

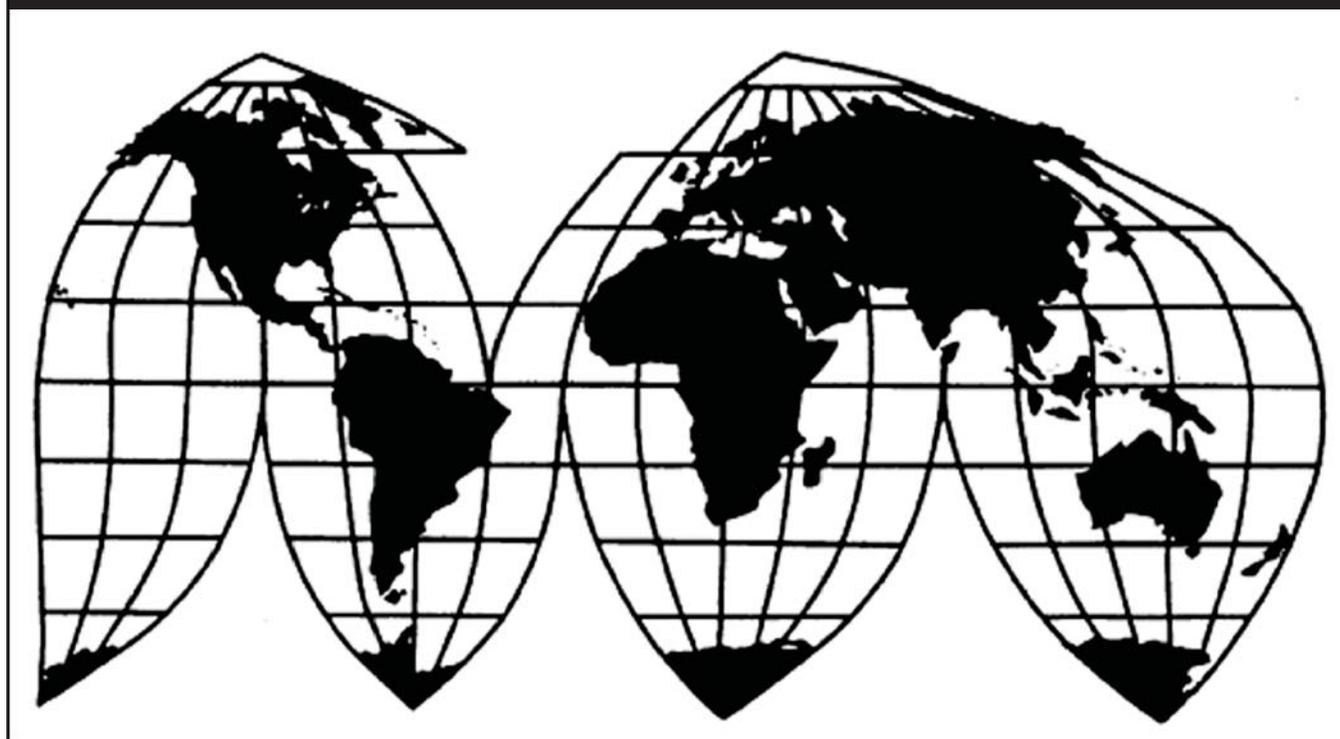
Chlorinated Isocyanurates from China and Japan

Investigation Nos. 701-TA-501 and 731-TA-1226 (Final)

Publication 4494

November 2014

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been identified by the use of ***.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-501 and 731-TA-1226 (Final)

CHLORINATED ISOCYANURATES FROM CHINA AND JAPAN

DETERMINATIONS

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to section 705(b) of the Tariff Act of 1930 (19 U.S.C. § 1671d(b)) (“the Act”), that an industry in the United States is threatened with material injury by reason of imports of chlorinated isocyanurates from China, provided for in subheadings 2933.69.6015, 2933.69.6021, 2933.69.6050, 3808.50.4000, 3808.94.5000, and 3808.99.9500 of the Harmonized Tariff Schedule of the United States, that have been found by the Department of Commerce (“Commerce”) to be subsidized by the government of China.²

The Commission further determines, pursuant to section 735(b) of the Act (19 U.S.C. § 1673d(b)), 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, by reason of imports of chlorinated isocyanurates from Japan that have been found by Commerce to be sold in the United States at less than fair value (“LTFV”).³

BACKGROUND

The Commission instituted these investigations effective August 29, 2013, following receipt of a petition filed with the Commission and Commerce by Clearon Corp., South Charleston, WV; and Occidental Chemical Corp., Dallas, TX. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of chlorinated isocyanurates from China were subsidized within the meaning of section 703(b) of the Act (19 U.S.C. § 1671b(b)) and that imports of chlorinated isocyanurates from Japan were dumped within the meaning of 733(b) of the Act (19 U.S.C. § 1673b(b)). Notice of the scheduling of the final phase 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,

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 The Commission additionally determined that it would not have found material injury by reason of subject imports of chlorinated isocyanurates from China but for the suspension of liquidation of entries on the subject imports.

³ Vice Chairman Dean A. Pinkert determines that an industry in the United States is materially injured by reason of imports from China and Japan of chlorinated isocyanurates.

Washington, DC, and by publishing the notice in the *Federal Register* on May 19, 2014 (79 FR 28771). The hearing was held in Washington, DC, on September 9, 2014, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in these investigations, we find that that an industry in the United States is threatened with material injury by reason of imports of chlorinated isocyanurates (“chlorinated isos”) from China that the U.S. Department of Commerce (“Commerce”) has found are subsidized by the government of China. We also find that an industry in the United States is not materially injured or threatened with material injury by reason of imports of chlorinated isos from Japan that Commerce has found are sold in the United States at less than fair value (“LTFV”).¹

I. Background

On August 29, 2013, Clearon Corp. (“Clearon”) and Occidental Chemical Company (“OxyChem”) (collectively referred to as “Petitioners”), both domestic producers of chlorinated isos, filed petitions with Commerce and the Commission alleging that the domestic industry was materially injured or threatened with material injury by reason of subject imports of chlorinated isos from China and Japan.²

Petitioners appeared at the hearing and submitted prehearing and posthearing briefs. Shikoku Chemicals Corporation (“SCC”) and Shikoku International Corporation (“SIC”) (collectively referred to as “Japanese Respondents” or “Shikoku”), respectively a Japanese producer/exporter and an affiliated U.S. importer of chlorinated isos from Japan, appeared at the hearing and submitted prehearing and posthearing briefs. At the hearing, witnesses from Suncoast Chemical, Inc. (“Suncoast”), a tableter of chlorinated isos, and Del Cal, Inc. (“Del Cal”), a U.S. importer of chlorinated isos, also appeared on behalf of the Japanese Respondents. No producers/exporters of chlorinated isos from China participated in the final phase investigations.

U.S. industry data are based on questionnaire responses of the three integrated producers of chlorinated isos (Clearon, OxyChem, and BioLab), which accounted for 100 percent of domestic granular/powder chlorinated isos production, and five firms that only performed tableting operations during the January 2011-June 2014 period of investigation (“POI”).³ Data on subject imports from China and Japan are based on usable questionnaire

¹ Vice Chairman Pinkert determines that an industry in the United States is materially injured by reason of imports of chlorinated isos from China that Commerce has found are subsidized by the Government of China and imports of chlorinated isos from Japan that Commerce has found are sold at LTFV. See Concurring and Dissenting Views of Vice Chairman Dean A. Pinkert. Commissioner Pinkert joins Sections I through V.C. of this opinion, except as noted.

² Confidential Report (“CR”) at I-1, Public Report (“PR”) at I-1.

³ CR/PR at Table III-1; CR at I-6, PR at I-4. Petitioners and a third domestic producer of chlorinated isos, BioLab, Inc. (“BioLab”), referred to herein as the “integrated” producers of chlorinated isos, produce granular chlorinated isos and convert the isos into tablets or contract to have tollers tablet (Continued...)

responses from ten U.S. importers, which represented the majority of subject imports from China and Japan during the POI, supplemented with proprietary Customs data.⁴ The Commission received a usable response to its questionnaires from one subject producer in China (***) , which did not export chlorinated isos to the United States during the POI.⁵ The Commission received usable questionnaire responses from three subject producers in Japan: Nankai Chemical Co., Ltd. (“Nankai”), Nissan Chemical Industries, Ltd. (“Nissan”), and SCC; they accounted for virtually all subject imports from Japan during the POI and almost all known production of chlorinated isos in Japan.⁶

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁷ Section 771(4)(A) of the Tariff Act of 1930, as amended (“the Tariff Act”), defines the relevant domestic industry as the “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”⁸ In turn, the Tariff Act defines “domestic 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.”⁹

The decision regarding the appropriate domestic like product in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or

(...Continued)

the product. Several other domestic firms are generally referred to herein as “tableters” because they do not produce the granular product, but convert it into tablets, either independently or as tollers. CR/PR at Table III-1.

The Commission received limited data from tableters. The Commission issued questionnaires to twelve firms believed to be tableters of chlorinated isos. The following tableters responded to the Commission’s questionnaires: LPM, N. Jonas, Oreq, Qualco, Stellar, and Suncoast. CR/PR at Table III-1. Only four tableters (***) provided financial data in their questionnaire responses. CR/PR at Table VI-6.

⁴ CR/PR at IV-1 & Table IV-1. Five U.S. importers provided usable pricing data, which accounted for approximately *** percent of U.S. shipments of subject imports from Japan and *** percent of subject imports from China during the POI. CR at V-10; PR at V-6 to V-7.

⁵ CR at VII-3 to VII-4; PR at VII-3.

⁶ CR at VII-7, PR at VII-4.

⁷ 19 U.S.C. § 1677(4)(A).

⁸ 19 U.S.C. § 1677(4)(A).

⁹ 19 U.S.C. § 1677(10).

“most similar in characteristics and uses” on a case-by-case basis.¹⁰ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.¹¹ The Commission looks for clear dividing lines among possible like products and disregards minor variations.¹² Although the Commission must accept Commerce’s determination as to the scope of the imported merchandise that is subsidized or sold at less than fair value,¹³ the Commission determines what domestic product is like the imported articles Commerce has identified.¹⁴

B. Product Description

In its final determinations, Commerce defined the imported merchandise within the scope of these investigations as follows:

¹⁰ See, e.g., *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *Torrington Co. v. United States*, 747 F. Supp. 744, 749 n.3 (Ct. Int’l Trade 1990), *aff’d*, 938 F.2d 1278 (Fed. Cir. 1991) (“every like product determination ‘must be made on the particular record at issue’ and the ‘unique facts of each case’”). The Commission generally considers a number of factors, including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See *Nippon*, 19 CIT at 455 n.4; *Timken Co. v. United States*, 913 F. Supp. 580, 584 (Ct. Int’l Trade 1996).

