the final determination. After evaluating JR's allocation methodology, we find that, while the company's costs do not correlate perfectly with the amount of labor used, its methodology is more accurate than the alternative put forth by petitioner, in that JR's methodology at least assigns

higher costs to products which have more production steps or have more complex processes (and therefore use more labor). In this particular instance, petitioner's methodology of allocating overhead based on production volume would be distortive and inaccurate, because JR's costs would not vary proportionally with the volume produced. Petitioner's recalculated numbers show that the overhead amounts vary by an insignificant amount between the different product groups produced by JR. However, we noted at verification that it is more costly to produce subject merchandise as a powder than as a liquid (these are classified as separate product groups in JR's accounting system), because powder production requires additional machinery and has several additional production steps. Therefore, we have used JR's verified overhead costs for purposes of the final determination.

Comment 2

Petitioner alleges that all of JR's home market sales of certain products were made at prices below the cost of production (COP) and should be excluded from the Department's analysis for purposes of the final determination. In order to support this allegation, petitioner provided its own COP calculations for these products, using respondent's data after revising them to take into account its proposed methodology for reallocating overhead expenses. (See *Comment 1*, *supra*.) Petitioner then compared the revised COPs to the gross unit prices for the products in question, less any reported rebates. According to petitioner, because (1) the total volume of all below-cost sales is greater than ten percent of the JR's total home market sales of subject merchandise, and (2) all of the sales of the specific products in question are below-cost, the Department should apply its "10/90/10" rule and exclude the below-cost sales from the margin analysis. Accordingly, petitioner states, the Department should base FMV for the U.S. sales previously compared to the below-cost sales on the constructed value (CV) for one of products sold in the home market. Petitioner reasons that, of the below-cost products sold in the home market, this product is the only one having a revised dimmer of less than 20 percent of the COM of the comparison products sold in the United States.

Finally, petitioner submits that its COP allegation should not be rejected on timeliness grounds, as not only did petitioner previously submit an allegation, but it is not now either realleging sales below cost or requesting

that the Department initiate a COP investigation. Rather, petitioner argues that the facts on the record, verified by the Department, establish that JR's sales were below COP. Moreover, petitioner maintains that it did not have complete access to these facts, used in its case brief for the first time, as (1) petitioner did not receive sufficient information on one of the products in question until JR filed its second deficiency response (which was submitted after the deadline for filing a cost allegation) and (2) much of JR's cost information was revised during verification.

Respondent contends that the Department should reject petitioner's COP allegation, as it is 106 days past the regulatory deadline. Respondent states that the Department afforded petitioner numerous opportunities to submit an adequate allegation prior to the deadline, yet petitioner declined to do so. Moreover, respondent states that petitioner had sufficient information in its possession prior to the deadline to make substantially the same allegation, as almost all of the data used by petitioner in its case brief was contained in JR's pre-deficiency questionnaire responses. Finally, respondent argues, regardless of the timing involved, petitioner's allegation is without merit because it relies on an incorrect reallocation of overhead costs.

DOC Position

We agree with respondent that petitioner's cost allegation is untimely. We find that petitioner had access to all of the necessary information two weeks prior to the preliminary determination, and that, had petitioner chosen to make a cost allegation earlier than in its case brief, it had the raw data to do so. We also note that the "deadline" set out in 19 CFR 353.31(c)(1)(i) does not require the Department to reject cost allegations received after the deadline date in all cases. Rather, it states that the deadline will be 45 days before the scheduled date for the preliminary determination "unless a relevant response is untimely or incomplete." Because JR's original response was deficient, the Department requested that JR submit new information after the regulatory "deadline." Had this new information directly led petitioner to believe or suspect that any of JR's home market sales were made at prices below COP, petitioner could have made a cost allegation at that point in the investigation and we would not necessarily have considered it to be untimely. Accordingly, because petitioner had access to the relevant information well before the date on which it submitted its case brief, we

have rejected petitioner's cost allegation as untimely.

Comment 3

Petitioner contends that one large volume sale should be excluded from the calculation of FMV because it (1) was not made within the POI; (2) was not made in the ordinary course of trade; and (3) constituted a pretended/fictitious sale. Should the Department disagree, petitioner argues, this sale should be disregarded in any event, because it was made at a price below its COP.

Regarding the first argument, petitioner states that a contract analysis is relevant in determining when a sale occurs for purposes of the antidumping duty law. According to petitioner, the methodology that respondent used to determine the date of sale for the order in question conflicted with one of the provisions in the agreement between respondent and its customer.

Accordingly, petitioner asserts that the date that a binding commitment was made under the terms of the agreement (in this case the date of shipment) should be controlling for date of sale purposes. As the sale was shipped outside the POI, petitioner asserts that it should be excluded from the calculation of FMV.

Regarding the second argument, petitioner contends that, because (1) the sale was priced below the COM of the product in question and (2) the circumstances surrounding the sale patently deviated from the conditions and practices applicable to other home market sales reported by JR, it is clear that the sale was not made in the ordinary course of trade.

Regarding the argument that this sale was fictitious, petitioner contends that both the timing of the sale (*i.e.*, after the filing of the petition) and the price at which it was made (*i.e.*, below the price then in effect between JR and its customer), when taken in conjunction with the fact that its shipping pattern was markedly different from that for JR's other sales to this customer, lead to the conclusion that the sale was contrived for the purpose of serving as the basis for a more favorable FMV calculation. Petitioner states that this sale should therefore be disregarded for purposes of the final determination and section 773(a)(1) of the Act, which states that, "[I]n the ascertainment of foreign market value for the purposes of this title no pretended sale or offer for sale, and no sale or offer for sale intended to establish a fictitious market, shall be taken into account."

Respondent contends that the sale was properly reported as a sale made

within the POI. Respondent notes that its order record card, used to establish the date of sale for all other home market transactions, shows that both price and quantity were fixed on the date reported in the home market sales listing. Moreover, respondent asserts, the customer in question was obligated to, and in fact did, accept and pay for all merchandise sold pursuant to this sale, and it did so in the same manner as JR's other sales. Respondent further states that this sale was not made outside the ordinary course of trade, because there were other large sales made by JR during the POI. Therefore, respondent states that the size of this sale was not uncommon. Finally, respondent argues that this sale was not a fictitious sale, as it was made in order to assist the customer to develop a market for the product in certain areas of the United Kingdom.

DOC Position

We agree with respondent that the date of sale for this transaction was within the POI. At verification, we reviewed respondent's documentation on this sale and found that the binding commitment between the parties as to price and quantity was made on the date that respondent reported in its sales listing.

However, we agree with petitioner that this sale was made outside the ordinary course of trade. We note that not only was this sale at a greater quantity and lower price than other sales to the same customer, but it was also out of line with the prices and quantities of the vast majority of respondent's other sales transactions in the home market during the POI. In addition, we note that the agreement between respondent and the customer in question was concluded in a manner noticeably different from respondent's other sales during the POI (*i.e.*, the sale involved a "special agreement" between the parties in order to promote the product at issue).

Based on our determination that this sale was not made in the ordinary course of trade, we have excluded it from our calculation of FMV for purposes of the final determination.

Accordingly, we do not need to address the issue of whether this sale was made in order to establish a fictitious market.

Comment 4

Petitioner contends that one of JR's home market sales should be treated as a consignment sale, even though it was not reported as such. Petitioner further contends that the gross unit price for this sale should be revised upward to

equal JR's "scheduled price" for this product, with the difference between the scheduled and reported prices treated as a commission. As support for its contention that this sale should be classified as a consignment sale, petitioner notes that the sale was made to a customer who acts as a consignment agent for other products. In addition, petitioner claims that this transaction appears to have been handled in a manner similar to that in which JR's consignment sales to this agent were handled.

Respondent contends that petitioner's argument should be rejected because the sale in question was not a consignment sale. Respondent notes that JR's consignment agreement with its agent covered a different product entirely. Therefore, respondent maintains that this sale should be treated as a non-consignment sale for purposes of the final determination.

DOC Position

We agree with respondent. The Department normally accepts a respondent's assertions, which the respondent has certified as factually correct, unless either there is conflicting information on the record or the information is found to be factually inaccurate during verification. In this instance, we examined the circumstances surrounding this sale at verification and saw no evidence that it was shipped to the customer in question as consignment stock. Moreover, it would be inappropriate to classify all sales to a customer, who acts at times as a consignee, as consignment merchandise, based solely on the fact that the parties have an agent/principal relationship governing sales of certain (but not all) products. Accordingly, we have not reclassified this sale as a consignment sale for purposes of the final determination.

Comment 5

Respondent argues that the Department should exclude sample and trial orders from its analysis, because the overriding goal of the antidumping statute is to make apples-to-apples comparisons. (See, e.g., *American Permac, Inc. v. United States*, 783 F. Supp. 1,421 (CIT 1992) ("*American Permac*").) According to respondent, in *American Permac*, the court recognized that in antidumping investigations the Department may exclude U.S. sales when they are unrepresentative of a company's U.S. selling practices and when such sales would result in an unfair comparison.

Respondent states that examining the sales at issue results in unfair pricing

comparisons because JR did not have the same type of sales in the home market during the POI. Moreover, respondent contends that to examine these sales is contrary to the Department's practice, citing Final Determination of Sales at Less Than Fair Value: Coated Groundwood Paper From the United Kingdom, 56 FR 56,403 (Nov. 4, 1991) (where the Department determined that including trial sales in only one market would be unfair).

Petitioner argues that the Department should continue to include these sales in its analysis because they are not outside the ordinary course of trade. Petitioner states that the quantities of these sales indicates that these orders were placed by the customer for the purpose of conducting full mill production trials and that JR had the expectation of follow-up sales. According to petitioner, this fact alone is sufficient to support the Department's determination that these sales were of usual commercial quantities and in the ordinary course of trade. Therefore, petitioners assert that they should be matched with home market sales for purposes of the final determination.

DOC Position

In performing its LTFV analysis, the Department is not required to examine every sales transaction made by a respondent during the POI. See 19 CFR 353.42(b)(1). (See also e.g., Final Determination of Sales at Less Than Fair Value: New Minivans From Japan, 57 FR 21,937 (May 28, 1992).) Accordingly, we have disregarded sample sales in our LTFV calculations for purposes of the final determination, because we find that these sales accounted for a very small percentage of U.S. sales by volume and we have adequate sales coverage without examining them. (See, e.g., Final Determination of Sales at Less Than Fair Value: Coated Groundwood Paper From France, 56 FR 56,380, 56,384 (Nov. 4, 1991).)

Regarding respondent's trial sales, however, we find that these sales were not made in unusually small quantities (i.e., the quantities were comparable to the quantities of other U.S. sales transactions reported by respondent, and were actually larger than the quantities of respondent's home market sales of the identical merchandise). Because respondent has provided no compelling reason to disregard these sales, we determine that it is appropriate to include them in our LTFV analysis.

Regarding respondent's argument that the Department should exclude both sample and trial sales because to not do so would result in the Department's

making unfair comparisons, we find that this argument is without merit. The Department makes price-to-price comparisons based on the requirements set forth in both the antidumping statute and its regulations. We evaluate the information used in our LTFV analysis in light of these requirements, as well as in light of the commercial practices in the industry in question. Based on our evaluation of the circumstances surrounding the particular transactions at issue, we find that our actions are consistent with both the statute and the regulations. Consequently, respondent's argument does not alter our analysis in any way.

Comment 6

Respondent contends that the Department should exclude from its analysis JR's home market sales of "excess, left over, or odd lot" merchandise, because this merchandise was not sold in the ordinary course of trade. Respondent notes that, unlike other products sold in the home market which were produced to order for home market customers, the merchandise in question was produced solely for one U.S. end user. Consequently, respondent states, the excess produced from each batch was inventoried and sold infrequently in the home market as an incidental, "odd lot" product.

According to respondent, the Department has realized in other cases that excess or left over merchandise is out of the ordinary course of trade and has therefore excluded such merchandise from its calculation of FMV. As support for this contention, respondent cites *Certain Fresh Cut Flowers From Colombia: Final Results of Antidumping Duty Administrative Review* 55 FR 20,491 (May 17, 1990) ("*Flowers*").

Alternatively, respondent argues that the Department should disregard JR's home market sales of the product in question and base FMV on CV. Respondent argues that its home market sales do not provide a meaningful basis for price-to-price comparisons because of the extreme differences in individual sales quantities between the two markets. Respondent cites 19 CFR 353.55(e), which states that in "comparing the United States price with foreign market value, the Secretary normally will use sales of comparable merchandise." In this case, respondent contends that "comparable" refers to price comparability, not similarity of physical characteristics. As evidence that the prices for these two products are not comparable, respondent offers the fact that a significant percentage of

its preliminary dumping margin was attributable to these comparisons.

Petitioner maintains that the Department was correct in basing FMV or JR's home market sales of the product in question. Petitioner asserts that these sales were made to the same customer and in similar quantities as other home market sales, and that respondent's argument amounts to little more than an eleventh hour claim for an adjustment for pre-sale warehousing expenses. Petitioner further asserts that accepting respondent's argument that these sales were outside the ordinary course of trade would therefore necessitate making a similar determination for a number of other home market sales not at issue. Where there exist contemporaneous sales of identical merchandise in the home market, petitioner states, it is appropriate to rely on such sales, rather than CV, as the basis for determining FMV.

DOC Position

We agree with petitioner. The antidumping law requires the Department to disregard individual home market sales made outside the ordinary course of trade. This section of the law does not appear to apply in the current investigation, however, as JR's home market sales were made to the same customers, and in similar quantities, as other home market sales. Moreover, there is no indication that this particular merchandise is not sold to the same types of purchaser in the same manner as other sulfur dyes in the home market.

Regarding JR's argument that the real issue is price comparability between markets, we note that JR incorrectly cited 19 CFR 353.55. That section relates to adjustments for price differences in the merchandise due to differences in the commercial quantity of sales. This provision states that the Department "normally will use sales of comparable quantities of merchandise . . . (and) . . . will make a reasonable allowance for any difference in quantities, to the extent that the Secretary is satisfied that the amount of any price differential is wholly or partly due to that difference in quantities." JR did not attempt to claim that its price differential between the U.S. and home market sales of this product resulted from a difference in quantities. Thus, we find that this provision in the Department's regulations does not apply in this instance.

Finally, with regard to respondent's argument that the Department has disregarded sales of left over merchandise in the past, we note that the case cited by respondent, *Flowers*,

dealt with a perishable good. Thus, we find that the circumstances here are factually different from those in the *Flowers* case. Accordingly, we have included respondent's sales of the product in question in our final margin analysis.

Comment 7

Petitioner argues that the Department should calculate U.S. credit expenses using the actual interest rate incurred by JR during the POI on its U.S. dollar-denominated bank account. Petitioner asserts that the Department determined at verification that the actual interest rate paid on this account was substantially higher than the theoretical interest rate reported in JR's questionnaire response. According to petitioner, it is preferable to use an actual verified rate rather than a theoretical rate, particularly in view of the fact that at verification JR presented the Department with two different sets of rates from its bank.

Respondent argues that it was unable to provide the Department with the accurate short-term interest rate on its U.S. dollar-denominated account because its bank would not cooperate with JR. Respondent contends, however, that it is inappropriate to use the "verified actual" rate to calculate U.S. credit expenses, as JR did not actually pay this rate. Moreover, respondent notes that using this "actual" rate is especially unreasonable in light of the fact that the rates provided by the bank in response to JR's second request were so much lower than either the "actual" rate or the reported rate.

Rather, respondent argues, the Department should calculate U.S. credit expenses using JR's home market interest rate. Respondent points out that it rarely used its U.S. dollar-denominated account because the interest rate that JR would receive on positive balances was higher in its pounds sterling account. Thus, respondent contends that any financing of its U.S. dollar-denominated receivables was done primarily through its pounds sterling account and that, consequently, using JR's verified home market interest rates would lead to the most accurate measurement of the opportunity cost associated with holding U.S. receivables.

DOC Position

We agree with respondent and have recalculated U.S. credit expenses using JR's home market interest rate. We noted at verification that JR did not pay interest on its U.S. dollar-denominated receivables in the ordinary course of its business, as it only incurred interest

expenses for a very few days during the POI and then only by accident (*i.e.*, any interest paid on negative balances was due to the company's overestimation of the funds available in the account because the company attempted to maintain a zero or slightly positive balance there). We also determined at verification that JR borrowed from its home market bank in the ordinary course of its business, and we reviewed the interest rates applicable to those borrowings. Thus, our use of JR's home market interest rate is consistent with the instructions of the Court of Appeals for the Federal Circuit in a recent case, *La Metall Industriale, S.p.A. v. United States*, 912 F.2d 455 (Fed. Cir. 1990), where the court directed the Department to consider the commercially reasonable business practice of respondents in determining the interest rate used in the calculation of imputed credit.

Comment 8

Respondent argues that the Department should deduct from FMV imputed credit expenses related to the prepayment of value added taxes (VAT). Specifically, respondent argues that it incurred an opportunity cost for the period in which it had paid VAT to the U.K. government for a particular sale, but had not yet received payment from its home market customers. As Department precedent on this issue, respondent cites Final Results of Administrative Review of Antidumping Duty Order: Color Television Receivers From Korea, 49 FR 50,420 (Dec. 28, 1984) ("CTVs"), in which the Department allowed a similar claim.

Respondent notes that, although it is not the Department's current practice to impute credit expenses related to VAT prepayments, in a recent case the Department implied that it would allow such an adjustment if it were properly quantified. (See, Preliminary Determination of Sales at Less Than Fair Value: Dynamic Random Access Memory Semiconductors of One Megabyte and Above From the Republic of Korea, 57 FR 49,066 (Oct. 29, 1992) ("DRAMs"), where the Department disallowed credit expenses related to VAT payments because respondent did not take into account the saving gained from early payment of VAT by the customer.) Respondent states that its claim in this case was correctly quantified, as it took into account not only the opportunity cost associated with its prepayments of VAT to the U.K. government, but also the opportunity gain associated with early payment of VAT by its customers.

DOC Position

We disagree. After further reflection, we have reconsidered the position taken in DRAMs. We find that there is no statutory or regulatory basis for making the adjustment suggested by respondent. While there may be an opportunity cost associated with the prepayment of VAT, that fact alone is not a sufficient basis for the Department to make an adjustment in price-to-price comparisons. We note that virtually every charge or expense associated with price-to-price comparisons is either prepaid or paid for at some point after the cost is incurred. Accordingly, for each pre- or post-service payment, there is also an opportunity cost (or gain). Thus, to allow the type of adjustment suggested by respondent would imply that in the future the Department would be faced with the impossible task of trying to determine the opportunity cost (or gain) of every freight charge, rebate and selling expense for each sale reported in a respondent's database. In order to make a price-to-price comparison, this exercise would make our calculations inordinately complicated, placing an unreasonable and onerous burden on both respondents and the Department. Consequently, we have not deducted from FMV the imputed credit expense in question.

Comment 9

Respondent argues that JR's post-sale payments to its consignment agent were properly treated in the preliminary determination as rebates, rather than commissions, because the agent often resells the merchandise for a higher price than the price it paid JR.

DOC Position

We disagree. For purposes of the final determination, we are treating these payments as commissions, rather than as rebates, because they were made in return for the consignee's performing the functions of a sales agent (including the function of finding buyers). Because JR neither paid commissions in the U.S. market nor reported U.S. indirect selling expenses as an offset to commissions paid in the home market (as requested in section C of the Department's questionnaire), we have used BIA to determine the amount of the commission offset for JR's sales in question. As BIA, we have used the amount of the commission itself (thereby resulting in a net reduction to FMV of zero). We note that, although JR was aware that the Department could potentially reclassify these expenses as

commissions, it opted not to report offsetting expenses.

Comment 10

Petitioner argues that critical circumstances exist with respect to imports of subject merchandise from the United Kingdom, because imports of Sulfur Black 1 were massive over a relatively short period during the POI. Petitioner bases its analysis on the Bureau of Census' import statistics for Sulfur Black 1 (the type of sulfur dye which petitioner states accounts for a "significant portion" of the domestic sulfur dye market). Petitioner states that these statistics show that imports of Sulfur Black 1 increased by between 40 and 75 percent during April through June 1992 when compared to the period January through March 1992.

Respondent argues that petitioner's critical circumstances analysis is invalid because it is based on imports of only one product, rather than the entire range of products subject to investigation. According to respondent, a comparison of the volume of all of JR's products exported to the United States during the period January through March with the volume of its exports made during the period April through June shows that JR's exports of subject merchandise to the United States have actually decreased. Finally, respondent notes that, before the Department will find critical circumstances, the dumping margin must exceed 25 percent. Respondent notes that the preliminary margin in this case was lower than that amount.

DOC Position

We agree with respondent. As the final dumping margin calculated for JR is less than 25 percent and there is no "history" of dumping of the merchandise subject to this investigation, this issue is moot. For a discussion of the criteria used to determine the existence of critical circumstances, see the "Critical Circumstances" section of this notice.

Continuation of Suspension of Liquidation

We are directing the Customs Service to continue to suspend liquidation of all entries of sulfur dyes, including sulfur vat dyes, that are entered, or withdrawn from warehouse, for consumption on or after September 24, 1992, the date of publication of our affirmative preliminary determination in the Federal Register. The Customs Service shall require a cash deposit or the posting of a bond equal to the estimated amount by which the FMV of the merchandise subject to this

investigation exceeds the USP, as shown below. This suspension of liquidation will remain in effect until further notice. The weighted-average dumping margins are as follows:

Producer/manufacturer/exporter	Weighted-average margin percentage
James Robinson Limited	19.97
All Others	19.97

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination.

Notification to Interested Parties

This notice also serves as the only reminder to parties subject to administrative protective order (APO) of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 353.34(d). Failure to comply is a violation of the APO.

This determination is published pursuant to section 735(d) of the Act and 19 CFR 353.20(a)(4).

Dated: December 31, 1992.

Alan M. Dunn,

Assistant Secretary for Import Administration.

[FR Doc. 93-357 Filed 1-7-93; 8:45 am]

BILLING CODE 3510-06-01

201.35(c)(1) and 201.37(b) (19 CFR 201.35(c)(1) and 201.37(b)).

FOR FURTHER INFORMATION CONTACT:

Katherine M. Jones, Office of the General Counsel, U.S. International Trade Commission, 500 E Street, SW., Washington, DC 20436, telephone 202-205-3097. Hearing impaired individuals are advised that information on this matter may be obtained by contacting the Commission's TTD terminal on 202-205-1810.

SUPPLEMENTARY INFORMATION: The Commission believes that good cause exists in this investigation to hold a short portion of the hearing *in camera*. The *in camera* portion of the hearing will be for the purpose of addressing business proprietary information (BPI) as part of respondents' presentation in chief, and therefore properly the subject of an *in camera* hearing pursuant to Commission rule 201.36(b)(4) (19 CFR 201.36(d)(4)). In making this decision, the Commission nevertheless reaffirms its belief that wherever possible its business should be conducted in public.

The hearing will include public presentations by petitioner and respondents, with questions from the Commission. After respondents' public presentation, the Commission will hold an *in camera* session, during which time respondents will continue their presentation to the Commission and cover business proprietary information, followed by questioning by the Commissioners and time for rebuttal by petitioners regarding such information. For the *in camera* portion of the hearing, the room will be cleared of all persons except those who have been granted access to BPI under a Commission APO service list in this investigation. See Commission rule 201.35(b) (19 CFR 201.35(b)). All those planning to attend the *in camera* portion of the hearing would should be prepared to present proper identification.

Authority: The General Counsel has certified, pursuant to Commission Rule 201.39 (19 CFR 201.39), that in her opinion, a portion of the Commission's hearing in Sulfur Dyes from China, India, and the United Kingdom, Inv. Nos. 731-TA-548, 550 & 551 (Final), may be closed to the public to prevent disclosure of business proprietary information.

Issued: January 8, 1993.

By order of the Commission.

Paul R. Bardee,

Acting Secretary.

[FR Doc. 93-826 Filed 1-13-93; 8:45 am]

SELLING CODE 7020-02-0

[Investigation Nos. 731-TA-548, 550, and 551 (Final)]

Sulfur Dyes From China, India, and the United Kingdom; Commission Determination to Conduct a Portion of the Hearing *In Camera*

AGENCY: U.S. International Trade Commission.

ACTION: Closure of a portion of a Commission hearing to the public.

SUMMARY: Upon request of respondents in the above-captioned final investigation, the Commission has determined to conduct a portion of its hearing scheduled for January 13, 1992, *in Camera*. See Commission rules 207.23(a), 201.13, and 201.35 through 201.39 (19 CFR 207.23(a), 201.12, and 201.35 through 201.39). The remainder of the hearing will be open to the public. The Commission also has determined that the 10-day advance notice of the change to a meeting was not possible. See Commission rules

(57 FR 44165, September 24, 1992), the following events have occurred.

On September 18, 1992, respondents, Kwong Fat Hong Chemicals, Ltd. ("KFC"), Sinochem Shandong Import and Export Corporation ("Sinochem Shandong"), and SICC, submitted responses to the Department's market oriented industry ("MOI") questionnaire on behalf of Tianjin Bohai Dyes Factory ("Tianjin"), Wuhan Sulfur Dyestuff Factory ("Wuhan") and Handan Dyes Factory ("Handan").

On September 28, 1992, we received an allegation of clerical errors in the preliminary determination. We determined that the allegations did not involve clerical errors.

On October 1, 1992, respondents requested an extension of time in which to submit publicly available published information ("PI"). We granted the extension until November 9, 1992. We received a timely submission containing PI from respondents. On October 2, 1992, the petitioner, Sandoz Chemicals Corporation, submitted an allegation that KFC's home market and third country sales are below the cost of production. On October 8, and December 9, 1992, respondents submitted comments opposing petitioner's sales below cost allegation.

On October 2, 1992, we received a request from respondents to postpone the final determination pursuant to 19 CFR 353.20, and on October 23, 1992, we published a notice of postponement of final antidumping duty determination in this investigation (57 FR 48356).

Also on October 2, 1992, petitioner requested a public hearing. On October 6, 1992, KFC, Sinochem Shandong, SICC, respondents and C.H. Patrick & Company, Inc. ("CHP") and International Technical Services, Ltd. ("Intertech"), importers also requested a public hearing.

On October 7, 1992, respondents submitted a response to the market rates questionnaire on behalf of the Ministry of Foreign Economic Relations and Trade (MOFERT). On November 4, 1992, we requested that MOFERT provide us with background information on the sulfur dye industry in the PRC. On November 17, 1992, MOFERT submitted its response to our November 4, 1992, request.

From November 23 through December 11, 1992, the Department conducted verifications in Hong Kong and the PRC of the questionnaire responses submitted by respondents.

On January 15, 1993, petitioners, respondents and CHP submitted case briefs. On January 19, 1993, respondents and petitioner submitted rebuttal briefs. At the request of the Department,

[A-570-018]

Final Determination of Sales at Less Than Fair Value: Sulfur Dyes, Including Sulfur Vat Dyes, From the People's Republic of China

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

EFFECTIVE DATE: February 8, 1993.

FOR FURTHER INFORMATION CONTACT: Kimberly Hardin, Office of Antidumping Investigations, Import Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 482-0371.

FINAL DETERMINATION: The Department of Commerce ("the Department") determines that sulfur dyes, including sulfur vat dyes, from the People's Republic of China ("PRC") are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended ("the Act") (19 U.S.C. 1673d). The Department also determines that critical circumstances exist for all exporters except Sinochem International Chemicals Company, Ltd. ("SICC"). The estimated margins are shown in the "Suspension of Liquidation" section of this notice.

Period of Investigation

The period of investigation ("POI") is November 1, 1991, through April 31, 1992.

Case History

Since our affirmative preliminary determination on September 17, 1992

petitioner submitted a supplemental brief on January 19 and on January 21, 1993, respondents submitted comments rebutting this brief. A public hearing was held on January 21, 1993.

Scope of Investigation

The merchandise subject to this investigation is sulfur dyes, including sulfur vat dyes. Sulfur dyes are synthetic, organic, coloring matter containing sulfur. Sulfur dyes are obtained by high temperature sulfurization of organic material containing hydroxy, nitro or amino groups, or by reaction of sulfur and/or alkaline sulfide with aromatic hydrocarbons. For purposes of this investigation, sulfur dyes include, but are not limited to, sulfur vat dyes with the following color index numbers: Vat Blue 42, 43, 44, 45, 46, 47, 49, and 50 and Reduced Vat Blue 42 and 43. Sulfur vat dyes also have the properties described above. All forms of sulfur dyes are covered, including the reduced (leuco) or oxidized state, precakes, paste, powder, concentrate, or so-called "pre-reduced, liquid ready-to-dye" forms. The sulfur dyes subject to this investigation are classifiable under subheadings 3204.15.10, 3204.15.20, 3204.15.30, 3204.15.35, 3204.15.40, 3204.15.50, 3204.19.30, 3204.19.40 and 3204.19.50 of the Harmonized Tariff Schedule of the United States (HTSUS). The HTSUS subheadings are provided for convenience and customs purposes. Our written description of the scope of this investigation is dispositive.

Separate Rates

In our preliminary determination, we stated that the final decision as to whether Sinochem Shandong and SICC should receive company-specific rates would depend upon successful verification of the factual assertions made by respondents and relied upon in the preliminary determination.

Based on our findings at verification, we have determined that Sinochem Shandong and SICC have demonstrated, pursuant to the test enunciated in the Final Determination of Sales at Less Than Fair Value: Sparklers From the People's Republic of China, 58 FR 20588 (May 6, 1991) ("Sparklers"), that they are entitled to separate rates. Unless a respondent demonstrates entitlement to a separate, company-specific rate pursuant to the test enunciated in Sparklers, we will presume that they are subject to a single rate. (See, e.g., Final Determination of Sales at Less Than Fair Value: Certain Carbon Steel Butt-Weld Pipe Fittings From the People's Republic of China, 57 FR 21056 (May 18, 1992) ("Butt-weld").) In this

instance the PRC government did not adequately respond to our questionnaire. In particular, it failed to identify all sulfur dye producers as requested by the questionnaire.

Therefore, pursuant to section 776(c) of the Act, we used the rate set forth in the petition as best information available ("BIA") when calculating the "All Other" rate in accordance with the two-tiered BIA methodology, outlined in Preliminary Determination of Sales at Less Than Fair Value: Sulfanilic Acid From the People's Republic of China, 57 FR 9409, 9410, (March 18, 1992)) ("Sulfanilic Acid").

Fair Value Comparisons

To determine whether sales of sulfur dyes, including sulfur vat dyes, from the PRC to the United States were made at less than fair value, we compared the United States price ("USP") to the foreign market value ("FMV"), as specified in the "United States Price" and "Foreign Market Value" sections of this notice.

United States Price

We based USP on purchase price, in accordance with section 772(b) of the Act, because the subject merchandise was sold to unrelated purchasers in the United States prior to importation and because exporter's sales prices methodology, in those instances, was not otherwise indicated.

For Sinochem Shandong and SICC, we calculated purchase price based on packed c.i.f. prices from the respective trading companies to unrelated customers. We made deductions, where appropriate, for foreign inland freight, ocean freight, and marine insurance. We also made deductions for a trade discount. Consistent with the preliminary determination, we continued to use, as BIA, the highest inland freight amount in the PRC calculated for the distances from factory to port for Shandong and SICC. The inland freight expense was based on a quoted truck freight rate contained in a public, June 1992, cable from the U.S. embassy in India. See Surrogate Country section below.

For KFC, we calculated purchase price based on packed c.i.f. prices from KFC to unrelated customers. We deducted foreign inland freight, ocean freight, marine insurance, drayage, other expenses, and a third party surcharge.

Foreign Market Value

Section 773(c)(1) of the Act provides that the Department shall determine foreign market value using factors of production methodology if (1) the merchandise is exported from a non-

market economy ("NME"), and (2) the information does not permit the calculation of FMV using home market prices, third country prices, or constructed value under section 773(a) of the Act.

In past cases (e.g., Final Determination of Sales at Less Than Fair Value: Chrome-Plated Lug Nuts From the People's Republic of China, ("Lug Nuts") 58 FR 46153 (September 10, 1991), and Sparklers), and indeed in every case conducted by the Department involving the PRC, the PRC has been treated as an NME. In this case, none of the parties to this proceeding has suggested that the PRC is no longer an NME. However, respondents claim that their raw materials and labor inputs used in the production of the subject merchandise are market driven, and, therefore, that the sulfur dyes, including sulfur vat dyes, industry in the PRC is a MOI.

The Department has previously interpreted section 773(c)(1)(B) of the Act to mean that FMV can be based on an NME exporter's prices or costs, despite the fact that the country may otherwise be considered an NME, if sufficient market forces are at work (see *Lug Nuts* and Final Determination of Sales at Less Than Fair Value: Oscillating Fans and Ceiling Fans From the People's Republic of China, ("Fans") 58 FR 55271 (October 25, 1991).

In the preliminary determination in this investigation, the Department stated the criteria that would be used for determining whether a MOI exists in an economy which otherwise is considered to be non-market:

- For merchandise under investigation, there must be virtually no government involvement in setting prices or amounts to be produced. For example, state-required production of the merchandise, whether for export or domestic consumption in the non-market economy country would be an almost insuperable barrier to finding a market-oriented industry.

- The industry producing the merchandise under investigation should be characterized by private or collective ownership. There may be state-owned enterprises in the industry but substantial state ownership would weigh heavily against finding a market-oriented industry.

- Market-determined prices must be paid for all significant inputs, whether material or non-material, and for an all but insignificant proportion of all the inputs accounting for the total value of the merchandise under investigation. For example, an input price will not be considered market-determined if the producers of the merchandise under investigation pay a state-set price for the input or if the input is supplied to the producers at government direction. Moreover, if there is any state-required production in the industry producing the

input, the share of state-required production must be insignificant.

If these conditions are not met, pursuant to 19 CFR 353.52, the foreign market value will be calculated by using prices and costs from a surrogate country, in accordance with section 773(c) (3) and (4) of the Act.

The responding trading companies and factories have submitted information in support of their MOI claim. These firms account for approximately 35 percent of PRC production and 30 percent of exports to the United States during the POI. While the above firms have attempted to provide information in support of their MOI claim, the PRC government has been less than cooperative in this case. The PRC government failed to respond to the MOI questionnaire when we first issued it, and also failed to respond to our "Mini-section A" questionnaire which seeks to identify producers. Even though the PRC government did eventually respond to a portion of our "MOI questionnaire", it did so only after we made it clear to them that unless it responded we would not even consider the MOI claim being made by the responding companies. We determined that it would not be possible to adequately evaluate an MOI claim without full government cooperation.

The PRC government's lack of timely and complete cooperation has left us with insufficient information to reasonably evaluate the market orientation of the PRC sulfur dye industry as a whole. Most important is the fact that we have detailed information on only 35 percent of the industry which consists solely of voluntary respondents. Because the PRC government failed to cooperate in the beginning of the investigation, we were unable to identify and select additional companies to investigate in order to have a large and more representative group of companies with which to evaluate the entire industry.