¹¹ See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

¹² *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in “such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not ‘like’ each other, nor should the definition of ‘like product’ be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.”).

¹³ See, e.g., *USEC, Inc. v. United States*, 34 Fed. Appx. 725, 730 (Fed. Cir. 2002) (“The ITC may not modify the class or kind of imported merchandise examined by Commerce.”); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int’l Trade 1988), *aff’d*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

¹⁴ *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 (“Commerce’s {scope} finding does not control the Commission’s {like product} determination.”); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission’s determination defining six like products in investigations in which Commerce found five classes or kinds).

Chlorinated isocyanurates are derivatives of cyanuric acid, described as chlorinated s-triazine triones. There are three primary chemical compositions of chlorinated isocyanurates: (1) Trichloroisocyanuric acid (“TCCA”) (Cl₃(NCO)₃), (2) sodium dichloroisocyanurate (dihydrate) (NaCl₂(NCO)₃ X 2H₂O), and (3) sodium dichloroisocyanurate (anhydrous) (NaCl₂(NCO)₃). Chlorinated isocyanurates are available in powder, granular and solid (e.g., tablet or stick) forms.¹⁵

Commerce’s scope of investigation includes all chemical and physical forms (powder, granules, and tablets) of chlorinated isos. Chlorinated isos are chemical compounds used primarily as sanitizing agents for swimming pools, spas, and industrial water treatments and as bleaching agents for detergents, bleaches, and cleansers.¹⁶ The active ingredient for sanitizing purposes is chlorine, which acts as a biocide, killing algae and other microbes.¹⁷

There are three primary chemical compositions of chlorinated isos, depending upon the amount of available chlorine, which are within Commerce’s scope of investigation: (1) trichloroisocyanuric acid or “trichlor,” which has 90 percent available chlorine; (2) sodium dichloroisocyanurate or “dichlor” in anhydrous form, which has 63 percent available chlorine; and (3) dichlor in dihydrate form, which has 56 percent available chlorine.¹⁸ Trichlor is usually sold in tablet or stick form, whereas dichlor is usually sold in granular form.¹⁹

C. Analysis

In the preliminary phase of these investigations, the Commission defined a single domestic like product, consisting of all chlorinated isos within Commerce’s scope definition.²⁰

¹⁵ Commerce’s scope definitions further indicated the following:

Chlorinated isocyanurates are currently classifiable under subheadings 2933.69.6015, 2933.69.6021, 2933.69.6050, 3808.50.4000, 3808.94.5000, and 3808.99.9500 of the Harmonized Tariff Schedule of the United States (“HTSUS”). Tariff classification 2933.69.6015 covers sodium dichloroisocyanurates (anhydrous and dihydrate forms) and trichloroisocyanuric acid. Tariff classifications 2933.69.6021 and 2933.69.6050 represent basket categories that include chlorinated isocyanurates and other compounds including an unfused triazine ring. Tariff classifications 3808.50.4000, 3808.94.5000 and 3808.99.9500 cover disinfectants that include chlorinated isocyanurates. The HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of the investigation is dispositive. 79 Fed. Reg. 56059-61 (Sept. 19, 2014) (chlorinated isos from Japan); 79 Fed. Reg. 56560-62 (Sept. 22, 2014) (chlorinated isos from China).

¹⁶ CR at I-10, PR at I-7.

¹⁷ CR at I-10, PR at I-7.

¹⁸ CR at I-10, PR at I-7.

¹⁹ CR at I-10, PR at I-7.

²⁰ *Chlorinated Isocyanurates from China and Japan*, 701-TA-501 & 731-TA-1226 (Preliminary), USITC Pub. 4431 (Nov. 2013) (“USITC Pub. 4431”) at 7-9.

The Commission found that there was not a “clear dividing line” between trichlor and dichlor, observing that these two forms of chlorinated isos have more similarities than differences.²¹ It found that trichlor and dichlor had similar chemical compositions and similar uses in sanitizing swimming pools.²² It also found that trichlor and dichlor appeared to be at least somewhat interchangeable, although consumers generally preferred one over the other in particular applications.²³ It stated that the available information on the record indicated that trichlor and dichlor were sold in similar channels of distribution.²⁴ It stated that trichlor and dichlor were made from a common feedstock and observed that OxyChem and Clearon produced both products utilizing the same employees at the same facilities, as well as similar production processes, although on separate, dedicated production lines.²⁵ Specifically, consumers tend to “shock” their pools with dichlor in May or June and then use trichlor in slower release tablets for maintenance thereafter.²⁶ It also stated that the record on price differences between trichlor and dichlor was mixed.²⁷ In light of the foregoing considerations, and absent any arguments by the parties to the contrary, the Commission found that trichlor and dichlor were part of a single domestic like product.²⁸ Accordingly, it found a single domestic like product, consisting of all chlorinated isos, that was coextensive with Commerce’s scope definition.²⁹

The record in the final phase of these investigations does not contain any new information concerning the domestic like product factors,³⁰ and there is no argument that the Commission should adopt a definition of the domestic like product that is different from that in the preliminary determinations.³¹ Therefore, for the reasons set forth in the preliminary determinations, we define a single domestic like product consisting of all chlorinated isos, coextensive with the scope of the investigations.

III. Domestic Industry

A. In General

The statute defines the relevant industry as the “producers as a {w}hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes

²¹ USITC Pub. 4431 at 9.

²² USITC Pub. 4431 at 7-8.

²³ USITC Pub. 4431 at 8.

²⁴ USITC Pub. 4431 at 8.

²⁵ USITC Pub. 4431 at 8-9. BioLab produces only trichlor. *Id.* at 24 n.151.

²⁶ CR at II-19; PR at II-10.

²⁷ USITC Pub. 4431 at 9.

²⁸ USITC Pub. 4431 at 9.

²⁹ USITC Pub. 4431 at 9.

³⁰ *See generally*, CR at I-10 to I-14, PR at I-7 to I-9.

³¹ *See* Petitioners’ Prehearing Br. at 3; Japanese Respondents’ Prehearing Br. at 4.

a major proportion of the product.” In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

There are two domestic industry issues in these investigations. The first concerns whether tableters engage in sufficient production activity to be considered members of the domestic industry. The second concerns whether appropriate circumstances exist to exclude any producer from the domestic industry pursuant to the statutory related parties provision.

B. Sufficient Production-Related Activities

None of the parties in the final phase of these investigations disputes that the three integrated producers are domestic producers of chlorinated isos. These firms (Clearon, OxyChem, and BioLab) produce and sell both granular and tableted chlorinated isos (Clearon and BioLab produce tablets internally, while OxyChem toll produces tablets).³² Petitioners argue, however, that the domestic firms that solely tablet chlorinated isos do not engage in sufficient production-related activity to qualify as domestic producers.³³ Respondents disagree.³⁴

In deciding whether a firm qualifies as a domestic producer, the Commission generally analyzes the overall nature of a firm’s production-related activities in the United States to determine if they are sufficient to constitute domestic production within the meaning of the statute. The Commission generally considers six factors in this analysis: (1) source and extent of the firm’s capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product.³⁵ No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation.³⁶

We discuss each of these factors in turn.³⁷

³² CR at III-4-5. PR at III-3.

³³ Petitioners’ Prehearing Br. at 44-48; Petitioners’ Posthearing Br. at 43-55.

³⁴ Japanese Respondents’ Posthearing Br., Exh. 1, Answers to Commissioners’ Questions at 88-107.

³⁵ *Diamond Sawblades and Parts Thereof from China and Korea*, Inv. Nos. 731-TA-1092-93 (Final), USITC Pub. 3862 at 8-11 (July 2006).

³⁶ *Diamond Sawblades and Parts Thereof from China and Korea*, Inv. Nos. 731-TA-1092-93 (Final), USITC Pub. 3862 at 8-11 (July 2006).

³⁷ In the preliminary phase of these investigations, the Commission found that the tableters were engaged in sufficient production-related activities to qualify as domestic producers. It found that (1) the capital investment of the tableters was substantial, and their work involved some technical expertise with hazardous materials; (2) tableters employed a significant number of personnel in their (Continued...)

Source and Extent of the Firm's Capital Investment. The capital investment and capital expenditures necessary for tableting operations are substantial, although they are much lower than the investment necessary to produce granular trichlor and dichlor. The responding chlorinated isos tableters' reported total assets were *** in 2011, *** in 2012, and *** in 2013,³⁸ whereas total assets reported for granular/powder chlorinated isos were *** in 2011, *** in 2012, and ***.³⁹ Tableters reported capital expenditures of *** in 2011, *** in 2012, and *** in 2013, *** in January-June 2013 ("interim 2013"), and *** in January-June 2014 ("interim 2014").⁴⁰ By contrast, granular chlorinated isos producers reported capital expenditures of *** in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014.⁴¹

Technical Expertise Involved in U.S. Production Activities. Tableting production is a less complicated process than production of the granulated product and entails less extensive employee training.⁴² However, because chlorinated isos are hazardous chemicals, tableting operations require specialized equipment and maintenance, specific measures to prevent the release of caustic gas (which may result in respiratory and other health-related issues), and appropriately trained staff.⁴³ Workers producing the granular product are paid approximately *** per hour, whereas tableting workers are paid approximately *** per hour.⁴⁴

Value Added to the Product in the United States. Based on questionnaire responses, the value added by U.S. tableting operations excluding SG&A expenses ranged from *** percent,

(...Continued)

U.S. operations; (3) the value added to the finished product by tableting, including SG&A expenses, ranged from *** percent (and ranged from *** excluding SG&A expenses); (4) U.S. tableters sourced granular chlorinated isos from domestic as well as import sources; and (5) tableters also reported other costs as part of their tableting operations. Given these considerations, the Commission concluded that, on balance, the record indicated that tableters were engaged in sufficient production-related activities to be considered producers of the domestic like product. USITC Pub. 4431 at 10-12.