The PRC government has provided some information regarding the question of government controlled production, so called "in-plan" production, of vat dyes and some inputs. The PRC government has also provided some information as to the identity of the other producers. However, the information submitted in the government questionnaire response, and the information provided at verification, are inadequate regarding all three elements of the MOI test. The specific deficiencies are: (1) The list of in-plan products provided by the PRC government which shows that vat dyes and their inputs are not in-plan is not time-specific and does not clearly cover

the POI; (2) the PRC government has not provided sufficient data on the extent of state ownership of the remaining 65 percent of the sulfur dye industry; and (3) the PRC government has not provided any information on whether market prices are paid for the inputs of the suppliers of the 65 percent of the industry which is non-responding. For all of the above reasons, we determine that there is an insufficient basis for finding a MOI in this case.

Surrogate Country

Section 773(c) of the Act requires the Department to value the factors of production, to the extent possible, in one or more market economy countries that are at a level of economic development comparable to that of the non-market economy country, and that are significant producers of comparable merchandise. The Department has determined that India and Pakistan are the most comparable to the PRC in terms of overall economic development, based on per capita gross national product ("GNP"), the national distribution of labor, and growth rate in per capita GNP. (See memorandum from the Office of Policy to David L. Binder, dated August 6, 1992.) Because India fulfills the requirements outlined in the statute, India is the preferred surrogate country for purposes of valuing the factors of production used in producing the subject merchandise. We have used only Indian surrogate value for purposes of the final determination.

We valued the factors of production in accordance with the hierarchy for preferred input values set forth in Butt-Weld. We first used Indian published material before resorting to unclassified information contained in U.S. government cables, or the public cost of production questionnaire response of Atul, a respondent in a companion case involving India, which was submitted on the record in this case ("Atul's response").

We calculated FMV based on factors of production reported by the factories which produced the subject merchandise for respondents. The factors used to produce sulfur dyes include materials, labor, and energy. We verified the production information of three of the factories which submitted information on behalf of KFC, Sinochem Shandong, and SICC.

To value dinitrochlorobenzene ("DNCEB"), sodium sulphide, and sodium hydroxide, we used published, publicly available information from Chemicals Weekly, and also Chemical Business in the case of sodium hydroxide, as provided in respondents' November 9, 1992, submission. (See

Comment 1 for a complete discussion of this issue). To value sulfur, we used published, publicly available information from the Monthly Statistics of the Foreign Trade of India (March 1988) as in the preliminary determination. We adjusted the factor values for the POI using wholesale price indices published by the International Monetary Fund.

To value labor rates, we used unskilled and skilled labor rates, including benefits, obtained from the U.S. embassy in India, as was done in the preliminary determination. We adjusted the unskilled wage rate to account for the number of hours in an Indian work week based on information contained in the published source, Country Reports on Human Rights Practices for 1990, which was submitted to the U.S. Senate Committee on Foreign Relations in February 1991.

To calculate FMV, the reported factors of production were multiplied by the appropriate Indian values for the various components. With the exception of DNCEB for Tianjin, we added an amount for the delivery of inputs to the factory to arrive at a delivered cost of materials. We calculated the truck freight rate based on June 1992 information obtained from the U.S. embassy in India. Based upon the wholesale price indices available, we did not adjust this figure. We calculated train freight rates based on a December 1989 cable from the U.S. embassy in India. We adjusted the figures for the POI using wholesale price indices published by the International Monetary Fund.

We valued factory overhead, SG&A, and profit based upon information provided by respondents in their November 9, 1992, submission. (See Comment 1 for a complete discussion of this issue).

We also added, where appropriate, an amount for packing labor based on the appropriate Indian skilled and unskilled wage rates, and an amount for packing materials based on Indian prices obtained from the public record of the concurrent investigation of sulfur dyes, including sulfur vat dyes, from India, in order to arrive at a constructed FMV for one metric ton of sulfur dye. (For a complete analysis of surrogate values, see our concurrence memorandum dated January 22, 1993.)

Critical Circumstances

Petitioner alleged that "critical circumstances" existed with respect to imports of sulfur dyes, including sulfur vat dyes, from the PRC. Section 735(a)(3) of the Act provides that critical circumstances exist when we determine

that there is a reasonable basis to believe or suspect that:

(A)(i) There is a history of dumping in the United States or elsewhere of the class or kind of merchandise which is the subject of the investigation, or

(ii) The person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise which is the subject of the investigation at less than its fair value, and

(B) There have been massive imports of the class or kind of merchandise which is the subject of the investigation over a relatively short period.

Regarding criterion (A)(ii) above, we normally consider margins of 25 percent or more in the case of purchase price comparisons, and 15 percent or more in the case of exporter sales price comparisons, sufficient to impute knowledge of dumping under section 735(a)(3)(A)(ii) of the Act.

Pursuant to 19 CFR 353.16(f), we generally consider the following factors in determining whether imports have been massive over a short period of time: (1) The volume and value of the imports; (2) seasonal trends (if applicable); and (3) the share of domestic consumption accounted for by imports.

Regarding (A) above, the margins found for Sinochem Shandong, SICC, and KFC are all over 25 percent, and accordingly, we can impute knowledge.

Regarding (B) above, for Sinochem Shandong, its imports increased by over 15 percent between the period November 1, 1991 through March 31, 1992 and the period April 1 through August 31, 1992 ("the comparison periods"), and thus have increased massively. For SICC, its imports increased by less than 15 percent between the comparison periods, and thus have not increased massively. For KFC, because KFC did not provide the monthly shipment information requested in the questionnaire, we find that its imports are massive based on BIA.

In accordance with section 735(a)(3) of the Act, we determine that critical circumstances exist with respect to imports from Sinochem Shandong and KFC, and that critical circumstances do not exist with respect to imports from SICC. With respect to the firms covered by the "All Other" rate, because that dumping margin is sufficient to impute knowledge of dumping, and because we have determined that imports of sulfur dyes, including sulfur vat dyes, have been massive over a relatively short time for at least two firms, we determine that critical circumstances also exist for "all other" firms.

Currency Conversion

When calculating foreign market value, we made currency conversions in accordance with 19 CFR 353.60(a).

Verification

Pursuant to section 776(b) of the Act, we verified information used in reaching our final determination. We used standard verification procedures, including examination of relevant accounting records and original source documents provided by respondents.

Interested Party Comments

Comment 1

Respondents state that the Department should use the PI provided in respondents' November 9, 1992, submission for valuing the factors of production in a surrogate economy. Specifically, respondents argue that the Department should use the internal prices in India, the surrogate country of first choice, for DNCB, sodium hydroxide, sodium sulfide and many of the other raw material inputs used to produce the subject merchandise. Respondents avow that since neither of the Chinese sulfur black producers use imported inputs, the Department should not rely on import statistics to value the factors of production in this case. Regarding DNCB, respondents state that the Department should not use the inflated German import value that was used in the preliminary determination. Respondents also state that, since neither Chinese nor Indian sulfur black producers use imported DNCB for production, neither should the Department use imported figures. On these bases, respondents urge the Department to use the domestic cost of DNCB in India, or the price of DNCB in China, to reflect the true cost of DNCB. Regarding sodium hydroxide, respondents also argue that the Department should use the PI submitted by respondents in its November 9, 1992, submission.

Regarding overhead, respondents claim that the Department double counted energy and diesel fuel based upon the items included at Atul's factory overhead. Respondents argue that we should use the overhead rate they calculated based on Atul's response.

Regarding selling, general and administrative expenses ("SG&A"), respondents argue that we should use the rate they calculated based on Atul's response.

Petitioner states that there is nothing in the record which supports respondents' statement that Indian sulfur dye producers do not use

imported inputs. Petitioner claims that the record states that one Indian sulfur black producer produces DNCB for its sulfur black production. Petitioner submits that the Department's reliance on Indian import statistics is proper because they are inherently reliable and are based upon actual prices. Petitioner claims that respondents' assertion that the submitted prices are "actual domestic prices for the inputs" is incorrect. Petitioner contends that the publications submitted on the record by respondents refute any contention that these prices are "actual prices," and that the prices are not actual because they are not firm quotes. Petitioner asserts that the publications note that, with respect to DNCB, the prices are without tax and excise, which is not insubstantial in India. Petitioner estimates that tax and excise can equal 40 percent or more of the sales price. Petitioner states that respondents should have submitted updated import statistics or an alternative inflation factor rather than now complain about the inflation factor used in the preliminary determination.

Regarding profit and factory overhead, petitioner submits that in the preliminary determination, the Department relied upon a previous investigation of the Indian chemicals industry which is more reliable than publications with respect to the chemicals and pharmaceutical industries as suggested by respondents.

Regarding electricity, water, and coal, petitioner states that respondents incorrectly assert that the amounts for these items are already included in the factory overhead of the one producer in the surrogate country. Petitioner argues that respondents cannot make such overbroad claims regarding the practice in India based upon one producer.

DOC Position

In our preliminary determination we relied on data obtained from the following sources: (1) Indian import statistics, (2) an OECD report, and (3) cables from the U.S. embassies in India and Pakistan. In accordance with our recently enunciated practice we invited interested parties to submit PI in a timely fashion. (see DAS Sailer memorandum dated September 10, 1992). Respondents' counsel submitted such information for most factor inputs and also submitted the public version of the COP questionnaire response submitted by an Indian producer in the companion case involving Indian sulfur dyes. Respondents' PI consisted of information from the following sources: (1) Three Indian chemical business

publications, and (2) an Indian government study.

In accordance with our hierarchy of preferred surrogate factor value sources articulated in Butt Weld, we have used respondents' PI for inputs which were not valued using PI in the preliminary determination. However, for some inputs, we have both Indian import statistics (which were used in the preliminary determination) and respondents' PI. Thus, we must decide which source of PI is preferable. Respondents' data are more current than the import statistics used in the preliminary determination. In addition, we have observed that the average Indian import value for certain material inputs can vary, sometimes significantly, based on the country of origin, or the quantity of the shipment, and if based on a basket category, the type of merchandise. This indicates that the import statistics may be sensitive to differences in quality, technical specifications, and quantity. In this case, the industry publications in the surrogate country have the advantage of being immune from at least some of these difficulties. Moreover, respondents have provided us with two sources of data with approximately comparable prices leading us to question the import statistics in this case. Accordingly, we have used respondents' PI to value material costs.

Concerning petitioner's arguments about taxes, the record of this case is not dispositive regarding whether any taxes are, or should be paid, the manner in which they would be paid, or how such payment should be incorporated into the factor values used. Moreover, the fact that a publication issues a disclaimer regarding the prices published therein does not invalidate those prices as a reasonable barometer of market conditions. Rather, such disclaimers serve merely to protect the publication from liability. Accordingly, we have used the values as reported in respondents' PI.

Regarding factory overhead, respondents submitted an Indian government study containing data relevant to overhead calculations. However, respondents calculated a fixed overhead ratio of 6.56 percent based solely on depreciation expenses. Our review of the study revealed that there was detailed information on repairs and maintenance, two categories of expenses that are traditionally considered to be overhead expenses. Moreover, the study contained information on energy costs, which, if included with the other expenses, yields an overhead rate of 19.13 percent of materials and labor. We note that the public cost of production

response of Atul, an Indian producer of the subject merchandise, reveals a similar overhead rate, inclusive of energy, of 18.55 percent of materials and labor. The recalculated rate of 19.13 percent is preferable because it is more current, clearly identifies the expenses included, and is similar to the rate calculated for a known producer of the subject merchandise in India. Hence, we determined that the recalculated rate of 19.13 percent overhead rate is the most appropriate choice for the final determination.

Regarding selling, general and administrative expenses (SG&A), respondents calculated a SG&A rate of 13.95 percent of cost of manufacture based on Atul's response. However, this calculation involves only general expenses and ignores selling expenses. We recalculated the SG&A rate to include selling expenses, which yielded a rate of 24.14 percent. The recalculated rate is preferable because it is more current than the figure used in the preliminary determination and is based on the experience of a known producer of the subject merchandise in a surrogate country. Moreover, neither the 24.13 recalculated rate nor the rate used in the preliminary determination is PI. Hence, we used the recalculated rate for the final determination.

Finally, regarding profit, as with SG&A, we relied on Atul's response. However, we recalculated respondents' calculations because respondents used net, rather than gross, profit. The recalculated profit rate of 8.87 was greater than the statutory minimum.

Comment 2

Petitioner states that KFC's sales in Hong Kong cannot be used as a basis for FMV as the criteria in 19 U.S.C. 1677b(f) have not been met. According to petitioner, 19 U.S.C. 1677b(f) provides that, only under specifically defined circumstances may an intermediate country be considered the "country from which the merchandise is exported" and foreign market value based on the price in the intermediate country. Petitioner also notes that the Department's regulations specifically provide in 19 CFR 353.46(c) that where merchandise is transhipped through a third country, the Secretary may not, except under CFR 353.47, calculate foreign market value based on the price at which the merchandise is sold in the "country of transshipment." Accordingly, petitioner argues that, under the statutory and regulatory scheme, an intermediate country is considered a "country of transshipment" pursuant to 19 CFR 353.46(c) unless the statutory criteria of

19 U.S.C. 1677b(f) are met. Specifically, petitioner notes that KFC purchases sulfur dyes from the exporter/agent and not from the manufacturer or producer and, therefore, does not satisfy the first criterion of section 1677b(f).

Petitioner states that the second criterion of the statute, which requires a lack of knowledge by the producer or manufacturer of "the country" to which the reseller intends to export the merchandise, has not been met, as Wuhan, the PRC producer, has admitted its knowledge of the country to which KFC, the Hong Kong reseller, intended to export the merchandise, *i.e.*, Hong Kong. Petitioner concludes, based on the statutory language, "such country shall be treated, for purposes of this section, as the country from which the merchandise was exported," that the intermediate country will be considered the country of exportation and FMV determined on that basis. Thus, the country referred to in the second criterion of the statute is the same one referred to in the concluding passage (*i.e.*, the intermediate country), not the United States.

Thus, petitioner argues that in this case, the second statutory criterion requires that Wuhan, as the PRC manufacturer or producer, be unaware that the reseller, KFC, intended to export the merchandise from the PRC to the alleged intermediate country, Hong Kong. Petitioner claims that Wuhan had knowledge of KFC's intent to export the merchandise to Hong Kong and thus, as the second criterion of the statute is not satisfied by Wuhan, the statute requires the Department to treat the PRC, not Hong Kong, as the country of exportation.

Petitioner states that for an intermediate country to be treated as the country from which the merchandise was exported, both the statute and regulations require that the merchandise "enter the commerce of such country." However, petitioner claims that KFC's sulfur dyes do not enter the commerce of Hong Kong. Petitioner contends that the terms "enters the commerce of such country" in 19 U.S.C. 1677b(f)(4) and "enters the commerce of the intermediate country" in 19 CFR 353.47(c) require that the merchandise under consideration be sold or offered for consumption in the intermediate country. Petitioner claims that since the statutory and regulatory criteria have not been met in the instant investigation, Hong Kong cannot be considered "the country from which the merchandise was exported" instead, it is merely a country of transshipment. Petitioner claims that this is a classic case of transshipment where the

merchandise exported to the United States was not even warehoused in Hong Kong. Rather, the goods were placed on a truck at the PRC warehouse and shipped directly to the port in Hong Kong for shipment to the United States. Petitioner argues that at the point of exportation from the PRC the merchandise was destined for the United States. The merchandise, therefore, never entered the commerce of Hong Kong; rather, the merchandise was merely transshipped through Hong Kong.

Respondents claim that the Department verified that KFC meets all of the statutory requirements of the intermediate country provision. Specifically, respondents state that: (1) KFC, a Hong Kong reseller, purchases the merchandise, from the manufacturer or producer of the merchandise in the PRC; (2) the producer, the exporter of the merchandise, and KFC's agent in China do not know (at the time of the sale to KFC) the country to which KFC intends to export the merchandise (e.g., United States); (3) KFC exports sulfur black dye to countries other than the United States; (4) KFC's sulfur black enters the commerce of Hong Kong, but is not substantially transformed in Hong Kong; and (5) KFC's sulfur black is subsequently exported to the United States. As such, respondents claim that KFC should be considered an intermediate country reseller pursuant to the Act. Respondents state that KFC, not the PRC producer or exporter, sells the sulfur black dye and sets the price to the United States and is the source of any dumping. Respondents state that since KFC has the sales organization, the relationships with customers, and sells from inventory out of its warehouses, the Chinese parties (*i.e.*, producers, exporters and the agent) do not and cannot know the ultimate destination of the merchandise at the time of sale to KFC.

Respondents state that when KFC imports sulfur dye into Hong Kong, pursuant to Hong Kong law, it must file an import declaration and items destined for transshipment are not required to be declared. Respondents state that when KFC files an import declaration with the Hong Kong government, it "enters" the sulfur black into the commerce of Hong Kong. Respondents claim that the sulfur dyes could be sold in Hong Kong, and some of the sulfur dyes, in fact, were sold in Hong Kong.

Respondents state that the sulfur dyes KFC sells to the United States are also exported to countries other than the United States. Respondents claim that KFC does not alter the sulfur black dye

in any manner after it is purchased from the Chinese producer and imported into Hong Kong. Respondents contend that the sulfur dyes are subsequently exported to the United States.

Respondents cite numerous cases in which the Department considered the reseller provision where the reseller is located in the intermediate country, not the home market. Respondents state that the petitioner's circumvention argument is without merit as KFC's exports from Hong Kong are presently subject to estimated duty deposits, and if a dumping order is issued, KFC would be involved in any administrative review. Respondents refute petitioner's argument that the PRC producer sells to the middleman (*i.e.*, the exporter and/or agent) because KFC is the only party that takes title to the merchandise, not the exporter, nor the agent. Finally, respondents state that petitioner intentionally misconstrued the statutory language so as to write the intermediate country reseller provision out of the statute or in the alternative, to attempt to confuse the Department so that it will find that KFC does not meet this provision.