³⁸ CR/PR at Table VI-9. These data are only for firms with stand-alone tableting operations.

³⁹ CR/PR at Table VI-9.

⁴⁰ CR/PR at Table VI-8.

⁴¹ CR/PR at Table VI-8. We note that the total assets reported for BioLab and Clearon's tableting operations totaled around \$*** in each of the full years of the POI, while capital expenditures for these tableting operations totaled between \$*** and \$*** during those years, lending further support to the conclusion that tableting requires substantial capital investment. CR/PR at Table VI-8 and Table VI-9.

⁴² CR at I-12 to I-14, PR at I-8 to I-9. Petitioners' Posthearing Br., Exh. 1, Answers to Commissioners' Questions at 44.

⁴³ CR at I-14, PR at I-9; Hearing Tr. at 140, 165 (Eisch); Japanese Respondents' Posthearing Br., Exh. 1, Answers to Commissioners' Questions at 95-97.

⁴⁴ CR/PR at Table III-7 & Table SUPP-3. These data are only for firms with stand-alone tableting operations.

with an average of *** percent, and the value added including SG&A expenses ranged from *** percent, with an average of *** percent.⁴⁵

Employment Levels. Tableters employ a substantial number of production and related workers (“PRWs”). Tableters that responded to the Commission’s questionnaire reported employing *** PRWs in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014.⁴⁶ Producers of granular/powder chlorinated isos reported employing *** PRWs in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014.⁴⁷

Quantity and Type of Parts Sourced in the United States. The record indicates that U.S. tableters source granular chlorinated isos from both domestic and subject sources.⁴⁸

Other Costs and Activities in the United States Leading to Production of the Like Product. Tableters reported other significant costs incurred in the United States, including training, marketing, machinery repair, and licensing costs.⁴⁹

Conclusion. Based upon the record in the final phase of these investigations, we find that the tableters are engaged in sufficient production-related activities to qualify as domestic producers.⁵⁰ The capital investment of the tableters is substantial,⁵¹ and their work involves some technical expertise involving hazardous materials.⁵² The tableters employ a significant number of personnel in their U.S. operations.⁵³ The value added to the finished product by tableting including SG&A expenses ranged from *** percent during the POI, which is not insubstantial.⁵⁴ The record indicates that U.S. tableters source granular chlorinated isos from domestic as well as subject sources.⁵⁵ Tableters also reported other significant costs as part of their tableting operations, including training, marketing, machinery repair, and licensing costs.⁵⁶ We accordingly find that the record indicates that tableters engage in sufficient production-related activities to be considered producers of the domestic like product.

⁴⁵ CR/PR at Table VI-7. These data are only for firms with stand-alone tableting operations.

⁴⁶ CR/PR at Table SUPP-3. These data are only for firms with stand-alone tableting operations.

⁴⁷ CR/PR at Table SUPP-3. We note that BioLab and Clearon reported between *** and *** PRWs for their tableting operations in the full years of the POI, lending further support to the conclusion that tableting entails substantial employment levels.

⁴⁸ CR/PR at Table II-1; CR at III-6 to III-8, PR at III-3.

⁴⁹ Japanese Respondents’ Prehearing Br. at 8 & Exh. 1C.

⁵⁰ Commissioner Johanson does not join this finding and instead finds that the tableters do not engage in sufficient production-related activities to qualify as domestic producers. See Separate Views of Commissioner David S. Johanson.

⁵¹ CR/PR at Tables VI-8 & VI-9.

⁵² CR at I-14, PR at I-9; Hearing Tr. at 140 (Eisch), 163-64 (Janzen), and 165 (Eisch).

⁵³ CR/PR at Table SUPP-3.

⁵⁴ CR/PR at Table VI-7.

⁵⁵ CR/PR at Table II-1; CR at III-6 to III-8, PR at III-3.

⁵⁶ Japanese Respondents’ Posthearing Br., Exh. 1A at 2 & Exh. 1D at 2.

C. Related Parties

This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.⁵⁷ Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.⁵⁸

Petitioners argue that, if the Commission includes tableters in the domestic industry definition, it should find that appropriate circumstances exist to exclude one tableter (***) under the related parties provision of the statute.⁵⁹ Japanese Respondents did not address the issue of related parties.

*** and *** are related parties under the statute because they each imported subject merchandise during the POI.⁶⁰ We discuss below whether appropriate circumstances exist to exclude either of these producers from the domestic industry.

***. We find that appropriate circumstances do not exist to exclude *** from the domestic industry. *** accounted for *** percent of domestic production of granular/powder chlorinated isos and *** percent of domestic production of tablets during the POI.⁶¹ It ***,⁶² and its interests appear to lie principally in domestic production. *** imports of subject merchandise were *** compared to its domestic production over the period of investigation; its ratio of subject imports to domestic production ranged from *** percent during the POI.⁶³ *** incurred *** for most of the POI.⁶⁴ ⁶⁵ Because we find that *** interests lie primarily in

⁵⁷ See *Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd mem.*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem.*, 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

⁵⁸ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following: (1) the percentage of domestic production attributable to the importing producer; (2) the reason 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 producer 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. See, *e.g.*, *Torrington Co. v. United States*, 790 F. Supp. at 1168.

⁵⁹ Petitioners argue that *** relied heavily on subject imports of chlorinated isos in its tableting operations and that *** substantially benefitted from its imports *** to the performance of domestic integrated producers BioLab, Clearon, and OxyChem. See *e.g.*, Petitioners' Prehearing Br. at 44-45.

⁶⁰ CR/PR at Tables III-8 & III-9.

⁶¹ CR/PR at Table III-1.

⁶² CR/PR at Table III-1.

⁶³ CR/PR at Table III-8.

⁶⁴ CR/PR at Tables VI-4.

domestic production, we find that appropriate circumstances do not exist to exclude it from the domestic industry.

***. *** is a tableter that *** and also imports and purchases subject merchandise.^{66 67} *** is a relatively small tableter, accounting for approximately *** percent of U.S. tablet production during the POI;⁶⁸ its production was *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014.⁶⁹ Although it did not import any subject merchandise in 2011, *** imported *** pounds of subject merchandise from Japan in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014.^{70 ***.}⁷¹

The record indicates that, during the POI, *** interests lay primarily in domestic production, as indicated by its ratio of imports to domestic production.⁷² Moreover, its *** during the POI does not appear to be correlated with its importation of subject merchandise – *** exceeded industry averages in years when it imported *** of subject merchandise as well as when its subject imports ***. *** accounts for only a small share of domestic tablet production. Based on these facts, we find that appropriate circumstances do not exist to exclude *** from the domestic industry.

Conclusion. We define the domestic industry to include the three integrated producers of chlorinated isos and all tableters.⁷³

(...Continued)

⁶⁵ As he has done in other investigations, Vice Chairman Pinkert has not relied upon related parties' financial performance on their U.S. manufacturing operations as a factor in determining whether there are appropriate circumstances to exclude them from the domestic industry and has instead relied on the other information set forth in the text. He has not relied upon their financial performance because the record in the final phase of these investigations does not reflect a link between their profitability and any benefit that they derive from imports.

⁶⁶ CR at III-7, PR at III-3.

⁶⁷ Commissioner Johanson does not join this discussion because he does not find that tableters are part of the domestic industry.

⁶⁸ CR/PR at Table III-1.

⁶⁹ CR/PR at Tables III-1 & III-9.

⁷⁰ CR/PR at Table III-9.

⁷¹ CR/PR at Table III-1.

⁷² The ratio of *** imports of subject merchandise to its U.S. production was *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in interim 2013, and *** percent in interim 2014. CR/PR at Table III-9.

⁷³ Commissioner Johanson does not find that the tableters are part of the domestic industry.

IV. Cumulation⁷⁴

A. Legal Framework

For purposes of evaluating the volume and price effects for a determination of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

- (1) the degree of fungibility between subject imports from different countries and between subject 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 subject imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
- (4) whether the subject imports are simultaneously present in the market.⁷⁵

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.⁷⁶ Only a “reasonable overlap” of competition is required.⁷⁷

⁷⁴ The questionnaire data indicate imports from each subject country exceeded the requisite 3 percent statutory negligibility threshold for the most recent 12-month period prior to the filing of the petition for which data are available. From August 2012 to July 2013, subject imports from China accounted for 46.5 percent of total U.S. imports of chlorinated isos by quantity, and U.S. imports from Japan accounted for 45.7 percent of total U.S. imports. CR at Table IV-9 (p. IV-16), PR at Table IV-9 (p. IV-6). Because subject imports from each of the subject countries were above the applicable statutory negligibility thresholds, we find that subject imports from China and Japan are not negligible under 19 U.S.C. § 1677(24).

⁷⁵ See *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

⁷⁶ See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

⁷⁷ The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that “the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition.” H.R. Rep. No. 103- (Continued...)

In the preliminary phase of these investigations, the Commission cumulated subject imports from Japan and China in its analysis of material injury by reason of subject imports.⁷⁸ In the final phase of these investigations, Petitioner contends that the Commission should cumulate subject imports from Japan and China because there is a reasonable overlap of competition.⁷⁹ Japanese Respondents, however, argue that the Commission should not cumulate subject imports because of a lack of fungibility and differences in channels of distribution between subject imports from Japan and China.⁸⁰

B. Analysis

In these investigations, the threshold criterion for cumulation is satisfied because Petitioners filed the antidumping duty petition with respect to subject imports from Japan and the countervailing duty petition with respect to subject imports from China on the same day, August 29, 2013.⁸¹ We thus examine whether there is a reasonable overlap of competition between subject imports from China and Japan and between subject imports from each source and the domestic like product.

Fungibility. The record indicates that domestically produced chlorinated isos and the subject imports from China and Japan are generally fungible.⁸² While there may be some quality differences between the products from different sources, including inferiority of subject merchandise from China in terms of off-gassing and consistency in granular particle size,⁸³ the overwhelming majority of market participants reported that granular/powder chlorinated isos from the United States, China, and Japan were always or frequently interchangeable.⁸⁴

(...Continued)

316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902; *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.")).

⁷⁸ USITC Pub. 4431 at 15-19.

⁷⁹ Petitioners' Prehearing Br. at 23-27; Petitioners' Posthearing Br., Exh. 1, Answers to Commissioners' Questions at 2-5.

⁸⁰ Japanese Respondents' Prehearing Br. at 26-41; Japanese Respondents' Posthearing Br., Answers to Commissioners' Questions at 17-28.