Respondents state that it makes sense to interpret the statute as Congress intended it to be interpreted as the Department has done in the past. Respondents state that when the statute is examined, it is clear that the term "such country" refers to the intermediate country, but the term "the country" or "a country" refers to the countries to which the reseller in the intermediate country intends to export. Respondents state that Congress passed the intermediate country reseller provision to cover the situation where the reseller in the intermediate country is the source of the dumping because the reseller, not the companies in the home market, knows where the merchandise is being exported.

DOC Position

We agree with petitioner that KFC's exports to the United States do not enter the commerce of Hong Kong and, as such, KFC does not qualify under section 733(f)(4) the Act. We treated KFC as an intermediate country reseller under 773(f) in the preliminary determination based on KFC's characterization of these sales in its questionnaire response which appeared to satisfy the five requirements of section 773(f) of the Act. We determined, in fact, that the method of sale and distribution for KFC's sales to the United States is more accurately described as transshipment.

At verification we learned that KFC's characterization of this information in

its questionnaire response was not entirely accurate. Specifically, the following things became clear: (1) Customers in both Hong Kong and the United States purchase dyes produced in different PRC factories; (2) the one Hong Kong customer of KFC purchased dye from a different PRC factory than the United States customer; (3) all merchandise exported to the United States was shipped from the PRC factory to KFC's rented warehouse in Shenzhen, PRC; (4) all merchandise sold in Hong Kong was shipped from a different PRC factory, through the Shenzhen warehouse, to KFC Hong Kong warehouse; (5) the merchandise bound for sale in Hong Kong was sold from inventory from KFC's Hong Kong warehouse; and (6) the merchandise bound for the United States was put on a truck in KFC's rented warehouse in Shenzhen and trucked through Hong Kong directly to the port for shipment. Thus, from verification, we determined that the merchandise exported to the United States was shipped from the factory in the PRC to a warehouse in the PRC where it was, eventually, reloaded on a truck and driven directly to the port in Hong Kong for shipment to the United States. The above pattern of sale and distribution is most accurately characterized as transshipment.

Counsel for respondents argues that there is a "contingency of diversion" into the commerce of Hong Kong for the merchandise exported to the United States based on the fact that KFC files a document with Hong Kong Customs which would allow KFC to sell this merchandise in Hong Kong if it wanted to. Counsel states that there is a separate Hong Kong customs document for transshipment which KFC could use if they were merely transshipping.

However, verification clearly showed that KFC's exports to the United States were transshipped through Hong Kong. The fact the KFC files a customs document which would allow it to sell the merchandise in Hong Kong is not, in and of itself, sufficient evidence that this merchandise entered the commerce of Hong Kong. In a recent case, Preliminary Determination of Sales at Less Than Fair Value: Ferrosilicon From Kazakhstan, 58 FR 79 (January 4, 1993), we relied partially on the fact that merchandise entered a bonded warehouse as evidence the merchandise did not enter the commerce of that country. However, the fact that KFC does not store the sulfur dyes which are bound for export to the United States in a bonded warehouse in Hong Kong does not by itself demonstrate that the merchandise enters the commerce of Hong Kong. We must examine all of the

evidence on the record to determine whether merchandise enters the commerce of a country. In this case, KFC's sales to the United States are clearly transshipments which do not enter the commerce of Hong Kong, and as such, do not merit consideration under section 773(f) of the Act.

Accordingly, we do not reach petitioner's arguments regarding the interpretation of section 773(f) of the Act or KFC's sales in Hong Kong.

Comment 3

Respondents state that all factors were verified at Wuhan and although some reported factors differed from the amount verified, the differences were minor in most cases and adequately explained.

Regarding Wuhan, petitioner requests that the Department ignore the factors of production reported by respondents and use BIA or the factors verified and summarized at page seven of the verification report. Petitioner suggests that the Department resort to BIA for the input factors for skilled and unskilled packing labor as these items were not verified.

Petitioner notes a discrepancy between the amount KFC reports as Wuhan-produced sulfur dyes and the amount Wuhan reported produced during the POI. Petitioner concludes that some of the U.S. sales consist of sulfur dyes produced by factories other than Wuhan. Petitioner claims that it is significant that no invoices from Wuhan were produced at verification by either KFC, the agent, or the exporter. Petitioner states that KFC cannot demonstrate to the Department that the merchandise it sold to the United States was, in fact, produced by Wuhan. Finally, petitioner alleges that the unresolved conflict between the amounts reported by Wuhan and that sold to the United States together with the Department's inability to verify that the dyes exported to the United States were produced by Wuhan should result in the Department's resort to BIA. Petitioner urges the Department to reject KFC's oral representations and use the rate in the petition as BIA for the final determination.

DOC Position

We disagree with petitioner. The verification report spells out the mistakes in the information submitted by Wuhan which were noted at verification. The noted mistakes, when taken together, did not represent a verification failure meriting the use of BIA. Rather, we have followed our practice of correcting errors found at verification as long as those errors are

not comprehensive nor do they exhibit a systematic misstatement of fact. Thus, we used the information in Wuhan's questionnaire response corrected for errors noted at verification.

Comment 4

Respondents state that the Department should treat Sinochem Shandong's claimed commission as a commission rather than as a discount as was done in the preliminary determination. Respondents state that it provided documentation at verification supporting the fact that the amount claimed is a commission. Respondents claim that its customer calls the amount a discount because it is advantageous for the customer to do so.

DOC Position

We disagree with respondents. A commission is a payment to a sales representative for engaging in sales activity on behalf of the seller. A discount is a reduction in price to a customer. That customer may well turn around and resell the merchandise; however, such resale would not change the discount into a commission. The entity that received this payment was a customer—not a salesman—who subsequently resold the merchandise. Accordingly, we determine that this payment is properly treated as a discount.

Comment 5

Respondents request that the Department offset the cost of raw materials by the revenue earned on the sale of sodium thiosulfate by the PRC factory during the POI.

DOC Position

We have not granted this adjustment. Respondents have not adequately demonstrated how the production and sale of sodium thiosulfate does, or could be used to, offset the material cost reported for production of the subject merchandise. In any event, only the quantity of material inputs used to produce the subject merchandise is relevant under the Act's factors methodology, not an NME producer's costs or alleged offsets.

Comment 6

Respondents request that, since the Department verified that Tianjin uses 25 kg. drums for packing, the Department value drums at one-half of the public price reported by Atul, the Indian respondent because the Indian drums are 50 kg.

DOC Position

We agree with respondents. At the preliminary determination we used the 50 kg. value because Tianjin's questionnaire response was unclear as to whether it used 25 or 50 kg. drums. At verification we determined that Tianjin did use 25 kg. drums.

Comment 7

Respondents argue that the Department, in its instructions to U.S. Customs, should not explicitly limit the application of the margin calculated for a given exporter (e.g., SICC) solely to export transactions involving that exporter and its supplying factory (e.g., Handan).

Petitioner states that, assuming a low margin for KFC compared to the other exporters, the factories would sell to the United States through KFC rather than thorough exporters having relatively higher dumping margins, thus circumventing an antidumping duty order. Further, petitioner states that because KFC was unable to submit invoices from the factories, the Department could not verify that the merchandise actually sold to the United States was the same as that reported by KFC.

DOC Position

We disagree with respondents. The LTFV margins for specific exporters, who qualified for separate rates in this case, are calculated based upon two factors: (1) FMV based on the factors of production of the PRC factory which supplied the specific exporter, valued in a surrogate country, and (2) USP based on the specific exporter's prices to unrelated customers in the United States. Any margin calculated using these two bases would only be representative of transactions involving these two parties and are only to be applied to imports of the listed manufacturer or producer which are exported by the listed exporter. Thus, any transaction covering other producers or other exporters would be covered by the "all others" rate.

Comment 8

Petitioner submits that the margin for KFC will exceed 25 percent and, following its administrative practice, the Department must impute knowledge of dumping by the importers pursuant to section 773(e)(1)(a)(ii) of the Act and determine that critical circumstances exist for KFC.

Respondents state that the Department has verified that neither SICC nor Sinochem Shandong's exports were massive after the petition was filed.

DOC Position

We agree with petitioner. See the **Crucial Circumstances** section of this notice.

Comment 9

Petitioner states that the summary of the January 4, 1993, verification report regarding market rates and state control makes clear that these issues have been discussed previously with PRC officials. Petitioner asserts that the documents submitted during verification do not fully comply with the requests of the Department to substantiate the market and separate rate claims and, therefore, respondents' claim for separate rates and utilization of Chinese market prices should be rejected.

Respondents state that the Department should use actual Chinese costs to calculate costs in this case because the Chinese government for the first time has placed documentary evidence on the record of this investigation that the product subject to investigation and the raw material inputs are not subject to any state-mandated prices under the mandatory or the guidance plan.

Respondents state that the prices for the product subject to investigation and all the chemical inputs are freely set by the producers based on supply and demand in the Chinese market. Respondents state that there is virtually no government involvement in setting prices or amounts to be produced, the sulfur dyes industry is characterized by collective ownership, and market-determined prices are paid for all significant inputs and for an all but insignificant proportion of all the inputs accounting for the total value of sulfur black. Respondents also state that the Department verified that market prices were paid for all inputs and there was no state-required production for the inputs. Regarding labor, respondents state the factories are able to hire and fire workers based on the companies' needs and their workers' performances.

DOC Position

We disagree with respondents. See the **Separate Rates and Foreign Market Value** sections of this notice.

Comment 10

In determining the extent of state-required production in the input industries, respondents state that coal, electricity and foreign inland freight should not be included. Respondents claim that the Department should exclude coal, electricity and freight because these inputs represent an insignificant proportion of the total value according to the preliminary

determination. Respondents further state that, should the Department determine that market prices can be used, then the Chinese market prices for coal, electricity and freight rates should be used to calculate the Chinese costs of production.

DOC Position

This issue is moot because we rejected the MOI claim for other reasons. See the **Foreign Market Value** section of this notice.

Comment 11

Petitioner contends that the sales dates reported by Sinochem Shandong are incorrect and the Department should use as BIA the rate provided in the petition as the sales reported are not within the POI.

Respondents submit that the terms of Sinochem Shandong's contract are not set until the merchandise is actually shipped. Respondents request that, as reported, the Department use the shipment date as the date of sale in the final determination.

DOC Position

We agree with respondents. We examined respondents' date of sale methodology at verification and determined that it was reasonable.

Comment 12

Petitioner contends that the Department should reject Tianjin's response and use BIA for the factors of production determination as the verification report is replete with discrepancies that taint the entire submission. Petitioner claims that respondents' eleventh hour disclosure of the true nature of the transactions resulted in the lack of any possibility of reviewing Tianjin's response for completeness. Petitioner submits that there were substantial discrepancies in Tianjin's submitted information including four different calculations in its labor hours, with the last version submitted at verification with amounts substantially below those reported in the three prior submissions. Petitioner states that the Department should reject as untimely its submission at verification regarding labor hours. In addition, petitioner states that the Department was unable to verify the division of the workers between production/packing and skilled/unskilled and, therefore, the submission at verification could not be substantiated. Finally, petitioner states that the inability of the Department to conduct a completeness test regarding Tianjin (and the failure to verify any data of the reseller) and the

discrepancies permeating Tianjin's reported data requires the rejection of the response and the use of BIA as a basis of determining FMV.

Regarding labor, respondents state that Tianjin did not provide new labor factors at verification. Respondents state that the Department's verifier was provided with an exhibit which showed three calculation errors that had been made in the September 8, 1992, response. Respondents state that the only difference between the exhibit and the September submission were due to clerical calculation errors. Respondents request that the Department use the labor hours so calculated by the Department at verification in the final determination.

Respondents state that when petitioner quotes from the Tianjin verification report that "TDF has understated costs for all raw material inputs," the petitioner is referring to the market prices of the inputs, not the factors of production. Respondents also state that the factors provided by Tianjin were identical to the information provided in Tianjin's books and records. Therefore, respondents request that the Department accept the raw material input data supplied by the respondents.

Respondents state that petitioner claims, without basis, that the verifier could not perform a completeness test because respondents' November 9, 1992, submission was untimely. Respondents submit that there is no statement by the verifier that indicated that the November submission was untimely or resulted in the verifier being precluded from doing a completeness test. Respondents request that the Department use the data reported in the November submission in the final determination.

DOC Position

We disagree with petitioner. The verification report spells out the mistakes in the information submitted by Tianjin which were noted at verification. The noted mistakes, when taken together, do not represent a verification failure meriting the use of BIA. Rather, we have followed our practice of correcting errors found at verification as long as those errors are not comprehensive or exhibit a systematic misstatement of fact. Thus, we used the information in Tianjin's questionnaire response corrected for errors noted at verification.

Comment 13

Regarding SICC, petitioner states that the Department was unable to verify the reported marine insurance for respondents' U.S. sales. Petitioner states

that the formula requested to demonstrate how the marine insurance premium schedule would result in the marine insurance expense reported was never provided at verification. Petitioner suggests that as the respondents have failed to provide the requested information, the Department should resort to BIA for the marine insurance on respondents' U.S. sales.

Respondents state that at verification of SICC's producer, SICC provided a marine insurance premium schedule which includes the formula for marine insurance premiums. Respondents note that the insurance premiums reported were estimates slightly higher than the formula in the schedule. Respondents request that, since the formula was provided, the Department use the formula for SICC marine insurance for the final determination or use the average marine insurance as verified at Sinochem Shandong.

DOC Position

We agree with petitioners. Unlike the types of errors noted at verification discussed in comments 3 and 12, this was an error where information requested was not provided. Thus, this charge could not be verified. As BIA we have used the higher of the estimated amounts reported in the questionnaire response or the alleged amounts respondents indicated.

Comment 14

Petitioner states that the sales dates reported by SICC are incorrect, and the Department should use as BIA the rate provided in the petition as the reported U.S. sales are not within the POI.

Respondents state that the date of sale reported by SICC was the shipment date because the contract did not fix both price and quantity at the contract date. Respondents submit that additional information was provided at verification to support the claim that the shipment date was the earliest date at which both quantity and price were fixed. As such, respondents request that the Department use the shipment date as the date of sale as reported.

DOC Position

We agree with respondents. At verification we examined respondents' date of sale methodology and determined that it was reasonable.

Comment 15

Regarding Handan, petitioner states that the correct amount for water per metric ton of sulfur black noted in the verification report should be used.

DOC Position

This issue is moot because we have used a factory overhead rate that includes an amount for water. Hence, we do not need to value water separately.

Comment 16

Petitioner argues that because the Department did not verify certain information at the Jinan factory, an input supplier, the Department should draw adverse inferences about factor value information related to Jinan.

Respondents state that to infer that Tianjin should be penalized because the Department did not verify additional parties, such as Jinan, is unwarranted. Respondents argue that for the petitioner to ask the Department to use BIA because each item was not examined to the petitioner's satisfaction is absurd. Respondents request that the Department disregard petitioner's inaccurate and untrue arguments.

DOC Position

We agree with respondents. Given the time and resource constraints in an AD case involving an NME where a MOI claim is being evaluated, we must limit the number of suppliers, and supplier's suppliers, we visit during verification. Accordingly, no adverse inferences are warranted.

Comment 17

Petitioner states that the Department should substitute the verified marine insurance and freight for the estimated amounts reported in Sinochem Shandong's response.

Respondents agree with petitioner but suggest that the Department use the average verified marine insurance and freight.

DOC Position

We agree with petitioner.

Continuation of Suspension of Liquidation

In accordance with section 733(d) of the Act, we are directing the Customs Service to continue to suspend liquidation of all entries of sulfur dyes, including sulfur vat dyes, from the PRC, as defined in the "Scope of Investigation" section of this notice, that are entered, or withdrawn from warehouse, for consumption on or after the date of publication of this notice in the Federal Register. The Customs Service shall require a cash deposit or posting of a bond equal to the estimated margin amount by which the foreign market value of the subject merchandise exceeds the United States price as shown below. The suspension of

liquidation will remain in effect until further notice.

Manufacturer or produced/ exporter	Margin percent	Critical circumstances
Sinochem Shandong/ Tianjin	34.88	Yes.
SICC/Handan	102.46	No.
KFC/Wuhan	191.00	Yes.
All others	213.16	Yes.

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination.

Notification to Interested Parties

This notice also serves as the only reminder to parties subject to administrative protective order (APO) of their responsibility covering the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 353.35(d). Failure to comply is a violation of the APO.

This determination is published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)) and 19 CFR 353.20.

Dated: February 1, 1993.

Joseph A. Spetrini,
Acting Assistant Secretary for Import Administration.

[FR Doc. 93-2841 Filed 2-5-93; 8:45 am]

BILLING CODE 3510-06-M

APPENDIX B
LIST OF WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject : SULFUR DYES FROM CHINA, UNITED KINGDOM, AND INDIA
Inv. No. : 731-TA-548, 550 and 551 (Final)
Date and Time : January 13, 1993 - 9:30 a.m.

Sessions were held in connection with the investigation in the Main Hearing Room 101 of the United States International Trade Commission, 500 E St., S.W., Washington, D.C.

OPENING REMARKS

Petitioner (Mr. Galvin)
Respondents (Mr. Reardon)

In support of Imposition of
Antidumping Duties:

Galvin & Mlawski
New York City, NY
and

Riggle and Craven
Chicago, IL
On behalf of

Sandoz Chemicals Corporation
Charlotte, NC

Michael Dixon, Marketing Development Manager, Textiles
Robert H. Coley, Executive Director, Textile Industry Line

John J. Galvin)--OF COUNSEL
David J. Craven)--CO-COUNSEL

In Opposition to the Imposition of
Antidumping Duties:

McNair Law Firm, P.A.
Washington, D.C.

and

Miller, Canfield, Paddock and Stone
Washington, D.C.

On behalf of

C.H. Patrick and Company, Inc.
International Technical Services, Ltd. (Intertech)
Sinochem International Chemicals Company
Sinochem Shangdong Import & Export Corporation
Kwong Fat Hong Chemicals, Ltd.

Trade Resources Company
Washington, D.C.

Silvio A. Rodriguez, Senior Vice President,
Dyes Division, C.H. Patrick & Co., Inc.
Thomas J. Reardon, President and CEO,
C. H. Patrick & Co., Inc.
Donna D. Faber, Vice President/Technical,
Dyes Division, C.H. Patrick Co., Inc.
Thomas A. Tantillo, Vice President, Dyeing
and Finishing, Graniteville Co.
Kevin Kwan, President, Kwong Fat Hong
Chemicals Ltd.
Tongyuan Qi, Deputy Division Director,
Dyestuffs, Chinese Ministry of Chemicals

Seth Kaplan, Economist, Trade Resources Co.
Richard Boltuck, Economist,
Trade Resources Co.

Randi S. Field)
Terry X. Gao)--OF CO-COUNSEL
William E. Perry)

In Opposition to the Imposition of
Antidumping Duties:

Siegel, Mandell & Davidson, P.C.
New York, NY
On behalf of

Biddle Sawyer Corporation
Atul Products Limited

Christopher F. Walsh, President, Twilight Color
& Chemical Co., Inc.
John Weil, Technical Director, Twilight Color
& Chemical Co., Inc.

Brian S. Goldstein)
David Newman)--OF COUNSEL
Paul A. Horowitz)

Rogers & Wells
Washington, D.C.
On behalf of

James Robinson Ltd. ("JR")
Southern Dye and Chemical Company ("Southern")
Keystone Aniline Corporation

Robert Rae, President, James Robinson Limited
David Clarke, Technical Director, James Robinson
Limited

Arthur Andrews, President,
Keystone Aniline Corp.
Leon LaGrande, President,
Southern Dye & Company
Ronald Jones, President,
Applied Business Management Company

James Levy, Consultant

William Silverman)
Carrie A. Simon)--OF COUNSEL
Douglas J. Heffner)

APPENDIX C

COLOUR INDEX INFORMATION

SULPHUR DYES

When the Supplement to the 2nd Edition of the *Colour Index* was published in 1963, the development of the group of dyes applied by method 6 had proceeded to such a stage that it was necessary to draw a more definite distinction between the six groups which had previously been described in the 2nd Edition. The designations which were then published have been retained, and the table printed below gives the designations, to help the user in establishing the group into which a particular dye falls.

The 'C.I. Solubilised Sulphur' dyes carry a different C.I. Constitution Number from the parent sulphur dye (when the manufacturing method is known) as chemically they are the thiosulphonic acid derivatives of the parent dye. The 'C.I. Leuco Sulphur' dyes, on the other hand, carry the same C.I. Constitution Number as the corresponding 'C.I. Sulphur' dye, as chemically they are only pre-reduced forms of the conventional parent dye.

Since the Supplement was published, a new class of dye has been reported, which for a variety of reasons was given the classification 'C.I. Condense Sulphur'. These dyes may be applied together with 'C.I. Solubilised Sulphur' dyes by special techniques and are described in a short preamble to this small new section on page 3705.

Dyeing Methods

For the sake of convenience the general dyeing methods are reprinted in the following paragraphs. It should be noted that the proportions of reducing agents and the dyeing temperatures suggested may vary with individual dyes and the advice of the manufacturers should be followed with regard to the detailed dyeing procedure.

Method 1

The dye is pasted with a little cold water and then dissolved by boiling for 10 minutes with the necessary amount of sodium sulphide in sufficient water to give a strong sulphide concentration without exceeding the saturation point of the dye. The dissolved dye is then added to the requisite volume of water in the dyeing vessel, together with 2.5% of anhydrous sodium carbonate if required. The material to be dyed is then entered and the temperature of the dyebath raised as necessary. Common salt (5–15 g/l) or Glauber's salt

crystals (10–30 g/l) is then added, the amount depending on the depth required. This is most advantageously done in several additions made during dyeing. The material is then rinsed well, aftertreated if necessary, rinsed again and finished in the normal manner.

Standing Baths

Sulphur dyes do not exhaust completely and it is advantageous to employ a standing bath, especially for full blacks and other heavy dyeings. In these cases, after the first bath, to obtain a similar depth, the dyebath is replenished with 55–75% of the weight of dye originally used. This should be dissolved separately with the necessary amount of sodium sulphide. The exact proportions required depend on the degree of exhaustion obtained in the first bath and the process may be repeated many times. No further additions of salt are necessary after the first bath.

In the entries that follow, the average degree of exhaustion is defined as moderate, good, or very good. On a percentage basis these definitions may be regarded as under 65%, 65–75% and over 75% respectively.

Method 2*

The dye is pasted with water and this paste, together with the correct amount of reducing agent, is boiled in 25–30 times its weight of soft water. The reducing agent consists of a mixture of two parts of anhydrous sodium carbonate with one part of sodium formaldehyde sulphonylate.

The dissolved dye is added to the dyebath, which is again boiled for a short time. The material is then entered dry and is dyed for 20 minutes at the boil. Common salt or Glauber's salt is then added in an amount depending on the depth required and dyeing is continued for a further 30–40 minutes. The material is then rinsed in the normal manner and any desired aftertreatments are made.

Method 3

This method is similar to Method 1 except that little or no sodium sulphide is required to dissolve the dye. For the actual amounts required, the manufacturers' literature should be consulted.

General Generic Name	Solubility in Water	Substantivity in Water	Descriptive Class	Dyeing Method
C.I. Sulphur	Insoluble or partially soluble	Variable slight substantivity	Conventional	1
			Dispersed or specialised conventional	2
C.I. Leuco Sulphur	Soluble	Substantive	Liquid mixtures with Na ₂ S and/or NaHS	3
			Dry mixtures with Na ₂ S as reducing agent	4
			Dry mixtures with sodium formaldehyde sulphonylate as reducing agent	5
C.I. Solubilised Sulphur	Soluble	Non-substantive	Thiosulphonic acid derivatives	6

Method 4

The dye is pasted with a little water at about 30°C, and the paste diluted with 10–12 times its weight of water at the same temperature and allowed to stand for 10 minutes with occasional stirring. The dissolved dye is added to the requisite volume of water in the dye vessel, to which has previously been added 5–40% of common salt or 10–80% of Glauber's salt and a small quantity of anhydrous sodium carbonate. The material is entered and dyed for 45–60 minutes at 25–30°C. On completion of dyeing the material is rinsed and finished in the normal way.

Method 5*

The dye is pasted with water and dissolved by boiling in 10–20 times its weight of soft water. This solution is added to the dyebath containing the necessary volume of water and the temperature is raised to 90–95°C. The material is entered and after 20–30 minutes common salt or Glauber's salt is added as required. On completion of dyeing the material is rinsed and finished in the normal way.

Method 6

The dye is pasted with cold water and dissolved by boiling for a short time in sufficient water to ensure complete dissolution. The solution is added to the dye vessel containing the necessary volume of warm water. Reduction to the substantive form can be made either before or after entering the material. The reducing agent usually employed is sodium sulphide, but sodium hydrosulphide may also be used, as can reducing agents consisting of mixtures of sodium carbonate with glucose, sodium hydrosulphite or sodium formaldehyde sulphoxylate. Additions of common salt from 5–30 g/l are required to assist exhaustion and dyeing is continued at the correct temperature until the desired result is obtained. The material is then rinsed and finished in the normal manner.

When sodium carbonate and sodium hydrosulphite are used, it may be necessary to make small additions of the reducing agent from time to time to keep the bath in good condition.

Aftertreatments

In the tabular layout which has been adopted for the section, the effect of the most commonly used aftertreatments employed to establish a stable hue has been described whenever possible. It is this property which distinguishes different

brands and is required when assessing the oxidation characteristics of a particular dye.

Special auxiliaries are also described in the literature for aftertreating material dyed with sulphur dyes, which react with the unoxidised dye and improve the fastness to wet treatments.

Fastness Properties

It is impossible to differentiate with any degree of certainty between material dyed with C.I. Sulphur dyes, C.I. Leuco Sulphur dyes and C.I. Solubilised Sulphur dyes. It follows that the fastness properties are similar and consequently no attempt has been made to draw any distinction between the three groups in this respect.

Textile Usage

In addition to general use in batch processes, sulphur dyes are nowadays being used much more extensively in pad-steam processes. All types can be applied in this way but the C.I. Leuco Sulphur liquid dyes and the C.I. Solubilised Sulphur dyes are especially suitable. Also worthy of note is the increasing use of the C.I. Solubilised Sulphur dyes in pad-jig processes.

The C.I. Leuco Sulphur dyes applied by method 4 are specially suitable for dyeing viscose rayon because of the low application temperature. The C.I. Solubilised Sulphur dyes are used on all forms of cotton and viscose rayon but especially for goods in which penetration, appearance and handle are of importance but not achievable with dyes listed under the complementary C.I. Sulphur and C.I. Leuco Sulphur headings.

In addition to the application methods listed on page 3649, methods have been described involving high temperature baking in the presence of sulphur-containing chemicals such as thiourea and acid forming catalysts. Baking may be done in conjunction with anticrease treatments.

Non-Textile Usage

Leather—This class of dye can only be used on leathers capable of resisting alkali, e.g. oil-tanned leather. Only certain brands and, in particular, the Leuco and Solubilised dyes are suitable and then only in presence of a protective agent.

A table of sulphur dyes suitable for application to leather was included in the Leather Dyes Section of the Supplement to the 2nd Edition (see pages S243–245).

LITERATURE

CIBA, BP 661913, 636399

CFM BP 787878, 874151

H. M. Waddle *et al.*, *The Effect of Sulfur Black on the Tendering of Cotton Yarns*, *Amer. Dyestuff Rep.*, 1948, 37, 833–837

H. Birchall, *Developments in the Application of Sulphur Dyes to Loose Cotton and Yarns*, *JSDC*, 1951, 67, 495–501

H. Boothroyd, *Dyeing with Sulphur Dyes*, *JSDC*, 1942, 58, 25

F. Feigl, *Spot Tests, Analyst*, 1935, 60, 56

V. E. Rostovtsev and S. A. Plaksin, *Tekstil. Prom.*, 1948, 8, No. 4, 24; *Chem. Abs.*, 1950, 44, 3259

S. Rakhlina, *Tekstil. Prom.*, 1949, 9, 29

Horsfall and Lawrie, *The Dyeing of Textile Fibres* (London, Chapman & Hall), 2nd Edn., 76–80, 98–102, 149, 165, 306

J. L. Crist and R. E. Rupp, *The Sulfur Dyes*, *Amer. Dyestuff Rep.*, 1957, 46, 83–86

J. Müller, *The Application of Water-soluble Sulphur Dyestuffs*, *Textil Praxis*, 1958, 13, 613–616, 731–735

C. Klopstock and W. Titzka, *On the Application of the Immedial Dyestuffs Hydrosol in machine and piece dyeing*, *Melliand Textilber.*, 1960, 41, 64–7 (English Edition E3, 1960, 218)

*No dyes requiring this method of application are listed in this Edition of the *Colour Index*

VAT DYES

Historical

Few naturally occurring vat dyes are known. Indigo, obtained from the *Indigoferae*, was applied to textiles probably 5000 years before the introduction of commercial synthetic indigo and is one of the oldest dyestuffs known. Tyrian Purple, obtained from molluscs found on the shores of the eastern Mediterranean Sea, had for its effective agent the 6:6' dibromoderivative of indigo and was a much later discovery; its use in Crete dates from about 1600 BC. The colour yields obtained were naturally small and costly so that materials coloured with this dye were reserved for royalty and persons of rank.

Bayer first synthesised indigo in 1879 but it was not until 1897 that the first commercial synthetic product was placed on the market.

In 1901 Bohn, attempting to prepare an anthraquinone analogue of indigo, obtained indanthrone, the first of the series of anthraquinonoid vat dyes, most of which possess greatly superior fastness properties compared to the previously known indigoid dyes.

A further major development took place in 1921 when Bader and Sunder succeeded in preparing a water-soluble leuco ester of indigo. This was placed on the market in 1922 under the name 'Indigosol O'. In 1924 a method of preparation direct from anthraquinone parent dyes by simultaneous reduction and esterification was patented by Jones, Wylam and Morton.

The synthetic vat dyes were nearly all originally sold as pastes in order to simplify the vatting operation but better methods of preparation enabled powders to be introduced and the physical condition of the modern powder brands has progressed step by step with the demands made by modern application methods such as continuous dyeing processes. In those cases where the dye, either in paste or powder form, is applied as a pigment with binder or is used for pre-pigmentation processes dyes of particularly fine particle size must be used.

Chemical

Vat dyes, with very few exceptions, fall into two clearly defined groups, indigoid and anthraquinonoid.

Included in the former are indigo, thioindigo and their derivatives while the latter include derivatives of anthraquinone as well as heterocyclic quinones. Characteristic of all these compounds is the ketonic group $>C=O$ which, on reduction, forms $>C-OH$. As leuco compounds are capable of forming water-soluble alkali metal salts the water-insoluble vat dyes may be brought into solution by reduction in alkaline liquor, in which form they exhibit affinity for textile fibres, subsequent oxidation re-forming the original insoluble dyestuff.

If the sodium leuco compounds are acidified acid leuco compounds can be prepared. Such compounds possess very much less affinity for the fibre and have been used to enable level dyeings to be obtained from dyestuffs which possess so great an affinity that, when applied by the normal process, they are difficult to apply evenly. The colours of these acid leuco compounds are often very different from

those of the corresponding sodium compounds and these differences, and other colour changes based on chemical constitution, have been used for dyestuff identification on the fibre¹.

Water-soluble leuco esters of vat dyes are particularly suitable for the production of level pale shades or the colouring of materials difficult to penetrate. The original dye is regenerated by simultaneous hydrolysis and oxidation.

Tendering

Some vat dyes, especially among the yellows and oranges, possess the power of accelerating the degradation of cellulose (or silk) upon which they are dyed. Tendering is particularly liable to take place during dyeing when the dye is in a reduced condition and occurs to a lesser degree on exposure of the dyed fabric to sunlight and moisture. For this reason, dyes which accelerate the tendering of cellulose should be protected from direct sunlight during dyeing. Cellulose tendering has been shown to be due to a catalytic action of the dye during oxidation and reduction resulting in the formation of minute quantities of hydrogen peroxide which act on cellulose to form oxycellulose^{2, 3, 4, 5}.

Laboratory methods have been worked out to determine whether or not dyes will accelerate tendering and much work has been done to connect constitution and fading with cellulose degradation. In particular it has been shown that in some cases dyes containing pyridine or pyrimidine rings in their structures will not accelerate the tendering of cellulose⁶.

Application - Dyeing

The conditions of application indicated throughout this section are those applicable to cellulosic fibres. Normally anthraquinone vat dyes are applied by one or more of three methods, referred to here as Methods 1, 2, and 3, corresponding to the hot, warm and cold dyeing methods in general use and approved by the S.D.C. Committee on the classification of vat dyes (see Appendix I to these notes). The preferred methods of application are indicated by an unbracketed number; alternative methods have the number enclosed in brackets.

Some hot-dyeing dyes require further additions of caustic soda to the dyebath and this is indicated by the code 1+. The dyeing method for indigoid dyes is designated Method 4.

Some indigoid dyes, and especially thioindigoid, may be applied by one of the methods used for anthraquinone dyes and this has been recorded when known.

In a few cases special application methods are used and these too are indicated.

When dyeing pale shades the speed of dyeing may be reduced by omitting electrolyte, adding a retarding agent and/or additional caustic soda and by temperature control.

Conversely, exhaustion may be increased by adding electrolyte or by reducing the alkalinity of the dyebath thus lowering the solubility of the leuco compound.

In those cases where oxidation after dyeing develops a black from a green, the dye is treated as a green and the development to a black is considered as an aftertreatment.

When the user is faced with the problem of colouring materials very difficult to penetrate the normal dyeing methods have to be modified, e.g. by acidifying the reduced dye to form the acid leuco compound which possesses very much less affinity for the fibre or, more commonly, by evenly impregnating the material with a very fine suspension of the unreduced dye and subsequently fixing it *in situ* by treatment with caustic soda and hydrosulphite (the pigment padding process)^{7, 8}.

The pigment padding process is the major basis for most continuous vat dyeing procedures e.g. pad steam⁹. Here the pigmented fabrics, preferably pre-dried, are passed through a cold padding liquor containing caustic soda and sodium hydrosulphite. Reduction and fixation are achieved by steaming at atmospheric pressure e.g. 30 seconds at 100–105°C. This is followed by continuous oxidation and soaping treatments as part of the continuous sequence. Pre-pigmentation of loose fibres, yarn packages, knitgoods on the winch, and woven fabrics on the beam dyeing machine is a valuable aid to level dyeing in aqueous development processes.

Vat dyes may be applied to silk by methods similar to those used for cellulose although protective agents may be added to the dyebath in order to avoid damage to the fibre^{10, 11}.

As wool is so easily damaged by caustic alkali it is usual to prepare a stock vat using the minimum amount of caustic soda and to prepare the dyebath itself with ammonia, glue and hydrosulphite. After adding the stock vat to the dyebath the latter should react only faintly red to phenolphthalein. Should alkalinity develop later ammonium sulphate may be added to the dye liquor to reduce alkalinity to a minimum. The indigoid vat dyes, most of which may be applied by such methods, have been found to be suitable for wool¹² although anthraquinonoid vat dyes may also be used satisfactorily^{13, 14}.

Vat dyes of high molecular weight will not normally dye cellulose acetate with an acetyl content of over 34% unless the fibre has been swollen, when it becomes difficult to handle. Some vat dyes are subject to gas-fume fading unless the surface of the cellulose acetate has been partially saponified. In spite of these difficulties acetate has been dyed with vat dyes and a number of patents have been taken out covering the use of solvents and/or additions to the dyebath¹⁵.