⁸¹ CR at I-1 to I-2, PR at I-1.

⁸² *See e.g.*, CR/PR at Tables II-10 & II-11.

⁸³ CR at II-27 to II-28 & II-37 to II-39, PR at II-15 & PR at II-22 to II-23.

⁸⁴ When comparing granular/powder chlorinated isos, eleven U.S. purchasers reported that subject imports from China and Japan are always interchangeable, and fifteen of eighteen U.S. purchasers reported that subject imports from both countries are always or frequently interchangeable with the domestic like product. Seven of eight U.S. producers reported that subject imports from China and Japan are always or frequently interchangeable with each other, and at least seven of nine U.S. producers reported that subject imports from both subject countries are always or frequently interchangeable.

(Continued...)

Similarly, most market participants reported that tableted chlorinated isos from subject and domestic sources were always or frequently interchangeable.⁸⁵ When comparing U.S. produced granular/powder chlorinated isos to tableted chlorinated isos from both subject countries, most U.S. producers and purchasers reported that they are always or frequently interchangeable, although importer responses were mixed.⁸⁶

Most purchasers also reported that subject merchandise from China and Japan were comparable to each other in terms of a variety of non-price factors including availability, delivery time, reliability of supply, and quality meeting industry standards.⁸⁷ Moreover, as discussed above, the majority of market participants reported that chlorinated isos from the United States, China, and Japan, whether in granular/powder or tableted form, were always or frequently interchangeable. Consequently, the responses of market participants indicate that any perceived quality differences or differences in the form (*i.e.*, granular/powder v. tablets) of

(...Continued)

interchangeable with the domestic like product. Four of six U.S. importers reported that subject imports from China and Japan are always or frequently interchangeable with each other, and at least four of six U.S. importers reported that subject imports from both subject countries are always or frequently interchangeable with the domestic like product. CR/PR at Table II-11.

⁸⁵ Eight of ten U.S. purchasers reported that subject imports from China and Japan are always interchangeable, and at least twelve of eighteen U.S. purchasers reported that subject imports from both countries are always or frequently interchangeable with the domestic like product. Seven of eight U.S. producers reported that subject imports from China and Japan are always or frequently interchangeable with each other, and at least seven of nine U.S. producers reported that subject imports from both subject countries are always or frequently interchangeable with the domestic like product. Two of three U.S. importers reported that, subject imports from China and Japan are always or frequently interchangeable with each other, and two of three U.S. importers reported that subject imports from both subject countries are always or frequently interchangeable with the domestic like product. CR/PR at Table II-11.

⁸⁶ For these granular-to-tableted comparisons, six of ten U.S. purchasers reported that subject imports from China and Japan are always interchangeable, at least eight of seventeen U.S. purchasers reported that subject imports from both countries are always or frequently interchangeable with the domestic like product. Similarly, seven of eight U.S. producers reported that subject imports from China and Japan are always or frequently interchangeable with each other, and seven of nine U.S. producers reported that subject imports from both subject countries are always or frequently interchangeable with the domestic like product. Two of four U.S. importers reported that, subject imports from China and Japan are always or frequently interchangeable with each other and two of four U.S. importers reported that subject imports from both subject countries are always or frequently interchangeable with the domestic like product. CR/PR at Table II-11.

⁸⁷ CR/PR at Table II-10. Purchasers also found the domestic like product and subject imports from Japan comparable in all non-price factors. Purchasers' comparisons of the domestic like product and subject imports from China were more varied. Nevertheless, a majority of purchasers found these products comparable in terms of quality meeting industry standards. *Id.*

subject imports from China and Japan do not significantly impair the interchangeability of the products.

Channels of Distribution. In the tablet segment of the market, which represents a significant portion of the U.S. market, the record indicates that substantial percentages of the domestic product and the subject imports from China and Japan were sold to retailers during most of the POI.^{88 89} Accordingly, we find that there is sufficient overlap in terms of channels of distribution. We emphasize that the pertinent inquiry concerns whether there is a “reasonable” overlap of competition and that completely overlapping markets are not required.⁹⁰

Geographic Overlap. The record indicates the presence of sales or offers to sell the domestic like product and subject imports in the same geographic markets. Both U.S. producers and importers from each of the subject countries reported selling chlorinated isos to all regions in the contiguous United States.⁹¹

⁸⁸ CR/PR at Table II-3. As a share of total reported shipments, U.S. producers’ U.S. shipments of tableted chlorinated isos sold to retailers were *** percent in 2011, *** percent in 2012, *** percent in 2013, and *** percent in interim 2013 and interim 2014. *Id.* For subject imports from China, the percentage of U.S. importers’ U.S. shipments sold to retailers was *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in interim 2013, and *** percent in interim 2014. *Id.* For subject imports from Japan, the percentage of U.S. importers’ U.S. shipments sold to retailers was *** percent in 2011 and *** percent in 2012 (U.S. importers of subject imports from Japan did not sell tableted chlorinated isos in the U.S. market in 2013 or interim 2014). *Id.*

⁸⁹ The record also indicates that, with respect to the granular/powder segment of the market, there is also some overlap in terms of channels of distribution. For granular/powder chlorinated isos, the record indicates that appreciable percentages of the domestic like product and subject imports from China and Japan were sold to tableters/repackers in both 2011 and 2012; however, there were considerable disparities between the distribution patterns for subject imports from China, on the one hand, and those from Japan, on the other, at the end of the POI. CR/PR at Table II-2. Specifically, in 2013 and interim 2014, overwhelming percentages of subject imports from China were sold to distributors, while domestic shipments and subject imports from Japan were sold mainly to tableters/repackers. CR/PR at Table II-2.

⁹⁰ *Wieland Werke*, 718 F. Supp. at 52; *Flores v. United States*, 704 F. Supp. 582, 592 (Ct. Int’l Trade 1989). Japanese Respondents emphasize that, during the POI, subject imports from Japan consisted entirely of granular/powder chlorinated isos while subject imports from China consisted predominantly of tableted chlorinated isos. *See e.g.*, Japanese Respondents’ Posthearing Br., Answers’ to Commissioners’ Questions at 23-24. We note that U.S. importers’ commercial U.S. shipments from China were primarily sold in tableted form during the POI, but in 2012, *** percent of such shipments were sold in powder/granular form. CR/PR at Table IV-6. To the extent that sales of granular/powder chlorinated isos constituted a different channel of distribution than sales of tableted chlorinated isos, the record indicates a reasonable overlap of competition across those channels.

⁹¹ CR/PR at Table II-4; CR at II-10 to II-11, PR at II-4 to II-5. Official Customs data also show that subject imports from China and Japan entered the United States in most geographical regions during the POI. CR/PR at Table IV-11; CR at IV-17 to IV-18, PR at IV-7 to IV-8.

Simultaneous Presence in Market. The record indicates that chlorinated isos from all sources were simultaneously present in the U.S. market. Chlorinated isos produced in the United States, China, and Japan were sold in the United States in every month between January 2011 and June 2014.⁹²

Conclusion. As discussed above, we find that the four cumulation criteria are satisfied in these investigations. We therefore conclude that there is a reasonable overlap of competition between imports from each subject country and the domestic like product and between subject imports from Japan and China. Consequently, we cumulatively assess subject imports from China and Japan for determining material injury by reason of the subject imports.

V. Analysis of Material Injury by Reason of Cumulated Subject Imports

A. In General

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.⁹³ In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.⁹⁴ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”⁹⁵ In assessing whether the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.⁹⁶ No single factor is dispositive, and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁹⁷

Although the statute requires the Commission to determine whether the domestic industry is “materially injured or threatened with material injury by reason of” unfairly traded imports,⁹⁸ it does not define the phrase “by reason of,” indicating that this aspect of the injury

⁹² CR at Table IV-9 (p. IV-17), PR at Table IV-9 (p. IV-7); CR at IV-16, PR at IV-7.

⁹³ 19 U.S.C. §§ 1671d(b), 1673d(b).

⁹⁴ 19 U.S.C. § 1677(7)(B). The Commission “may consider such other economic factors as are relevant to the determination” but shall “identify each {such} factor ... and explain in full its relevance to the determination.” 19 U.S.C. § 1677(7)(B).

⁹⁵ 19 U.S.C. § 1677(7)(A).

⁹⁶ 19 U.S.C. § 1677(7)(C)(iii).

⁹⁷ 19 U.S.C. § 1677(7)(C)(iii).

⁹⁸ 19 U.S.C. §§ 1671d(a), 1673d(a).

analysis is left to the Commission's reasonable exercise of its discretion.⁹⁹ In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.¹⁰⁰

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.¹⁰¹ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.¹⁰² Nor does

⁹⁹ *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("The statute does not 'compel the commissioners' to employ {a particular methodology}.", *aff'g*, 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

¹⁰⁰ The Federal Circuit, in addressing the causation standard of the statute, observed that "[a]s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred 'by reason of' the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" See also *Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

¹⁰¹ SAA at 851-52 ("The Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); accord *Mittal Steel*, 542 F.3d at 877.

¹⁰² SAA at 851-52 ("The Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n*, 266 F.3d at 1345 ("The Commission need not isolate the injury caused by other factors from injury caused by unfair imports (Continued...)

the “by reason of” standard require that unfairly traded imports be the “principal” cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as non-subject imports, which may be contributing to overall injury to an industry.¹⁰³ It is clear that the existence of injury caused by other factors does not compel a negative determination.¹⁰⁴

Assessment of whether material injury to the domestic industry is “by reason of” subject imports “does not require the Commission to address the causation issue in any particular way” as long as “the injury to the domestic industry can reasonably be attributed to the subject imports” and the Commission “ensure{s} that it is not attributing injury from other sources to the subject imports.”¹⁰⁵ ¹⁰⁶ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”¹⁰⁷

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Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.” (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int’l Trade 2002) (“{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury” or make “bright-line distinctions” between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that “{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an ‘other causal factor,’ then there is nothing to further examine regarding attribution to injury”), *citing Gerald Metals*, 132 F.3d at 722 (the statute “does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.”).

¹⁰³ S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

¹⁰⁴ *See Nippon Steel Corp.*, 345 F.3d at 1381 (“an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the ‘dumping’ need not be the sole or principal cause of injury.”).

¹⁰⁵ *Mittal Steel*, 542 F.3d at 877-78; *see also id.* at 873 (“While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured ‘by reason of’ subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.”) *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75.