Selected vat dyes can be applied to polyester fibres by thermofixation, e.g. pigmented and dried goods are thermofixed at 200–220°C for 60 seconds. Vat dyes are frequently similarly applied together with disperse dyes by thermofixation or high temperature dyeing processes on polyester-cellulose fibre blends.

Application – Solubilised vats

The main use of solubilised vat dyes on cotton or rayon is for the production of level pale shades on piece goods, for yarns in package form and for materials difficult to penetrate. The water-soluble dye is applied from a neutral bath to cellulosic materials and from a weakly acid bath to wool or silk and, if the affinity is low, the colour may be applied by padding. The process is unsuitable for weighted silk as the weighting is removed in development. Dyeings are developed in a fresh bath in the presence of an oxidising agent such as sodium nitrite, sodium bichromate or ferric chloride together with sufficient sulphuric acid to hydrolyse the

dyestuff on the fibre. For list of important Application Patents relating to solubilised vat dyes see Appendix II.

In the case of dyes sensitive to conditions of dyeing and oxidation milder development conditions are employed.

When exhaustion is good it is sometimes possible to use a one-bath process in which the nitrite is added to the dye liquor and development carried out in the same liquor by the addition of sulphuric acid to the exhausted dyebath.

Relatively recently the solubilised vat dyes have been commonly applied to polyester-cellulose blends to give pale shades of high fastness and shade solidity on both fibres. Subsequent to dyeing by the orthodox continuous or non-continuous methods used for cellulose alone, the developed, neutralised, soaped and dried material is given a short heat treatment (*circa* 30–60 seconds at 200°C) in order to fix the regenerated vat dye stain on the polyester fibre.

Application – Printing

A new era in textile printing opened with the introduction of vat dyes in spite of the difficulties associated with the early days when glucose in the presence of caustic soda was the only available reducing agent. The use of formaldehyde sulphonylate with potassium carbonate alone or in conjunction with sodium carbonate greatly simplified the process while in recent years the use of thiourea dioxide as a reducing agent¹⁶ has been suggested when printing acetate, wool or fibres likely to be damaged by alkali.

Two main processes of printing have been developed. In the first, the dyestuff, reducing agent and alkali are all incorporated in the printing paste, and, after printing, the material is dried and steamed. In the second process, which allows the printed but unreduced material to be stored indefinitely, the printing paste contains only the dyestuff and a thickener, the fabric being padded subsequently in a cold solution containing alkali, reducing agent and thickener, followed by steaming at 110–125°C for 40–50 seconds to reduce and fix the dye¹⁷.

This process is the basis of the present day “flash age” method of print development.

When printing cellulose acetate with vat dyes it is necessary either to incorporate in the printing paste sufficient sodium or potassium carbonate to saponify the cellulose acetate at the point of contact or to lightly saponify the whole of the fabric by padding with, e.g., sodium carbonate and sodium chloride or glycerol, drying and steaming before printing. It is of interest to note that dyes of unsymmetrical indigoid structure are claimed to give the best result¹⁸.

The solubilised vat dyes are normally printed with an oxidising agent with or without an acid splitting salt and development is brought about subsequently by steaming under neutral or acid conditions.

In addition to their application in direct printing, by the “all-in” or “flash-age” processes described above, the vat dyes and leuco esters may be employed, either alone or in conjunction with dyes of other classes, in a wide variety of discharge and resist styles.

The printing application data in this section refer to the use of the vat dyes and leuco esters in the six main fields of application. The titles used to describe these application fields, and the significance which has been attached to the titles for the purpose of recording the available information, are as follows:

Direct: The dye is suitable for use in direct printing on a white cellulose ground, by the "all-in" process.

Coloured Resist: The dye may be used as an illuminating colour in resist styles, i.e. as a head colour (under any ground).

White Resist: The dye when used as a ground may be resisted to give a good white (by any method).

Coloured Discharge: The dye may be used as an illuminating colour in discharge styles, i.e. as a head colour (on any ground).

White Discharge: The dye when used as a ground may be discharged to give a good white (by any method).

Flash Ageing: The dye is applicable by the two-stage process of printing, in which the printed fabric is padded with alkali and reducing agent and steamed in a flash-ager.

Aftertreatment

Subsequent to the oxidation of vat-dyed or vat-printed materials, or to the development of solubilised vat dyes, the material is advisedly soaped at the boil to remove any loose dye and to develop the true shade. During this treatment the dye becomes more crystalline and this may bring about changes in fastness, e.g. to light^{19, 20, 21}.

The fastness of the final shade may also be affected by the type of finish as, e.g. crease-resist, waterproofing, etc.

Presentation

The dyes in each hue group are arranged in numerical order according to the C.I. Generic Name. Where a dye is available both as a vat dye and the leuco ester, the vat dye appears first followed immediately by the solubilised form. Where a solubilised form exists without the corresponding parent dye, the solubilised form appears in the appropriate position according to its C.I. Generic Name.

The application and usage data are presented in tabular form. When the dye may be dyed by a variety of methods, the vatting and dyeing temperatures shown are those for the preferred method or methods only. Suitability or unsuitability for use in the various styles of printing is denoted by a ∇ or a \times respectively.

The main fastness properties tabulated refer to dyeings on cellulose. The fastness properties on other substrates are included, where available, under "Textile Application other than Cotton". The three figures given for fastness to light refer to $\frac{1}{2}$ - $\frac{1}{2}$ normal, normal and $2\times$ normal depth dyeings. Where only one figure is given in the light fastness data this refers to the standard (normal) depth dyeing. When the dye is known to have a tendency to accelerate the degradation of cellulose this fact has been noted below the table of fastness properties.

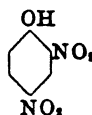
REFERENCES

- ¹ Derrett-Smith and Grey. The Identification of Vat Dyes on Cellulosic Materials. (Pergamon) 1967.
- ² Bamford and Dewar, Photosensitisation and tendering by vat dyes, *JSDC*, **65** (1949), 674
- ³ Landolt, Action of light on cellulose dyed with vat dyes, *JSDC*, **65** (1949), 659
- ⁴ Scholefield and Patel, The action of light on cotton dyed with vat dyestuffs, *JSDC*, **44** (1928), 268
- ⁵ Turner, Nabar and Scholefield The effect of reduced vat dyes upon the hypochlorite oxidation of cellulose, *JSDC*, **51** (1935), 5
- ⁶ Venkataraman, *Chemistry of synthetic dyes*, 996, 1228
- ⁷ FIAT 644, 17, The pigment padding method
- ⁸ Hopkins, Pigment padding processes of applying vat dyes, *JSDC*, **57** (1941), 358
- ⁹ Stott and Shimp, USP 2,487,197
- ¹⁰ Keyworth, Silk dyeing, *JSDC*, **49** (1933), 246
- ¹¹ Thomson, Dyeing of silk and silk mixtures, *JSDC*, **67** (1951), 335
- ¹² Luttringhaus, Flint and Arcus, Helindon dyestuffs for wool, *Am. Dy. Rep.*, **39** (1950), 2
- ¹³ Hug, Dyeing of woolen fibers and fabrics with vat colors, *Am. Dy. Rep.*, **37** (1948), 365
- ¹⁴ Weber, Dyeing of wool with vat colors with particular emphasis on the anthraquinone dyes, *Am. Dy. Rep.*, **40** (1951), 78
- ¹⁵ Campbell, The Dyeing of Secondary Cellulose Acetate, *JSDC*, **82** (1966), 311
- ¹⁶ Krug, Thiourea dioxide, A new reducing agent for textile printing, *JSDC*, **69** (1953), 606
- ¹⁷ Saville, USP 2,587,905
- ¹⁸ Krug, Thiourea dioxide, A new reducing agent for textile printing, *JSDC* **69** (1953), 608
- ¹⁹ Sumner, Vickerstaff and Waters, Effects of soaping treatment on vat dyeings, *JSDC*, **69** (1953), 181
- ²⁰ Wegmann, Zur Kenntnis der Nuancenänderungen beim Seifen von Küpenfärbungen, *Text-Rund*, **8** (1953), 157
- ²¹ Wegmann, Effect of Structure on Change in Colour of Vat dyes on Soaping, *JSDC*, **76** (1960), 226

LITERATURE

- Bader, *Chim. et Ind.* (1924), No. 449
- Rowe, Progress in application of vat dyes, *JSDC*, **43** (1927), 99
- Christ, Indigosols, *JSDC*, **54** (1938), 93
- Boulton and Morton, Application of vat dyes to viscose rayon, *JSDC*, **55** (1939), 481
- Valko, Particle size in vat-dyeing cellulose, *JASC*, **63** (1941), 1433
- Fox, *Vat dyestuffs and vat dyeing* (1946).
- Diserens, *Die Neuesten Fortschritte in der Anwendung der Farbstoffe*, **1** (1946) and *The Chemical Technology of Dyeing and Printing* (as translated and revised by Wengraf and Baumann) (1948)
- Hennessey, Practical experience in vat-acid dyeing, *Am. Dy. Rep.*, **36** (1947), 775, 784

53185 C.I. Sulphur Black 1 (*Greenish* → *Bluish black*)
C.I. Leuco Sulphur Black 1



2,4-Dinitrophenol

Heat 2,4-dinitrophenol or its sodium salt (which may be prepared *in situ* by the alkaline hydrolysis of 1-chloro-2,4-dinitrobenzene) with sodium polysulfide under reflux at 110–120°C for 48–72 hours or for a shorter time under pressure at 130–140°C. Then dilute the melt and complete precipitation of the dye by the addition of acid or by air oxidation

It is necessary to have the correct ratio of intermediate to polysulfide in the melt. When this has been achieved, very little dye remains in solution at the end of the process.

The empirical formula has been stated to be $C_{22}H_{14}N_4O_8S_7$ or $C_{24}H_{16}N_4O_8S_8$ according to conditions used in the preparation of the dye (Vetter)

Discoverers — Vidal 1896
Priebis and Kaltwasser 1899 (condenser method)
Vidal, *BP* 16449/96, 141759; *USP* 618152; *FP* 231188 and addn. *GP* 98437 (*Fr.* 5, 459), 116354 (*Fr.* 6, 145)
Cassella Co., *BP* 19831/96; *FP* 259509, 267343
Stolaroff, *BP* 2195/00; *FP* 296180
Soc. Chem. Ind., Basle, *BP* 13035/03; *FP* 333096
Clayton Aniline, *BP* 17805/03
Kalle Co., *BP* 26379/03; *FP* 337278; *GP* 186860 (*Fr.* 8, 748)
Claus & Co., *BP* 11590/09
Bayer Co., *BP* 15625/09; *USP* 935009
Hiyama, *JSDC*, 67 (1951), 35, ab. from *JSCI Jap. (Ind. Chem. Sect.)*, 51 (1948), 92–98
Sunderland, *JSDC*, 17 (1901), 3
Mayenberg, *JSDC*, 17 (1901), 62
Erdmann, *Ann.* 362 (1908), 133
Vetter, *Dissertation, Dresden* (1910)
Vlies, *JSDC*, 29 (1913), 316
Rowe, *JSDC*, 33 (1917), 12
Lubs, 314–315
BIOS 983, 61
FIAT 764 — Immedialcarbon L
Immedialschwarz MO ex.
Immedialschwarz NGD
Immedialschwarz Paste NSG ex.
Immedialschwarz T ex.
PB 74181, fr. 2689 — Immedialcarbon B

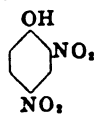
Water — insoluble
Alcohol — insoluble
 Na_2S — solubility very good — greenish black
 $NaOH$ to sodium sulfide solution — rather bluer
 HCl to sodium sulfide solution — greenish black ppt.
 H_2SO_4 conc. — sparingly soluble cold, dull greenish blue hot, converted into black blue by further heating
25% fuming sulfuric acid — black blue; on dilution — greenish black ppt.

53186 C.I. Solubilised Sulphur Black 1
(*Greenish black* → *Bluish black*)
The thiosulfonic acid of C.I. 53185

BIOS Misc. 55 — Immedial Carbon L for paper
FIAT 764 — Immedial Carbon L

Soluble in water
 H_2SO_4 conc. — black, with SO_2 evolved; on dilution — ppt.
 $NaOH$ — bluish black
 Na_2S soln. — greenish black

53190 C.I. Sulphur Black 10 (*Greenish black*)
C.I. Leuco Sulphur Black 10



2,4-Dinitrophenol

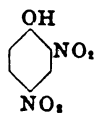
*p*-Aminophenol

Heat a mixture of 2,4-dinitrophenol and *p*-aminophenol (or *p*-nitrosophenol or *p*-nitrophenol) in aqueous sodium polysulfide

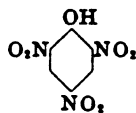
FDX 885 — Immedialtiefschwarz 3G

H_2SO_4 conc. — greenish black; on dilution — black ppt.

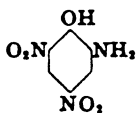
53195 C.I. Sulphur Black 2 (*Bluish black*)
C.I. Leuco Sulphur Black 2



2,4-Dinitrophenol



Picric acid



Picramic acid

Heat a mixture of 2,4-dinitrophenol and picric or picramic acid with aqueous sodium polysulfide. See C.I. 53185 and C.I. 53205 to which this group of sulfur blacks is closely related

FIAT 764 — Immedialschwarz MORR ex. st.
Immedialschwarz RFL
FDX 885 — Immedialschwarz PFL

Na_2S — solubility very good — bluish black
 H_2SO_4 conc. — bluish black; on dilution — black ppt.

53196 C.I. Solubilised Sulphur Black 2 (*Bluish black*)
The thiosulfonic acid of C.I. 53195

Soluble in water

- 53571** C.I. Sulphur Green 2 (*Bluish green* → *Green*)
C.I. Leuco Sulphur Green 2

BIOS 986, 2, 311
BIOS 983, 47, 90
FIAT 764 — Immedialgruen BB ex. 'F'

Prepare in a similar manner to that described in C.I.53570 omitting the copper sulfate from the sulfuration

Na₂S — solubility good — olive
H₂SO₄ conc. — dark blue; on dilution — dark blue ppt.

- 53572** C.I. Solubilised Sulphur Green 2 (*Bluish green* → *Green*)
The thiosulfonic acid of C.I. 53571

Soluble in water
H₂SO₄ conc. — blue; on dilution — ppt.
NaOH — bluish black
Na₂S soln. — greenish blue

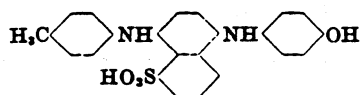
- 53573** C.I. Solubilised Sulphur Green 3 (*Green*)
The thiosulfonic acid of C.I. 53570

Soluble in water
H₂SO₄ conc. — dull green; on dilution — ppt.
NaOH — bluish green
Na₂S soln. — bluish green

- 53580** C.I. Sulphur Green 7 (*Green*)
C.I. Leuco Sulphur Green 7

BIOS 1155, 11-12
FIAT 764 — Immedialbrillantgruen 5G 'F'
See also C.I.53570

Yellower than C.I.53570, similar in fastness



5-(*p*-Hydroxyanilino)-8-*p*-toluidino-1-naphthalenesulfonic acid

Heat this intermediate with an alcoholic solution of sodium polysulfide in the presence of copper sulfate, under reflux for 50 hours. Then add sodium nitrite and after boiling for a further 16 hours, distil off the ethanol and precipitate by air blowing at 50-60°C

The indophenol is made by oxidising a mixture of *p*-Tolyl Peri acid and *p*-aminophenol with sodium hypochlorite, and then reducing with sodium hydrosulfide (BIOS 1155, 11-12)

- 53581** C.I. Solubilised Sulphur Green 7

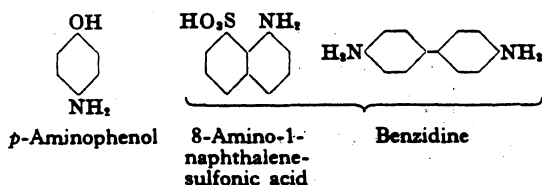
The thiosulfonic acid of C.I. 53580

- 53590** C.I. Sulphur Green 10 (*Dull green*)

Thiogene Fast Green 3GW (FH)

Discoverer — Hahnenkamm 1912

M.L.B., BP 6080/12; USP 1083489; GP 272843 (Fr. 11, 488)
See also BP 359254; GP 590873 (Fr. 20, 1056)



Heat the indophenol derived from *p*-aminophenol and the condensation product of benzidine and 8-amino-1-naphthalenesulfonic acid (Peri acid) with sodium polysulfide in the presence of copper sulfate

Addition of molybdic acid to the sulfuration gives a yellower dye (GP 590873)

(d) Indophenols containing a Carbazole Nucleus

- 53630** C.I. Vat Blue 43 (*Reddish blue* → *Reddish navy*)
C.I. Vat Blue 47 (*Reddish navy*)

Discoverers — Haas 1908; Herz 1909

Cassella Co., BP 2918/09, 18822/09, 489/11; USP 919572, 931598, 956348; FP 400022, 413716, 435537; GP 218371, 227323, 230119, 224590, 224591, 235264, (Fr. 10, 301, 258, 256, 303, 303, 305)

BP 884027

R. Wedekind & Co., GP 284888 (Fr. 12, 288)

Fierz-David, 396

Lubs, 327-328

BIOS 983, 43, 53-58, 71-74, 75-81

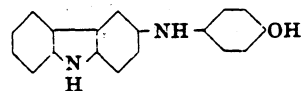
FIAT 1313, 3, 238

FIAT 764 — Hydronblau R, RR, 3R

For proposed constitution of these dyes see —

Shah, Tilak & Venkataraman, JSDC, 66 (1950), 333

Note — Some dyes of this constitution are converted into their leuco compounds in a similar manner to the C.I. Leuco Sulphur Dyes



p-(3-Carbazolylamino)phenol

Heat this intermediate with a solution of sodium polysulfide in butanol under reflux at 107°C for 24 hours. Then heat with sodium nitrite for a short time, distil off the butanol and complete precipitation of the dye by air blowing and adding salt

The indophenol is made by condensing carbazole with *p*-nitroso-phenol in conc. sulfuric acid at -20 to -23°C followed by reduction (BIOS 983, 71-74)

A modified dye is made by adding *p*-(4-amino-*m*-toluidino)phenol, 4,4'-iminodiphenol and phenol to the sulfuration (BIOS 983, 75-81)

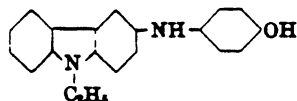
H₂SO₄ conc. — dark blue; on dilution — blue ppt.

53631 C.I. Sulphur Black 4 (Bluish black)

Similar to the method described in C.I.53630 except that copper sulfate is added to the sulfurisation

Discoverer — Haas 1908

Cassella Co., *BP* 14143/09; *FP* 413755; *GP* 221215 (*Fr.* 10, 304)
FIAT 764 — Indocarbon SN

53640 C.I. Vat Blue 42 (Blue → Reddish navy)

p-(9-Ethyl-3-carbazolylamino)phenol

Heat this intermediate with sodium polysulfide in butanol in a similar manner to that described in C.I.53630

The indophenol is made by condensing 9-ethylcarbazole with *p*-nitrosophenol in conc. sulfuric acid at -23°C (*BIOS* 983, 65-70)

Discoverer — Herz 1909

Cassella Co., *BP* 9689/09, 489/11; *USP* 966092; *FP* 412012, 435537; *GP* 222640 (*Fr.* 10, 302)
BIOS 983, 65-70
FIAT 1313, 3, 238
FIAT 764 — Hydronblau G
Greener than C.I.53630

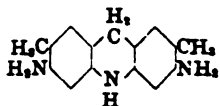
Note — Some dyes of this constitution are converted into their leuco compounds in a similar manner to the C.I. Leuco Sulphur Dyes

H_2SO_4 , conc. — greenish blue; on dilution — greenish blue ppt
 $\text{Na}_2\text{S}_2\text{O}_4/\text{NaOH}$ — yellow

(7) — ACRIDINE, AZINE, OXAZONE and THIAZONE COMPOUNDS

53680 C.I. Sulphur Brown 20 (Brown)

FIAT 764 — Immedialbraun R ex. kz. 'F'



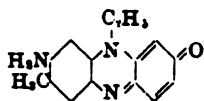
3,6-Diamino-2,7-dimethylacridan

Bake this intermediate with sodium polysulfide at $280\text{--}285^{\circ}\text{C}$ for 24 hours

53700 C.I. Sulphur Violet 4 (Reddish violet)

Discoverer — A. Schmidt 1905

M.L.B., *BP* 2797/06; *USP* 829740; *FP* 372277; *GP* 181125 (*Fr.* 8, 787)
I.G., *GP* 590873 (*Fr.* 20, 1056)
BIOS 983, 111-112
FIAT 764 — Immedialpurpur C 'F'



8-Amino-10-ethyl-7-methyl-2(10*H*)-phenazinone

Bake this intermediate with sodium polysulfide, in the presence of copper sulfate, at 190°C for 15 hours

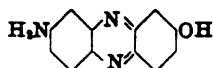
The azine is made by condensing *N*⁴-ethyltoluene-2,4-diamine with *p*-nitrosophenol in dilute hydrochloric acid, and then oxidising with manganese dioxide (*BIOS* 983, 111-112)

Addition of molybdic acid to the bake reddens the hue (*GP* 590873)

53710 C.I. Sulphur Red 3 (Dull bordeaux)

Discoverers — Weinberg 1900 (copper free dye)
A. Schmidt 1905

Cassella Co., *BP* 14836/00; *USP* 701435; *GP* 126175 (*Fr.* 6, 680)
M.L.B., *USP* 818980; *FP* 361608; *GP* 171177 (*Fr.* 8, 783)
BIOS 983, 50
BIOS 1155, 23-24, 29
FIAT 764 — Immedialprune S ex. 'F'
Immedialmarron B ex. 'F'



8-Amino-2-phenazolinol

Heat this intermediate with aqueous sodium polysulfide, in the presence of copper sulfate, under reflux at $115\text{--}116^{\circ}\text{C}$ for 6 hours (*BIOS* 1155, 29)

The copper sulfate may be omitted from the process if desired

The azine is made by air oxidising *p*-(2,4-diaminoanilino)phenol

H_2SO_4 , conc. — brownish violet; on dilution — red ppt.

53711 C.I. Solubilised Sulphur Red 3

The thiosulfonic acid of C.I. 53710

APPENDIX D

COMMENTS ON CHARACTERISTICS AND USES

QUESTIONNAIRE RESPONSES

The Commission's questionnaires in these investigations requested comments regarding the differences and similarities in the physical/chemical characteristics and uses of selected sulfur dyes. The following comments were received:

A) SULFUR dyes vs. SULFUR VAT dyes:

<u>Firm</u>	<u>Comments</u>
***.....	<p><u>Characteristics</u>.--"Both...dyes are made by thionating or sulfurizing specific intermediates with polysulfides and/or sulfur. The difference between...the dyes lies primarily in their method of reduction. Sulfur dyes are reduced with caustic and sodium sulfide to their leuco form. They are also applied from a sulfide dyebath. Sulfur vat dyes are reduced and applied from a caustic and sodium hydrosulfite bath. Sulfur dyes are sold and used in their leuco reduced liquid form. Sulfur vat dyes are sold and used as paste dispersions."</p> <p><u>Uses</u>.--Sulfur dyes are used in pad-steam continuous, exhaust, and denim dyeing operations. These dyes are used for their economy and where wash fastness to chlorine is not important. They are used to dye cellulosic fibers."</p>
***.....	<p><u>Characteristics</u>.--"In pre-reduced (leuco) form, the... differences are insignificant. When the fiber is dyed, the sulfur vat dye will generally have better washfastness and better resistance to chlorine bleaching...Because of this, they can be used in combination with CI Leuco sulfur dyes to improve fastness and in CI vat paste form can be used with conventional vat dyes to reduce costs of vat dye combination without any major sacrifice in color fastness."</p> <p><u>Uses</u>.--Denim, work clothing sold over the counter... Sulfur dyes also used in denim, knits, woven sports apparel, cordoroy, hosiery and yarn...On denim, the use of CI Leuco sulfur dye to replace the sulfurized vat leuco would be unacceptable due to the reaction with chlorine bleach being dramatically different."</p>

Firm
(Continued)

Comments

***..... Characteristics.--"Sulfur dyes are pre-reduced liquids for the cotton and rayon fiber. Sulfur vat pastes are un-reduced pastes that can reduce in a vat dye system where no chlorine fastness is required (i.e., reduce with caustic-hydro)."

Uses.--"Sulfur liquids are used industry-wide to produce dark, heavy shades economically. Sulfur vat dyes are used to make more economical vat shades--generally used in combination with other aq. vats. Both the sulfurs marketed as a pre-reduced liq. and the sulfur vat marketed as a paste are both applied on cotton and rayon fibers."

B) SULFUR VAT dyes vs. OTHER VAT dyes:

***..... Characteristics.--"Differences are insignificant. When the fiber is dyed, the fabric appearance is similar. Other vat dyes will have improved chlorine and crock fastness. Sulfur vats can be used with other vats to reduce cost."

Uses.--"Over-the-counter work clothing, sewing thread, hosiery, exhaust dyeing of denim yarns."

***..... Characteristics.--"Sulfur vat dyes are made by thionating or sulfurizing specific intermediates with polysulfides and/or sulfur. As such, sulfur is an intrinsic part of the chemical structure. Vat dyes primarily based on anthraquinone chemistry, are made by a completely different route; thus the chemical structures are different...Generally, the sulfur vat dyes are duller in shade than the vat dyes. Vat dyes have much superior chlorine fastness, wash fastness, and light fastness. Vat dyes are much more expensive than sulfur vat dyes. Both sulfur vat dyes and vat dyes are sold as paste dispersions. Both are reduced and applied from a caustic and sodium hydrosulfite bath."

Uses.--"Both...dyes are used in pad-dry-pad-steam continuous and exhaust dyeing operations. Vat dyes are used where the highest washfastness is required such as workwear and high-end towels. Due to the differences in cost and fastness characteristics, sulfur vat and vat dyes are not interchangeable."

Firm
(Continued)

Comments

- ***..... Characteristics.--"Sulfur vat dyes are totally different dye types. Vat dyes are antraquinone-based dyes. Sulfur-vat types are inert sulfur pastes that will reduce in sodium hydroxide and sodium hydrosulfite."
- Uses.--"Vat dyes are used for lighter, brighter shades where maximum fastness is required. Sulfur-vat dyes may be used with vat dyes to make some vat type shades where maximum fastness is not required."

C) Sulfur BLACK dyes vs. sulfur OTHER-COLOR dyes:

Firm

Comments

- ***..... Characteristics.--"Sulfur black, by their nature, contain more reduction chemicals than other colors. Their chemical natures are similar. Blacks and other colors are blended together to make a variety of sulfur shades."
- Uses.--"Sulfur dyes are used in denim, outer wear, corduroy, and polyester/cotton blends."
- ***..... Characteristics.--"Differences are insignificant. Both categories are used with some application procedures."
- Uses.--"Denim, knits, wovens, hosiery, on cotton ory rayon firers."
- ***..... Characteristics.--"Sulfur black and sulfur other color dyes have different chemical structures and chromophores that impart the difference in color. Generally both have poor washfastness to chlorine. Both are reduced with caustic and sodium sulfide to their leuco form. They are also applied from a sulfide dyebath. They are sold in their leuco reduced form."
- Uses.--"Both are used in pad-steam continuous, exhaust, and denim dyeing operations. Both are used for their economy and where washfastness to chlorine is not important. Their end uses are the same but they are not interchangeable due to the difference in color."

D) C.I. SULFUR dyes vs. C.I. LEUCO/SOLUBILIZED sulfur dyes:

FirmComments

***..... Characteristics.--"...dyes are sulfur dyes that have been chemically reduced with caustic and sodium sulfide to the soluble liquid form. C.I. sulfur dyes are in presscake, liquid, powder, granular or flake forms. C.I. sulfur dyes are insoluble or have limited solubility. The C.I. sulfur dyes have no affinity for the cotton. C.I. leuco/solubilized dyes have good affinity for cotton and when reoxidized in the fiber form and insoluble product."

Uses.--"C.I. sulfur dyes are not suitable for commercial uses. C.I. leuco/solubilized liquid dyes are used in pad-steam, continuous, exhaust and denim operations."

***..... Characteristics and uses.--"C.I. solubilized dyes are either water soluble liquids or water soluble powders used to dye textiles, paper, or leather. Requires added reduction to dye textiles. CI Sulfur dyes are non-reduced insoluble products required to be solubilized or reduced before dye can be applied to a substrate. Can also be reacted to form CI Solubilized dye."

***..... Characteristics.--"Unlike pre-reduced liquids, solubilized dyes contain no reduction and no fiber affinity. They are thiosulfonic acid derivatives; therefore are water soluble."

Uses.--"Solubilized types may be used in the paper or leather trade by different dye methods. Sulfur dyes is a class of dyes generally available for dark shades."

E) C.I. LEUCO dyes vs. C.I. SOLUBILIZED sulfur dyes:

FirmComments

***..... Characteristics.--"CI Solubilized has different chemical characteristics, i.e., no strong alkali or reduction is present in the physical or chemical form contrary to CI leuco dyes."

Uses.--"Both can dye cotton or rayon but CI solubilized must be reduced. Knits or wovens can be dyed for casual wear in exhaust bath. CI solubilized can also be used to dye paper and leather."

Firm
(Continued)

Comments

***..... Characteristics.--"The leuco dyes are generally a liquid, have added chemicals and are stable. The solubilized dyes have most of the sulfides removed and have no affinity to cotton or rayon. The solubilized forms are generally powders."

Uses.--"The leuco dyes are used as liq. in the textile industry to dye cotton and rayon. The solubilized dyes are powder and sold to the leather and paper industry."

***..... Characteristics.--"C.I. leuco dyes are sulfur dyes that have been chemically reduced with caustic and sodium sulfide to their soluble liquid form. C.I. solubilized dyes are sulfur dyes that have been chemically reacted with sodium sulfite and/or sodium bisulfite to their thiosulfate derivative. C.I. leuco dyes are water soluble and have affinity for the cotton. C.I. solubilized dyes are water soluble but have no affinity for the cotton. C.I. leuco dyes are applied from a caustic and sodium sulfide dyebath. C.I. solubilized dyes are reduced with caustic and dextrose and "salted out" on the cotton during the dyeing process. C.I. leuco dyes are sold as a liquid. Generally C.I. solubilized dyes are sold as a powder. Both have the same fastness characteristics."

Uses.--"C.I. leuco dyes are used in pad-steam continuous, exhaust, and denim dyeing operations. C.I. solubilized dyes are used primarily in exhaust dyeing operations like garment dyeing and use different reduction chemicals."

***..... Characteristics.--"Leuco and solubilized dyes are produced with different chemical intermediates, creating different dye molecules. Solubilized sulfur dyes are small molecules, allowing it to penetrate leather, with negative charges that react with the positively charged collagen molecule in leather hides. The leuco dye is a large molecule which is fixed onto cellulosic fibers by oxidation into insoluble pigment form."

Uses.--"Leuco dyes cannot be used (to dye leather) because the high pH, created during application, will destroy the leather. Solubilized dyes can be used to dye cotton but their relatively high cost limits their applications to niche areas."

F) CONVENTIONAL sulfur dyes vs. ENVIRONMENTALLY-SAFER sulfur dyes:

<u>Firm</u>	<u>Comments</u>
***.....	<p><u>Characteristics</u>.--"Similar but environmentally safer dyes contain less polysulfide and is applied using non-sulfide reducing agent with less sulfide in waste water."</p> <p><u>Uses</u>.--"Knits, denim, wovern, yarn thread."</p>
***.....	<p><u>Characteristics</u>.--"The amount of sulfides and polysulfides separates the difference...An environmentally safe sulfur dye must contain <u>no polysulfides</u>...The shade, build-up, fastness characteristics of the same product is the same."</p>

G) CLARIFIED sulfur dyes vs. UNCLARIFIED sulfur dyes:

<u>Firm</u>	<u>Comments</u>
***.....	<p><u>Characteristics</u>.--"Clarified sulfur dyes are filtered through a filtering device to remove inert and insoluble material. Chemical composition is the same."</p> <p><u>Uses</u>.--"Unclarified dye can be used in denim, continuous woven dyeing, knit fabric or jets or beck. Will likely cause problems in package dyeing of yarn or thread and beam dyeing fabric."</p>
***.....	<p><u>Characteristics</u>.--"Clarified sulfur dyes have all insolubles and filtrates removed."</p> <p><u>Uses</u>.--"Both products are used interchangeably. However, the possibility remains that the unclarified product could spot or speck on the fiber or fabric when dyed."</p>
***.....	<p><u>Characteristics</u>.--"Clarified refers to the sulfur liquid dyes that have been filtered to remove any grit and major insolubles. Unclarified sulfur dyes are sulfur liquid dyes that have not been filtered."</p> <p><u>Uses</u>.--"Both dyes can be used for pad-steam continuous, exhaust, and denim operations. The clarified dyes, however, are highly recommended over unclarified for exhaust package dye operations."</p>

APPENDIX E
COMMENTS ON MANUFACTURING PROCESSES

QUESTIONNAIRE RESPONSES

The Commission's questionnaires in these investigations requested comments regarding the differences and similarities in the manufacturing processes used in the production of selected sulfur dyes. The following comments were received:

A) SULFUR dyes vs. SULFUR VAT dyes:

FirmComments

- ***..... "To make leuco sulfur dye, reactors, scrubbers and skilled labor is required to add the chemicals in order to avoid a hazard problem. To make a vat paste --entirely different equipment is needed. A Col. dissolver, colloid mills, sand mills, special mix tanks and filtration is needed. All requires skilled labor."
- ***..... "Production inputs are similar in that sulfur is a common ingredient. For each color of dye the organic reacted with the sulfur and the reaction differs. Machines/equipment to make the vat dyes is greatly increased since the dye formed in the reaction must be isolated and finished (milled and dispersed). This requires additional equipment. The level of skilled labor is similar."
- ***..... "These products are not interchangeable. The sulfur dyes require reactors with special agitation, heating and cooling capabilities and must be connected to a hydrogen sulfide scrubber for environmental reasons. The sulfur vat dyes require Cowles dissolvers, colloid mill, cartridge filter and holding tanks with minimum cooling and agitation requirements."

B) SULFUR VAT dyes vs. OTHER VAT dyes:

- ***..... "These dyes are completely interchangeable. The same equipment is used, but this equipment is currently used to produce other vat dyes and disperse dyes more than *** of the time."
- ***..... "Manufacturing of other vat dyes is significantly different in that synthesis usually involves toxic solvents and special systems for handling solvents. Sulfur vat dyes are a aqueous (water) based chemistry. Level of skilled labor may be higher for other vat dyes...Typical conventional vat pastes are more expensive to manufacture due to higher priced raw materials and more complicated processing."

Firm
(Continued)

Comments

***..... "The same equipment is used. However, the trick is the formulation which requires years of experience and technology for plant managers and lab personnel."

C) Sulfur BLACK dyes vs. sulfur OTHER-COLOR dyes:

Firm

Comments

***..... "Same type of reactors if we start with insoluble presscake conc. pdr. The big difference is the amt. of solvents, sulfides, caustic, etc. required to make a stable liquid."