¹⁰⁶ Vice Chairman Pinkert does not join this paragraph or the following three paragraphs. He points out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is required, in certain circumstances when considering present material injury, to undertake a particular kind of analysis of non-subject imports, albeit without reliance upon presumptions or rigid formulas. *Mittal Steel* explains as follows:

What *Bratsk* held is that “where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market,” the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of

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The Federal Circuit’s decisions in *Gerald Metals*, *Bratsk*, and *Mittal Steel* all involved cases where the relevant “other factor” was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit’s guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.¹⁰⁸ The additional “replacement/benefit” test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission’s interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have “evidence in the record” to “show that the harm occurred ‘by reason of’ the LTFV imports,” and requires that the Commission not attribute injury from non-subject imports or other factors to subject imports.¹⁰⁹ Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.¹¹⁰

(...Continued)

investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

¹⁰⁷ *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 (“*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was ‘by reason’ of subject imports.”).

¹⁰⁸ *Mittal Steel*, 542 F.3d at 875-79.

¹⁰⁹ *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission’s alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

¹¹⁰ To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in final phase investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission’s causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries (Continued...)

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.¹¹¹ Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.¹¹²

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is material injury or threat of material injury by reason of subject imports.

1. Data Issues

We first note two overarching data issues in the final phase of these investigations. First, in calculating apparent U.S. consumption, we have made several adjustments to the U.S. producers' U.S. shipment data (1) to avoid double counting of chlorinated isos that were produced in granular form and then tableted directly and (2) to properly value granulated chlorinated isos that were tableted domestically from imported powder.¹¹³ Second, when calculating import data, we have relied upon questionnaire responses supplemented by proprietary Customs data for the importers that did not respond to the Commission's questionnaires.¹¹⁴

2. Demand Considerations

Approximately 85 to 90 percent of chlorinated isos in the U.S. market are used as residential pool sanitizers.¹¹⁵ Chlorinated isos are also used in industrial water treatment applications and as ingredients in detergents and cleansers.¹¹⁶ There is some seasonality in the market tied to swimming pool use, with most retail sales being made in the second and third

(...Continued)

that export to the United States. The Commission plans to continue utilizing published or requested information in final phase investigations in which there are substantial levels of nonsubject imports.

¹¹¹ We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

¹¹² *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp.*, 458 F.3d at 1350, citing *U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

¹¹³ CR/PR at Table IV-12 nn.1, 2, and 3. In order to avoid double-counting issues relating to resales and re-packaging operations, we relied upon U.S. importers' U.S. imports for calculating U.S. apparent consumption rather than U.S. importers' U.S. shipments of imports. *Id.*

¹¹⁴ CR/PR at IV-1 & Table IV-1.

¹¹⁵ CR at II-19, PR at II-10.

¹¹⁶ CR at II-19, PR at II-10.

quarters of the year.¹¹⁷ Consumers tend to “shock” their pool with dichlor in May or June and then use trichlor for maintenance thereafter.¹¹⁸ The record shows shipments of chlorinated isos increasing in the first quarter of each year and peaking in the second quarter.¹¹⁹

Demand for chlorinated isos is affected by new housing construction,¹²⁰ although a rebound in the U.S. housing market during the POI did not result in significantly increased new residential swimming pool construction.¹²¹ New swimming pools are increasingly being equipped with salt chlorine generators, which do not require the addition of chlorinated isos.¹²²

There is evidence in the record that poor weather conditions in many regions of the United States resulted in lower pool usage and therefore particularly weak demand for chlorinated isos in 2013 and interim 2014.¹²³ Purchasers, U.S. producers, and importers cited, among other factors, poor weather conditions, competition from saltwater pools, and depressed levels of new swimming pool construction as reasons for declining chlorinated isos demand during the POI.¹²⁴ Apparent U.S. consumption of chlorinated isos increased from 2011 to 2012, and then declined in 2013 to a level below that of 2011.¹²⁵ Apparent U.S. consumption of chlorinated isos was *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013.¹²⁶

3. Supply Considerations

OxyChem, BioLab, and Clearon, the three U.S. manufacturers of granular/powder chlorinated isos, also subsequently tablet the product themselves or contract to have it tableted by other firms via tolling agreements.¹²⁷ Tableters, on the other hand, obtain granular

¹¹⁷ CR at II-19, PR at II-10.

¹¹⁸ CR at II-19, PR at II-10.

¹¹⁹ CR at II-19, PR at II-10.

¹²⁰ Hearing Tr. at 91 (Helmstetter), 220 (Klett).

¹²¹ Hearing Tr. at 91 (Helmstetter).

¹²² CR at II-22 to II-23, PR at II-12.

¹²³ CR at II-20 to II-21, PR at II-11.

¹²⁴ CR at II-20 to II-21, PR at II-11.

¹²⁵ CR/PR at Table C-1.

¹²⁶ Apparent U.S. consumption of chlorinated isos also was lower in interim 2014, at *** pounds, than in interim 2013, at *** pounds. CR/PR at Table C-1.

¹²⁷ CR at III-4 to III-5, PR at III-3. Clearon and OxyChem produce both dichlor and trichlor; BioLab produces only trichlor and purchases granular dichlor from ***. CR at III-4 to III-5, PR at III-3; CR/PR at Appendix E-3. Clearon and BioLab manufacture granular/powder trichlor and then tablet and package it at their own dedicated tableting and packaging facilities. CR at III-4 to III-5, PR at III-3. OxyChem does not directly tablet any chlorinated isos itself; it has tolling arrangements for tableting and packaging with several firms, including ***. CR at III-5, PR at III-3. *** CR/PR at Table II-1. *** CR at III-4; PR at III-3. *** CR at VII-8 n.13; PR at VII-4 n.14.

product from various sources, including domestic product and subject imports.¹²⁸ Thus, there is competition in the tablet segment of the market between the three integrated producers (*e.g.*, BioLab, Clearon, and OxyChem) and stand-alone tableters (*e.g.*, LPM, N. Jonas, Oreq, Qualco, Stellar, and Suncoast).¹²⁹ After tableting and packaging, the product is sold through mass merchant retailers, pool service companies, “big box” stores such as ***, and other retail outlets.¹³⁰

The domestic industry was the largest source of chlorinated isos in the U.S. market over the POI; its share of apparent U.S. consumption declined from *** percent in 2011 to *** percent in 2012, and then increased to *** percent in 2013.¹³¹ Cumulated subject imports held the second largest share of the U.S. market during the POI; their share of apparent U.S. consumption increased from *** percent in 2011 to *** percent in 2012, and then declined to *** percent in 2013.¹³² Subject imports of chlorinated isos from China have been subject to an antidumping duty order since June 2005.¹³³ Nonsubject imports had a very small presence in the U.S. market throughout the POI; their share of apparent U.S. consumption was *** percent in 2011, *** percent in 2012, and *** percent in 2013.¹³⁴

During the POI, subject imports from Japan were entirely in granular/powder form, while subject imports from China were in both granular/powder and tableted form.¹³⁵ Shikoku, the largest producer/exporter of chlorinated isos in Japan, sourced some of its supply for sale in the U.S. market from domestic producer OxyChem pursuant to an agreement between the two firms.¹³⁶

¹²⁸ CR at III-4 to III-5, PR at III-3 to III-4. As discussed earlier, the following six tableters responded to the Commission’s questionnaires: LPM, N. Jonas, Oreq, Qualco, Stellar, and Suncoast. CR/PR at Table III-1. *** CR at III-7 to III-8, PR at III-3. As discussed earlier, Commissioner Johanson does not find that the tableters are part of the domestic industry.

¹²⁹ CR/PR at Table III-1.

¹³⁰ CR at II-4; PR at II-2.

¹³¹ The domestic industry’s share of apparent U.S. consumption was higher in interim 2014, at *** percent, than in interim 2013, at *** percent. CR/PR at Table C-1.

¹³² Cumulated subject imports’ market share was lower in interim 2014, at *** percent, than in interim 2013, at *** percent. CR/PR at Table IV-12.

¹³³ CR at I-7 & n.10, PR at I-5 & n.10.

¹³⁴ Nonsubject imports’ market share was lower in interim 2014, at *** percent, than in interim 2013, at *** percent. CR/PR at Table IV-12. Mexico and Italy were the largest sources of nonsubject imports. CR at VII-15; PR at VII-6. Petitioners allege that there is no chlorinated isos production in Taiwan and that any chlorinated isos imported from Taiwan are transshipped from China. *See e.g.*, Petitioners’ Comments on Draft Questionnaires (May 27, 2013) at 11. However, the record does not indicate that Commerce has initiated anticircumvention proceedings with respect to imports of chlorinated isos from Taiwan.

¹³⁵ CR/PR at Tables IV-3 to IV-5.

¹³⁶ CR at VII-8 n.13; PR at VII-4 n.13.

4. Substitutability and Other Considerations

Based on the record in the final phase of these investigations, we find that there is at least a moderate degree of substitutability among domestically produced chlorinated isos and chlorinated isos from both subject sources.¹³⁷ As discussed above, the overwhelming majority of market participants reported that chlorinated isos from the United States, China, and Japan were always or frequently interchangeable,¹³⁸ despite the fact that there may be some quality differences between the products from the different sources.¹³⁹

Most purchasers reported that they purchased chlorinated isos through short-term contracts during the POI.¹⁴⁰ However, several large purchasers reported that virtually all of their purchases in 2013 were made using long-term contracts.¹⁴¹ Price negotiations frequently occur at the end of the pool season for the following season, and negotiations are typically complete by the end of September.¹⁴²

Raw materials accounted for between *** and *** percent of the cost of goods sold (“COGS”) for U.S. production of granular/powder chlorinated isos during the POI.¹⁴³ Urea and natural gas are both inputs into cyanuric acid, which, with further processing, yields chlorinated isos.¹⁴⁴ Urea and natural gas prices fluctuated for most of the POI, and then declined in interim 2014.¹⁴⁵

C. Volume of Cumulated Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the “Commission shall 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.”¹⁴⁶

Cumulated subject imports entered the U.S. market in substantial quantities throughout the POI. The volume of cumulated subject imports was *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013; it was *** pounds in interim 2013 and *** pounds in interim 2014.¹⁴⁷

¹³⁷ CR at II-24, PR at II-13.

¹³⁸ CR/PR at Table II-11 (discussing a “moderate-to-high degree of substitutability”).

¹³⁹ These differences included possible inferiority in performance in some respects by subject imports from China. CR at II-27 to II-28, PR at II-15; Japanese Respondents’ Prehearing Br. at 35-36; Hearing Tr. at 145 (Eisch).

¹⁴⁰ CR at II-31, PR at II-17.

¹⁴¹ CR at II-31, PR at II-17.

¹⁴² CR at V-5, PR at V-3.

¹⁴³ Derived from CR/PR at Table VI-1.

¹⁴⁴ CR/PR at V-1.

¹⁴⁵ CR/PR at Figures V-1 & V-2.

¹⁴⁶ 19 U.S.C. § 1677(7)(C)(i).

¹⁴⁷ CR/PR at Table IV-12.

While the market shares of cumulated subject imports, the domestic like product, and nonsubject imports fluctuated during the POI, little overall change occurred between 2011 and 2013, with subject import share falling overall by *** percentage points.¹⁴⁸ Cumulated subject imports' market share increased from *** percent in 2011 to *** percent in 2012 before falling to *** percent in 2013.¹⁴⁹ The domestic industry's market share was *** percent in 2011, *** percent in 2012, and *** percent in 2013.¹⁵⁰ Nonsubject imports' market share was *** percent in 2011, *** percent in 2012, and *** percent in 2013.¹⁵¹

After the filing of the petition in these investigations, the volume of cumulated subject imports declined considerably, comparing the interim 2014 to that in interim 2013.¹⁵² Similarly, the market share of cumulated subject imports was lower in interim 2014 than in interim 2013.¹⁵³ We attribute this decline at least in part to the pendency of these investigations; accordingly, in our analysis, we have given reduced weight to the data for interim 2014.¹⁵⁴

We find the volume and market share of cumulated subject imports to be significant, both absolutely and relative to domestic production and consumption.¹⁵⁵ However, for the reasons we discuss below, we do not find that the cumulated subject imports had significant price effects or a significant impact on the domestic industry.

D. Price Effects of the Cumulated Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that evaluating the price effects of the subject imports, the Commission shall consider whether

- (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
- (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.¹⁵⁶

¹⁴⁸ CR/PR at Table IV-12.

¹⁴⁹ CR/PR at Table IV-12.

¹⁵⁰ CR/PR at Table IV-12.

¹⁵¹ CR/PR at Table IV-12.

¹⁵² CR/PR at Table IV-12.

¹⁵³ The volume of cumulated subject imports was *** pounds in interim 2013 and *** pounds in interim 2014. The market share of cumulated subject imports was *** percent in interim 2013 and *** percent in interim 2014. CR/PR at Table IV-12.

¹⁵⁴ 19 U.S.C. 1677(7)(I) & SAA at 854.

¹⁵⁵ Vice Chairman Pinkert does not join the remainder of this opinion. See Separate and Dissenting Views of Commissioner Dean A. Pinkert.

¹⁵⁶ 19 U.S.C. § 1677(7)(C)(ii).

Domestic and subject imported chlorinated isos are generally considered to be substitutable. Price is an important factor in purchasing decisions, but quality, consistency, and availability were also rated as important.¹⁵⁷ Most purchasers reported that differences other than price were always or frequently significant when comparing the domestic like product and subject merchandise from China and Japan with each other.¹⁵⁸ Moreover, as discussed earlier in our analysis of substitutability, some purchasers reported quality differences that indicate there are non-price reasons for purchasing subject imports from Japan, including low off-gassing and consistent particle size.¹⁵⁹

In the final phase of these investigations, the Commission collected quarterly pricing data on eight pricing products¹⁶⁰ from three U.S. producers of granulated chlorinated isos, four U.S. tableters, and five importers.¹⁶¹ Pricing data reported by these firms accounted for *** percent of the domestic industry's U.S. shipments of domestic product, *** percent of U.S. shipments of subject imports from China, and *** percent of U.S. shipments of subject imports from Japan during the POI.^{162 163}

¹⁵⁷ CR/PR at Tables II-7 & II-8. Most purchasers ranked quality as the most important factor in purchasing decisions, price as the second most important factor, and availability the third. CR/PR at Table II-7. In terms of identifying which factors were "very important" in purchasing decisions, 24 purchasers selected availability, 23 selected product consistency, 23 selected price, and 22 selected quality meets industry standards. CR/PR at Table II-8.

¹⁵⁸ CR/PR at Table II-13.

¹⁵⁹ CR at II-28, PR at II-15.

¹⁶⁰ See CR at V-9 to V-10, CR at V-5 to V-6. Product 1 is granular trichlor, products 2-5 are granular dichlor, and products 6-8 are trichlor tablets.

¹⁶¹ CR at V-10, PR at V-6. As discussed above, we have included the tableters in the domestic industry. Since tableting is therefore domestic production, regardless of the source of the granular/powder input, we base our pricing comparisons for Products 6, 7, and 8 on the data listed for "includes mixed-origin product classified as domestic product." See e.g., CR/PR at Tables V-8 to V-10. Commissioner Johanson does not join this footnote.

¹⁶² CR at V-10, PR at V-6 to V-7. Notwithstanding Petitioners' suggestion to the contrary, we find that the pricing data coverage in the final phase of these investigations is reasonably comprehensive and allows us to assess price effects of the subject imports in the U.S. market. While coverage for subject merchandise from China is lower than coverage for domestically produced chlorinated isos or subject merchandise from Japan (in part due to toll production arrangements which absorb a substantial share of subject imports from China), we find that it is reasonably sufficient to provide an accurate depiction of the pricing of subject imports from China. CR at V-10 n.9, PR at V-7 n.9. Accordingly, our underselling analysis relies principally upon the producer and importer pricing data, consistent with what the Commission typically collects and relies on in investigations. Nevertheless, we discuss below Petitioners' arguments with respect to other price information.

¹⁶³ Because Commissioner Johanson does not treat tableters as part of the domestic industry, his price analysis excludes price data reported by tableters (***). Thus, the coverage ratios for his pricing products are *** percent of U.S. producers' shipments, *** percent of shipments of Chinese imports, and *** percent of shipments of Japanese imports. EDIS Doc. 545352.

There was predominant overselling by cumulated subject imports during the POI. The data show that subject imports oversold the domestic like product in *** of *** quarterly price comparisons, or *** percent of such comparisons, by margins ranging from *** percent to *** percent.¹⁶⁴ By comparison, subject imports undersold the domestic like product in the remaining *** comparisons, or *** percent of such comparisons, by margins ranging from *** percent to *** percent.^{165 166}

We have also assessed pricing product data on a volume basis. Overselling by cumulated subject imports accounted for *** percent of the total volume of U.S. shipments of subject imports reported by importers of the subject products during the POI.^{167 168} Thus, underselling was concentrated in lower-volume products and in quarters when the subject imports were sold in much lower quantities.

Accordingly, we do not find underselling by cumulated subject imports during the POI to be significant.¹⁶⁹

¹⁶⁴ CR/PR at Table V-12.

¹⁶⁵ CR/PR at Table V-12.

¹⁶⁶ For the pricing data used by Commissioner Johanson, there was also predominant overselling by cumulated subject imports during the POI. The data show that prices of cumulated subject imports oversold the domestic like product in *** of *** quarterly comparisons, or in *** percent of such comparisons, by margins ranging from *** percent to *** percent. By comparison, cumulated subject imports undersold the domestic like product in *** of *** quarterly comparisons, or in *** percent of such comparisons, by margins ranging from *** percent to *** percent. EDIS Doc. 545352.

¹⁶⁷ CR at Table V-13, p. V-43, PR at Table V-13, p. V-13. For subject imports from Japan, there was overselling by *** percent of the total reported volume. For subject imports from China, there was overselling by *** percent of the total reported volume. *Id.*

¹⁶⁸ For Commissioner Johanson, when evaluated by volume, overselling remained predominant, with *** percent of total sales volume for the pricing products over the POI showing overselling. EDIS Doc. 545352.

¹⁶⁹ Petitioners argue that the Commission should have evaluated purchaser pricing data for its underselling analysis. *See, e.g.,* Petitioners' Posthearing Br. at 40-43; Petitioners' Prehearing Br. at 37-43. We have considered the purchaser data in Appendix F, and find that these generally reflect similar pricing patterns to the quarterly price comparisons based upon U.S. importers' and U.S. producers' sales prices. *See, e.g.,* CR/PR at Appendix F & OINV Supplemental Worksheet (EDIS Doc. No. 544102).

Petitioners also suggest an alternative method of ascertaining underselling that they contend provides a more comprehensive pricing comparison at the same level of trade. They suggest comparing U.S. producers' quarterly pricing data for bulk isos products (pricing products 1, 2, 3, and 5) with average unit value data derived from official import statistics for HTS subheading 2933.69.6015, which include dichlor and trichlor in bulk quantities. They contend that this comparison demonstrates pervasive underselling by the subject imports. *See, e.g.,* Petitioners' Posthearing Brief at 11 and Ex. 4. However, Petitioners are incorrect that this proposed method compares values at the same level of trade. Rather, Petitioners' proposed method compares direct import costs with U.S. sales prices, and therefore, the proposed method compares values at different levels of trade. Petitioners' proposed method also improperly compares values of a mixed basket of goods. The Federal Circuit has criticized the use of
(Continued...)

Cumulated subject imports did not have significant price-depressing effects during the POI. While domestic and subject import prices declined for virtually all pricing products during the POI,¹⁷⁰ we do not find that these price declines were due to cumulated subject imports. Demand generally declined during the POI, and the domestic industry's raw material costs also declined after 2012, factors which would tend to lead to price declines.¹⁷¹ Moreover, cumulated subject imports mainly oversold the domestic like product during the POI, as is particularly apparent when the pricing data are assessed on a volume-weighted basis.¹⁷² Given these considerations, we find that cumulated subject imports did not have the effect of depressing domestic prices to a significant degree during the POI.

Because demand generally declined during the POI, and the domestic industry's raw material costs also declined after 2012, the domestic industry's ability to institute price increases was quite limited. Accordingly, we find that the cumulated subject imports, which predominantly oversold the domestic like product, did not have the effect of preventing price increases that would otherwise have occurred to a significant degree.