***..... "Manufacturing inputs differ in the organic that is reacted with the sulfur. Equipment for the reaction of the organic and sulfur are similar. Equipment for production of intermediates is significantly different."

***..... "Extensive clean-up of the equipment is required to prevent contamination, but otherwise they are completely interchangeable."

D) C.I. LEUCO dyes vs. C.I. SOLUBILIZED sulfur dyes:

Firm

Comments

***..... "Manufacturing inputs are similar. Equipment is similar through the dye formulation steps and significantly different for the dye isolation and finishing. In particular for the precipitation, isolation and spray drying of the leuco/solubilized dyes. Level of skilled labor is different for spray drying."

E) CONVENTIONAL sulfur dyes vs. ENVIRONMENTALLY-SAFER sulfur dyes:

Firm

Comments

***..... "Manufacturing inputs are similar but varied stoichiometrically. Equipment is similar. Skilled labor level is similar."

***..... "These dyes are completely interchangeable since the same equipment is used for both."

Firm
(Continued)

Comments

***..... "The complete omission of sodium polysulfides eliminates odors and most of the waste treatment problems. Regular sulfur dyes contain polysulfides, the amount depends on the individual color. Sulfur blacks contain the highest amount."

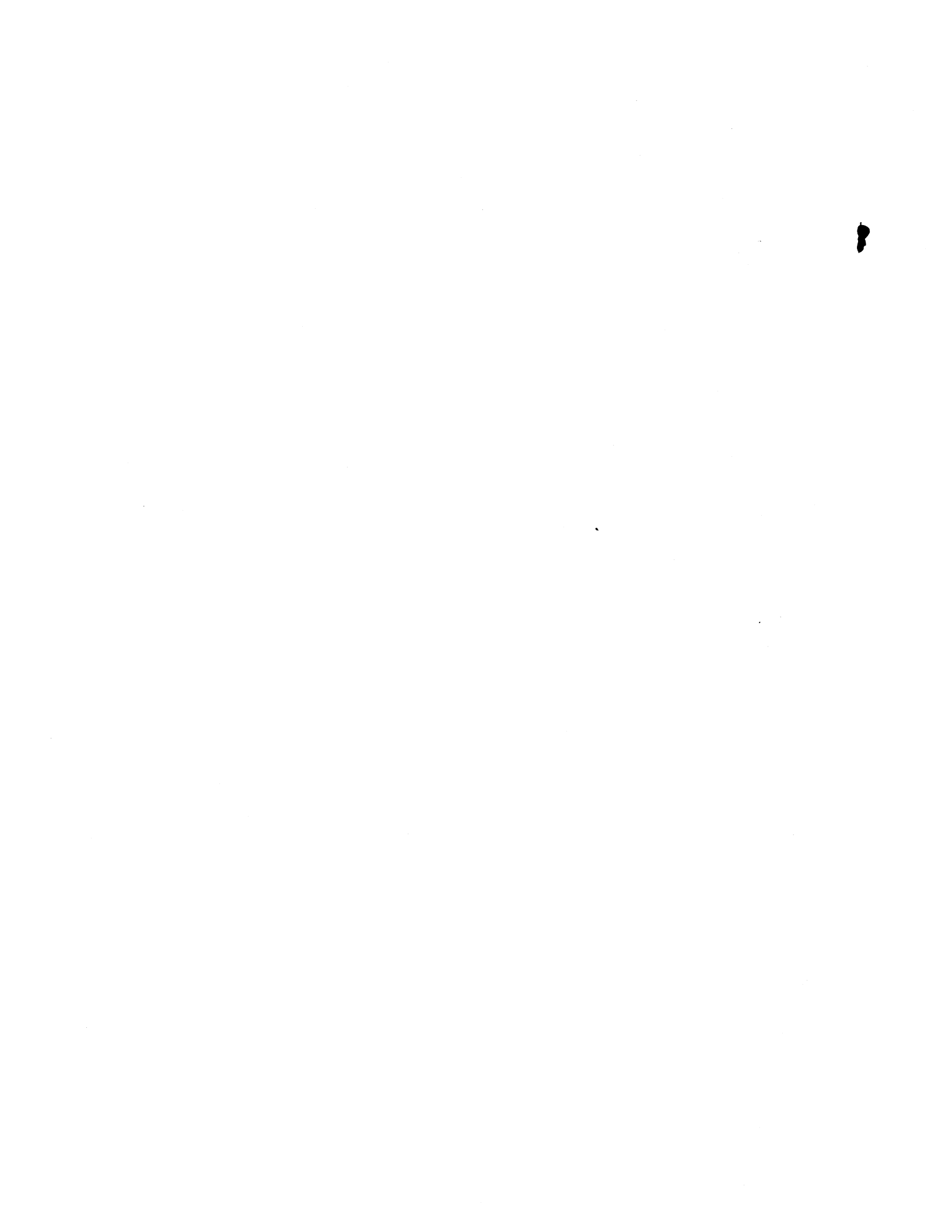
F) CLARIFIED sulfur dyes vs. UNCLARIFIED sulfur dyes:

Firm

Comments

***..... "Manufacturing is similar except for the clarification which is not done for unclarified sulfur dyes."

***..... "Clarified means filtered. It is a compromise in quality to market an unclarified dye."



APPENDIX F

HTS NOTES AND NOMENCLATURE

HARMONIZED TARIFF SCHEDULE of the United States (1993)

Annotated for Statistical Reporting Purposes

CHAPTER 32

TANNING OR DYEING EXTRACTS;
 TANNINS AND THEIR DERIVATIVES; DYES,
 PIGMENTS AND OTHER COLORING MATTER;
 PAINTS AND VARNISHES; PUTTY AND OTHER MASTICS; INKS

VI
 32-1

Notes

1. This chapter does not cover:
 - (a) Separate chemically defined elements or compounds (except those of heading 3203 or 3204, inorganic products of a kind used as luminophores (heading 3206), glass obtained from fused quartz or other fused silica in the forms provided for in heading 3207, and also dyes and other coloring matter put up in forms or packings for retail sale, of heading 3212);
 - (b) Tannates or other tannin derivatives of products of headings 2936 to 2939, 2941 or 3501 to 3504; or
 - (c) Mastics of asphalt or other bituminous mastics (heading 2715).
2. Heading 3204 includes mixtures of stabilized diazonium salts and couplers for the production of azo dyes.
3. Headings 3203, 3204, 3205 and 3206 apply also to preparations based on coloring matter (including, in the case of heading 3206, coloring pigments of heading 2530 or chapter 28, metal flakes and metal powders), of a kind used for coloring any material or used as ingredients in the manufacture of coloring preparations. The headings do not apply, however, to pigments dispersed in nonaqueous media, in liquid or paste form, of a kind used in the manufacture of paints, including enamels (heading 3212), or to other preparations of heading 3207, 3208, 3209, 3210, 3212, 3213 or 3215.
4. Heading 3208 includes solutions (other than collodions) consisting of any of the products specified in headings 3901 to 3913 in volatile organic solvents when the weight of the solvent exceeds 50 percent of the weight of the solution.
5. The expression "coloring matter" in this chapter does not include products of a kind used as extenders in oil paints, whether or not they are also suitable for coloring distempers.
6. The expression "stamping foils" in heading 3212 applies only to thin sheets of a kind used for printing, for example, book covers or hat bands, and consisting of--
 - (a) Metallic powder (including powder of precious metal) or pigment, agglomerated with glue, gelatin or other binder; or
 - (b) Metal (including precious metal) or pigment, deposited on a supporting sheet of any material.

Additional U.S. Note

1. For the purposes of subheadings 3204.11.10, 3204.12.20 and 3204.16.20, the term "dyes containing, by weight" means those products which contain as the only dye components, the specified components listed therewith, each of which must be present in the product. A tolerance of plus or minus two percentage points from the named percentages is allowable.

HARMONIZED TARIFF SCHEDULE of the United States (1993)

Annotated for Statistical Reporting Purposes

Heading/ Subheading	Stat. Suf- fix	Article Description	Units of Quantity	Rates of Duty		2
				1 General	Special	
3204 (con.)		Synthetic organic coloring matter, whether or not chemically defined; preparations as specified in note 3 to this chapter based on synthetic organic coloring matter; synthetic organic products of a kind used as fluorescent brightening agents or as luminophores, whether or not chemically defined (con.):				
3204.14 (con.)		Synthetic organic coloring matter and preparations based thereon as specified in note 3 to this chapter (con.):				
3204.14.20	00	Direct dyes and preparations based thereon (con.): Direct black 51, 69, 112, 114, 118, 122; Direct blue 74, 77, 85, 90, 156, 158, 158:1, 207, 211, 225, 244, 267; Direct brown 97, 113, 157, 169, 170, 200, 212, 214; Direct green 33, 59, 67, 68; Direct orange 17, 60, 105, 106, 107, 118; Direct red 9, 89, 92, 95, 111, 127, 173, 207, 221; Direct violet 47, 93; and Direct yellow 27, 39, 68, 93, 95, 96, 98, 109, 110, 133, 134.....	kg.....	9.5Z	Free (CA,E,IL,J)	54.7Z
3204.14.25	00	Direct blue 86; Direct red 83; and Direct yellow 28.....	kg.....	20Z	Free (CA,E,IL,J)	67.3Z
3204.14.30	00	Other: Products described in additional U.S. note 3 to section VI.....	kg.....	15Z	Free (CA,E,IL,J)	67.3Z
3204.14.50	00	Other.....	kg.....	20Z	Free (CA,E,IL,J)	67.3Z
3204.15		Vat dyes (including those usable in that state as pigments) and preparations based thereon:				
3204.15.10	00	Vat blue 1 (synthetic indigo), "Colour Index No. 73000".....	kg.....	3.3¢/kg + 14.4Z	Free (CA,E,IL,J)	6.6¢/kg + 29Z
3204.15.20	00	Vat brown 3; Vat orange 2, 7; and Vat violet 9, 13.....	kg.....	20Z	Free (CA,E,IL,J)	64.5Z
3204.15.30	00	Solubilized vat blue 5; Solubilized vat orange 1; Solubilized vat yellow 7, 45, 47; Vat black 19, 30, 31; Vat blue 5, 16, 19, 21, 66, 67; Vat brown 33, 50, 57; Vat green 28, 48; Vat orange 5, 13; Vat red 10, 15, 32, 41; and Vat yellow 46.....	kg.....	8.4Z	Free (CA,E,IL,J)	48.1Z
3204.15.35	00	Solubilized vat orange 3; Vat blue 2; Vat red 44; and Vat yellow 4, 20.....	kg.....	14.2Z	Free (CA,E,IL,J)	52.3Z

HARMONIZED TARIFF SCHEDULE of the United States (1993)

Annotated for Statistical Reporting Purposes

VI
32-8

Heading/ Subheading	Stat. Suf- fix	Article Description	Units of Quantity	Rates of Duty		2
				1 General	Special	
3204 (con.)		Synthetic organic coloring matter, whether or not chemically defined; preparations as specified in note 3 to this chapter based on synthetic organic coloring matter; synthetic organic products of a kind used as fluorescent brightening agents or as luminophores, whether or not chemically defined (con.):				
3204.15 (con.)		Synthetic organic coloring matter and preparations based thereon as specified in note 3 to this chapter (con.):				
3204.15.40	00	Vat dyes (including those usable in that state as pigments) and preparations based thereon (con.):				
		Other:				
		Products described in additional U.S. note 3 to section VI.....	kg.....	15%	Free (CA,E,IL,J)	75.3%
3204.15.50	00	Other.....	kg.....	20%	Free (CA,E,IL,J)	75.3%
3204.16		Reactive dyes and preparations based thereon:				
3204.16.10	00	Reactive black 1; Reactive blue 1, 2, 4; Reactive orange 1; Reactive red 1, 2, 3, 5, 6; and Reactive yellow 1.....	kg.....	14.2%	Free (CA,E,IL,J)	50.8%

HARMONIZED TARIFF SCHEDULE of the United States (1993)

Annotated for Statistical Reporting Purposes

VI
32-12

Heading/ Subheading	Stat. Suf- fix	Article Description	Units of Quantity	Rates of Duty		2
				1 General	Special	
3204 (con.)		Synthetic organic coloring matter, whether or not chemically defined; preparations as specified in note 3 to this chapter based on synthetic organic coloring matter; synthetic organic products of a kind used as fluorescent brightening agents or as luminophores, whether or not chemically defined (con.):				
3204.19 (con.)		Synthetic organic coloring matter and preparations based thereon as specified in note 3 to this chapter (con.):				
		Other, including mixtures of coloring matter of two or more of the subheadings 3204.11 to 3204.19 (con.):				
		Other:				
<u>3204.19.30</u>	00	Sulfur black, "Colour Index Nos. 53185, 53190, and 53195"...	kg.....	3.3¢/kg + 14%	Free (CA,E,IL,J)	6.6¢/kg + 28%
3204.19.35	00	Beta-carotene and other carotenoid coloring matter.....	kg.....	3.1%	Free (A*,CA,E,IL,J)	25%
		Other:				
<u>3204.19.40</u>	00	Products described in additional U.S. note 3 to section VI.....	kg.....	15%	Free (CA,E,IL,J)	50.5%
<u>3204.19.50</u>	00	Other.....	kg.....	20%	Free (CA,E,IL,J)	50.5%
3204.20		Synthetic organic products of a kind used as fluorescent brightening agents:				
3204.20.10	00	Fluorescent brightening agent 32.....	kg.....	20%	Free (A*,CA,E,IL,J)	64.2%
3204.20.50	00	Other.....	kg.....	8.1%	Free (A*,CA,E,IL,J)	44.1%
3204.90.00	00	Other.....	kg.....	5.9%	Free (A*,CA,E,IL,J)	50.8%
3205.00		Color lakes; preparations as specified in note 3 to this chapter based on color lakes:				
3205.00.20	00	Carmine.....	kg.....	15%	Free (A*,CA,E,IL,J)	72%
		Other:				
3205.00.40		Products described in additional U.S. note 3 to section VI.....		15%	Free (CA,E,IL,J)	72%
	10	Yellow.....	kg			
	20	Red.....	kg			
	30	Violet.....	kg			
	40	Blue.....	kg			
	50	Other.....	kg			
3205.00.50		Other.....		20%	Free (CA,E,IL,J)	72%
	10	Yellow.....	kg			
	20	Red.....	kg			
	30	Violet.....	kg			
	40	Blue.....	kg			
	50	Other.....	kg			

APPENDIX G

SUMMARY DATA ON THE SUBJECT SULFUR DYES

Table G-1

Subject sulfur dyes: Summary data concerning the U.S. market, 1989-91, January-September 1991, and January-September 1992

* * * * *

Figure G-1

Subject sulfur dyes: Salient data

* * * * *

APPENDIX H

INCOME-AND-LOSS DATA ON INDIVIDUAL SULFUR DYE PRODUCTS

Table H-1

Combined external and internal income-and-loss experience of Sandoz on its intermediate sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-2

Income-and-loss experience of the U.S. producer and finishers on their C.I. leuco sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-3

Income-and-loss experience of Sandoz on its C.I. solubilized sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-4

Internal income-and-loss experience of Sandoz on its presscake sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-5

Income-and-loss experience of Sandoz and Southern Dye on their reduced sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-6

Income-and-loss experience of the U.S. producer and finishers on their paste sulfur vat dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-7

Income-and-loss experience of the U.S. producer and finishers on their black sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-8

Income-and-loss experience of Sandoz and Southern Dye on their environmentally safer sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

Table H-9

Income-and-loss experience of Sandoz on its C.I. leuco sulfur dye operations, fiscal years 1989-91, January-September 1991, and January-September 1992

* * * * *

APPENDIX J
COMMENTS ON THE IMPACT OF IMPORTS

1. Since January 1, 1989, has your firm experienced any actual negative effects on its growth, investment, ability to raise capital, or existing development and production efforts, including efforts to develop a derivative or more advanced version of the product, as a result of imports of SULFUR DYES (INCLUDING SULFUR VAT DYES) from CHINA, HONG KONG (for product produced in China), INDIA, OR THE UNITED KINGDOM?

* * * * *

2. Does your firm anticipate any negative impact of imports of SULFUR DYES (INCLUDING SULFUR VAT DYES) from CHINA, HONG KONG (for product produced in China), INDIA, OR THE UNITED KINGDOM?

* * * * *

3. Has the scale of capital investments undertaken been influenced by the presence of imports of SULFUR DYES (INCLUDING SULFUR VAT DYES) from CHINA, HONG KONG (for product produced in China), INDIA, OR THE UNITED KINGDOM?

* * * * *

APPENDIX K
INFORMATION RELATED TO INDIAN TRANSSHIPMENTS

*

*

*

*

*

*

*

APPENDIX L

INFORMATION RELATED TO TARIFF MISCLASSIFICATIONS

*

*

*

*

*

*

*

APPENDIX M

C.I. SOLUBILIZED SULFUR BLACK 1: F.O.B. PRICES OF U.S. AND
INDIAN PRODUCED DYES AND MARGINS OF UNDER/(OVER) SELLING

Table M-1

C.I. Solubilized Sulfur Black I: F.o.b. prices of U.S.-produced dye to end users and f.o.b. prices of Indian-produced dye sold by a distributor to end users and margins of under/(over)selling, by quarters, January 1989-September 1992

* * * * *

APPENDIX N

U.S. F.O.B. TRANSFER PRICES FOR CERTAIN U.S. CONCENTRATE

Table N-1

Net f.o.b. transfer prices of certain U.S.-produced sulfur dye concentrate, by quarters, January 1989-September 1992

* * * * *

Table N-2

C.H. Patrick's delivered purchase prices of certain Chinese- and Indian-produced sulfur dye concentrate, by quarters, January 1989-September 1992

* * * * *

Figure N-1

Sulfur black dyes: Unit values based on converted quantity

* * * * *