In view of the foregoing, we find that cumulated subject imports did not have the effect of depressing prices or preventing price increases that would otherwise have occurred to a significant degree. While there are some confirmed lost sales and revenues, the total volume and revenue involved in these allegations are very small compared to the domestic industry's total sales, and do not outweigh other data in the record showing the lack of significant price effects.¹⁷³ Accordingly, we do not find that the cumulated subject imports had significant price effects.

(...Continued)

AUVs as a basis for establishing price trends when there are serious issues of product mix, and where the values may thus reflect different merchandise rather than differences in prices. *Allegheny Ludlum Corp. v. United States*, 287 F.3d 1365, 1373-74 (Fed. Cir. 2002). We consequently have not relied on this AUV data in our analysis of underselling.

¹⁷⁰ CR/PR at Tables V-3 to V-10.

¹⁷¹ CR/PR at Tables C-1, VI-1 & VI-2

¹⁷² CR/PR at Table V-13, p. V-43, PR at Table V-13, p. V-13.

¹⁷³ Of the 26 lost sales allegations, totaling \$***, four, totaling \$*** and between *** and *** pounds, were confirmed. CR/PR at Table V-13. Of the 20 lost revenues allegations totaling \$***, just one, totaling \$*** and *** pounds, was confirmed. CR/PR at Table V-14. In comparison, the domestic industry's total U.S. shipments by value ranged between \$*** and \$*** between 2011 and 2013. CR/PR at Table C-1. Thus, we do not find that these confirmed allegations outweigh the other data supporting our finding that there were no significant adverse price effects by reason of cumulated subject imports.

We also have examined the additional claims of lost sales involving seven purchasers and totaling *** pounds of chlorinated isos which Petitioners raised for the first time in their posthearing brief. Petitioners' Posthearing Br. at 9-10. Staff examined the purchase data provided in purchasers' questionnaire responses to assess the accuracy of these claims. Of the nine claims, staff confirmed three claims involving ***, ***, and ***. See, e.g., U.S. Purchaser Questionnaire Responses, sections V-1 and V-2 and CR at V-47, PR at V-15. These three claims totaled an estimated \$*** and involved *** (Continued...)

E. Impact of the Cumulated Subject Imports¹⁷⁴

Section 771(7)(C)(iii) of the Tariff Act provides that examining the impact of subject imports, the Commission “shall evaluate all relevant economic factors which have a bearing on the state of the industry.”¹⁷⁵ These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”

Most of the domestic industry’s trade, employment, and financial indicators deteriorated over the POI, corresponding with declines in apparent U.S. consumption of chlorinated isos. With respect to its granular/powder operations, the domestic industry’s capacity remained virtually constant throughout the POI.¹⁷⁶ Production, capacity utilization, and shipments declined between 2011 and 2013, although inventories also declined.^{177 178} The

(...Continued)

pounds of chlorinated isos. For similar reasons as those discussed above with respect to Petitioners’ confirmed lost sales allegations, we do not find these claimed lost sales, even assuming the claims are legitimate, outweigh the other data supporting our finding that there were no significant adverse price effects by reasons of cumulated subject imports. We also note that lost sales and revenue claims should be raised by Petitioners at a point in the investigation when they can be properly examined and verified by the Commission.

¹⁷⁴ The statute instructs the Commission to consider the “magnitude of the dumping margin” in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination with respect to subject imports from Japan, Commerce found dumping margins of 151.80 percent for Nankai Chemical Co., Ltd., 60.65 percent for Shikoku Chemicals Corp.; and 60.65 percent for all others. CR/PR at Table I-2. In its final determination with respect to subject imports from China, Commerce found subsidy margins ranging from 1.55 percent to 20.06 percent for two Chinese producers/exporters of chlorinated isos, and 10.81 percent for all others. CR/PR at Table I-1.

¹⁷⁵ 19 U.S.C. § 1677(7)(C)(iii); see also SAA at 851 and 885 (“In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.”).

¹⁷⁶ Production capacity was *** pounds in 2011, 2012, and 2013; it was *** pounds in interim 2013 and interim 2014. CR/PR at Table C-1.

¹⁷⁷ Production was *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. Capacity utilization was *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in interim 2013, and *** percent in interim 2014. U.S. shipments (by quantity) were *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds (Continued...)

number of production and related (“PRW”) workers, hours worked, and wages paid declined between 2011 and 2013.¹⁷⁹

For granular/powder operations, the domestic industry’s financial performance indicia generally deteriorated during the POI. Although the quantity of net sales increased between 2011 and 2013, the value of net sales declined during that period.¹⁸⁰ The domestic industry’s ratio of COGS to net sales increased.¹⁸¹ Operating income and operating income as a ratio to net sales declined steadily throughout the POI.¹⁸² Capital expenditures and research and development expenses also declined.¹⁸³

With respect to tableting operations, the industry’s trade data were mixed.¹⁸⁴ Tableting capacity increased during the POI.¹⁸⁵ Production, capacity utilization, and shipments declined

(...Continued)

in interim 2013, and *** pounds in interim 2014. U.S. shipments (by value) were \$*** in 2011, \$*** in 2012, \$*** pounds in 2013, \$*** in interim 2013, and \$*** in interim 2014. CR/PR at Table C-1.

¹⁷⁸ End-of-period inventories were *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. CR/PR at Table C-1.

¹⁷⁹ PRWs were *** in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014. Total hours worked were *** in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014. Wages paid were \$*** in 2011, \$*** in 2012, \$*** in 2013, \$*** in interim 2013, and \$*** in interim 2014. Worker productivity totaled *** pounds per hour in 2011, *** pounds per hour in 2012, *** pounds per hour in 2013, *** pounds per hour in interim 2014, and *** pounds per hour in interim 2014. CR/PR at Table SUPP-3.

¹⁸⁰ The quantity of net sales was *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. The value of net sales was \$*** in 2011, \$*** in 2012, \$*** in 2013, \$*** in interim 2013, and \$*** in interim 2014. CR/PR at Table C-1.

¹⁸¹ The domestic industry’s ratio of COGS to net sales increased from *** percent in 2011 to *** percent in 2012 and *** percent in 2013; it was higher in interim 2014, at *** percent, than in interim 2013, at *** percent. CR/PR at Table C-1.

¹⁸² Operating income totaled \$*** in 2011, \$*** in 2012, \$*** in 2013, \$*** in interim 2013, and \$*** in interim 2014. As a ratio to net sales, operating income was *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in interim 2013, and *** percent in interim 2014. CR/PR at Table VI-2.

¹⁸³ Capital expenditures fell from \$*** in 2011 to \$*** in 2012 and \$*** in 2013. They totaled \$*** in interim 2013 and \$*** in interim 2014. Research and development expenses fell from \$*** in 2011 to \$*** in 2012 and \$*** in 2013. They totaled \$*** in interim 2013 and \$*** in interim 2014. CR/PR at Table VI-8.

¹⁸⁴ In our impact analysis, we have considered ¹⁸⁴ the pertinent data for all tableters, including both the stand-alone tableters and the tableting operations of the integrated firms. Commissioner Johanson does not join in the discussion of the tableters in these two paragraphs as he excludes them from the domestic industry.

¹⁸⁵ Capacity was *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013; it was *** pounds in interim 2013 and *** pounds in interim 2014. CR/PR at Table C-1.

throughout the POI.¹⁸⁶ Inventories also increased during the POI.¹⁸⁷ The number of production PRWs, hours worked, and wages paid, however, increased during the POI.¹⁸⁸

For tableting operations, the domestic industry's financial performance indicia generally declined during the POI. Net sales (by quantity and by value) declined between 2011 and 2013.¹⁸⁹ The ratio of COGS to net sales increased during this period.¹⁹⁰ Operating income and operating income as a ratio to net sales declined steadily throughout the POI.¹⁹¹ Capital expenditures remained unchanged between 2011 and 2013, while research and development expenses declined between 2011 and 2013.¹⁹²

While the industry's condition declined over the POI, we do not find that the record in the final phase of these investigations shows a correlation between declines in the domestic industry's financial performance and increases in cumulated subject import volumes. On the one hand, the domestic industry's financial performance declined from 2011 to 2012 as cumulated subject import volumes increased both absolutely and relative to apparent

¹⁸⁶ Production was *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. Capacity utilization was *** percent in 2011, *** percent in 2012, *** percent in 2013, *** percent in interim 2013, and *** percent in interim 2014. U.S. shipments (by quantity) were *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. U.S. shipments (by value) were \$*** in 2011, \$*** in 2012, \$*** pounds in 2013, \$*** in interim 2013, and \$*** in interim 2014. CR/PR at Table C-1.

¹⁸⁷ End-of-period inventories were *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. CR/PR at Table C-1.

¹⁸⁸ PRWs were *** in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014. Total hours worked were *** in 2011, *** in 2012, *** in 2013, *** in interim 2013, and *** in interim 2014. Wages paid were \$*** in 2011, \$*** in 2012, \$*** in 2013, \$*** in interim 2013, and \$*** in interim 2014. Worker productivity totaled *** pounds per hour in 2011, *** pounds per hour in 2012, *** pounds per hour in 2013, *** pounds per hour in interim 2013, and *** pounds per hour in interim 2014. CR/PR at Table SUPP-3.

¹⁸⁹ The quantity of net sales was *** pounds in 2011, *** pounds in 2012, *** pounds in 2013, *** pounds in interim 2013, and *** pounds in interim 2014. The value of net sales was \$*** in 2011, \$*** in 2012, \$*** in 2013, \$*** in interim 2013, and \$*** in interim 2014. CR/PR at Table SUPP-3.

¹⁹⁰ The ratio of COGS to net sales increased from *** percent in 2011 to *** percent in 2012 and *** percent in 2013; it was higher in interim 2014, at *** percent, than in interim 2013, at *** percent. CR/PR at Table C-1.

¹⁹¹ Operating income totaled \$*** in 2011. Operating losses were \$*** in 2012, \$*** in 2013, \$*** in interim 2013, and \$*** in interim 2014. As a ratio to net sales, operating income was *** percent in 2011, negative *** percent in 2012, negative *** percent in 2013, negative *** percent in interim 2013, and negative *** percent in interim 2014. CR/PR at Table VI-3.

¹⁹² Capital expenditures were \$*** in 2011, \$*** in 2012 and \$*** in 2013. They totaled \$*** in interim 2013 and \$*** in interim 2014. Research and development expenses were \$*** in 2011 to \$*** in 2012 and \$*** in 2013. They were \$*** in interim 2013 and \$*** in interim 2014. CR/PR at Table VI-8.

consumption.¹⁹³ However, the domestic industry's financial performance also declined from 2012 to 2013, notwithstanding the fact that the volume of cumulated subject imports declined both absolutely and relative to apparent consumption during that time.¹⁹⁴ In fact, the operating income ratio for both granular/powder operations fell more sharply in 2013 than in 2012.¹⁹⁵ In addition, the industry's financial condition was substantially worse in interim 2014 than in interim 2013, despite the sharp drop in cumulated subject import volume and market share in interim 2014 compared to interim 2013.¹⁹⁶

Thus, regardless of whether the volume of cumulated subject imports in the U.S. market increased or declined, the domestic industry's condition deteriorated. In light of this lack of correlation between the cumulated subject imports and key indicators of the domestic industry's condition, we cannot find that the cumulated subject imports caused the significant declines in the domestic industry's performance during the POI.

Rather, we find that the domestic industry's unfavorable trends in operating performance were due to revenues declining both absolutely and relative to costs. Declining revenues, in turn, were caused at least in part by declining demand for chlorinated isos during the POI. To the extent there may have been other causes for the domestic industry's revenue declines, none of these related to the cumulated subject imports. As discussed above, the respective market shares of cumulated subject imports and the domestic industry remained relatively stable between 2011 and 2013 and there was not significant underselling by the cumulated subject imports, and the cumulated subject imports did not have significant adverse price effects during the POI.

In view of the foregoing, we find that the cumulated subject imports have not had a significant impact on the domestic industry. We accordingly determine that the domestic industry is not materially injured by reason of cumulated subject imports.

VI. Threat of Material Injury

A. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."¹⁹⁷ The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its

¹⁹³ CR/PR at Table C-1.

¹⁹⁴ CR/PR at Table C-1.

¹⁹⁵ CR/PR at Tables VI-2 & VI-3.

¹⁹⁶ CR/PR at Table C-1.

¹⁹⁷ 19 U.S.C. § 1677(7)(F)(ii).

determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.¹⁹⁸ In making our determination, we consider all statutory threat factors that are relevant.¹⁹⁹

B. Cumulation for Threat Analysis

Because our determinations address the issue of threat of material injury by reason of subject imports, we must consider whether to cumulate subject imports from Japan and China for purposes of a threat analysis. In contrast to cumulation for present material injury, cumulation for threat analysis is discretionary. Under section 771(7)(H) of the Tariff Act, the Commission may “to the extent practicable” cumulatively assess the volume and price effects

¹⁹⁸ 19 U.S.C. § 1677(7)(F)(ii).

¹⁹⁹ These factors are as follows:

...

(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,

(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,

(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices and are likely to increase demand for further imports,

(V) inventories of the subject merchandise,

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

...

(VIII) 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 domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).

19 U.S.C. § 1677(7)(F)(i). To organize our analysis, we discuss the applicable statutory threat factors using the same volume/price/impact framework that applies to our material injury analysis. Statutory threat factors (II), (III), (V), and (VI) are discussed in the analysis of subject import volume. Statutory threat factor (IV) is discussed in the analysis of subject import price effects. Statutory factors (VIII) and (IX) are discussed in the analysis of impact. Statutory factor (I) concerning countervailable subsidies is inapplicable to our determination concerning subject imports from Japan. Statutory factor (VII) concerning agricultural products are inapplicable to either of our determinations.

of subject imports from all countries as to which petitions were filed on the same day if the requirements for cumulation in the material injury context are satisfied.²⁰⁰

In section IV, we found that the requirements for cumulating subject imports for purposes of our material injury analysis are satisfied. For our analysis of threat of material injury, however, we find that subject imports from Japan and China are not likely to compete under similar conditions of competition in the U.S. market in the imminent future, based on the following considerations.

First, subject imports from Japan and China showed different volume trends during the POI: subject imports from Japan were relatively stable while subject imports from China fluctuated during the POI. The volume of subject imports from Japan increased from *** pounds in 2011 to *** pounds in 2012, but decreased to *** pounds in 2013.²⁰¹ The volume of subject imports from China, however, increased from *** pounds in 2011 to *** pounds in 2012, then decreased to *** pounds in 2013.²⁰²

Second, subject imports from Japan and China showed different pricing behavior during the POI. Subject imports from Japan were priced higher than subject imports from China in virtually all pricing comparisons, particularly for their highest-volume product (*i.e.*, Product 1).²⁰³ During the POI, subject imports from China more frequently undersold the domestic like product than did subject imports from Japan, whether measured by the total number of price comparisons or on a volume basis.²⁰⁴

Third, the record in the final phase of these investigations indicates other important differences between the manner in which subject imports from China and Japan competed in the U.S. market during the POI. During the POI, subject imports from Japan competed entirely in the granular/powder segment of the market;²⁰⁵ by comparison, subject imports from China competed in both the granular/powder and tablet segments of the market.²⁰⁶ As discussed above, subject imports of chlorinated isos from China have been subject to an antidumping

²⁰⁰ 19 U.S.C. § 1677(7)(H).

²⁰¹ CR/PR at Table IV-12.

²⁰² CR/PR at Table IV-12. While imports from both subject countries were lower in interim 2014 than interim 2013, we found above this was a result of these investigations and post-petition effects.

²⁰³ CR/PR at Tables V-3 to V-10.

²⁰⁴ During the POI, subject imports from China undersold the domestic like product in *** of ***, or *** percent, of quarterly price comparisons; by comparison, subject imports from Japan undersold the domestic like product in *** of ***, or *** percent, of quarterly price comparisons. CR/PR at Table V-12. On a volume basis, underselling by subject imports from Japan accounted for approximately *** percent of their total sales volume reported for the pricing products during the POI while overselling accounted for approximately *** percent of their total sales volume; by comparison, underselling by subject imports from China accounted for *** percent of their total sales volume reported for the pricing products during the POI while overselling accounted for *** percent of their total sales volume. CR at Table V-13, p. V-43, PR at Table V-13, p.V-13.

²⁰⁵ CR/PR at Tables IV-3 & IV-4.

²⁰⁶ CR/PR at Tables IV-3 & IV-4.

duty order since June 2005; however, subject imports from Japan have not been subject to an order.²⁰⁷ Finally, as noted above, there are some reported quality differences between the products from different sources, including inferiority of subject merchandise from China in terms of off-gassing and consistency in granular particle size.²⁰⁸

Based upon the differences discussed above, we find that subject imports from Japan and China are likely to compete in the U.S. market under significantly different conditions of competition in the imminent future. Accordingly, for purposes of our analysis of threat of material injury by reason of subject imports, we exercise our discretion not to cumulate subject imports from Japan and China.

C. Threat of Material Injury by Reason of Subject Imports from China

1. Likely Volume

As discussed above, the volume of subject imports from China fluctuated during the POI, but maintained a significant presence in the U.S. market.²⁰⁹ The volume of subject imports from China increased from *** pounds in 2011 to *** pounds in 2012, then decreased to *** pounds in 2013.²¹⁰ The market share of subject imports from China increased from *** percent in 2011 to *** percent in 2012, then declined to *** percent in 2013.²¹¹

The record in the final phase of these investigations indicates that when demand improved during the POI, subject imports from China significantly increased their presence in the U.S. market. As discussed above, U.S. apparent consumption of chlorinated isos increased from *** pounds in 2011 to *** pounds in 2012, an increase of *** percent.²¹² From 2011 to 2012, the volume of subject imports from China increased by *** percent, from *** pounds in 2011 to *** pounds in 2012, and their market share rose from *** percent to *** percent.²¹³ In other words, the record indicates that, as demand increased from 2011 to 2012, subject imports from China rapidly increased their presence in the U.S. market, rising by more than the increase in demand.

Although the volume of subject imports from China declined in 2013, that particular year featured anomalously low demand for chlorinated isos due at least in part to poor weather conditions and an unseasonably cold swimming pool season across many regions of the United States.²¹⁴ In light of the fact that demand was anomalously low in 2013, we expect that in the imminently foreseeable future demand will likely return to levels more closely approximating

²⁰⁷ CR at I-7 & n.10, PR at I-5 & n.10.

²⁰⁸ CR at II-27 to II-28 & II-37 to II-39, PR at II-15 & PR at II-22 to II-23.

²⁰⁹ CR/PR at Table IV-12.

²¹⁰ CR/PR at Table IV-12.

²¹¹ CR/PR at Table IV-12.

²¹² CR/PR at Table IV-12.

²¹³ CR/PR at Table IV-12.

²¹⁴ CR at II-21, PR at II-11.

those of 2011 and 2012. Consequently, we find that the volume levels in 2011 and 2012 are more indicative of the likely volume of subject merchandise from China in the imminent future. As U.S. demand returns to historic levels, subject imports from China will likely significantly increase their presence in the U.S. market in the imminent future, as they did in 2012, the last time that demand improved during the POI.²¹⁵

The large size and growth of the chlorinated isos industry in China indicates that the industry is fully capable of supplying increased volumes of subject merchandise to the U.S. market. The Commission issued foreign producers'/exporters' questionnaires to fifteen firms in China believed to produce and/or export chlorinated isos; however, only one subject producer from China submitted a questionnaire response, and it does not currently export chlorinated isos to the United States.²¹⁶ Publicly available data collected from an independent source indicates that the chlorinated isos industry in China is large and growing, export-oriented, and possesses significant excess capacity.²¹⁷ Available data on the record, including Chinese foreign producer questionnaire responses from the preliminary phase of these investigations, similarly indicate that the industry in China is exported oriented (particularly to the U.S. market),²¹⁸ possesses substantial excess capacity,²¹⁹ and has sizeable and growing inventories of chlorinated isos.²²⁰ Moreover, the European Union imposed antidumping duties on imports of trichlor from China in 2005 and continued the order in December 2011, restricting Chinese exports to a major market.^{221 222}

²¹⁵ We find additional support in the record for this likelihood in the purchasing behavior during the POI by one of the largest purchasers of chlorinated isos, ***. In 2012, when demand improved, *** purchased *** pounds of subject merchandise from China, while it also purchased *** pounds of domestically produced chlorinated isos. In 2013, however, when demand declined, *** purchased *** pounds of domestic product and only *** pounds of subject merchandise from China in 2013. See LPM's Purchaser Questionnaire.

²¹⁶ CR at VII-3; PR at VII-3.

²¹⁷ CR at VII-4, PR at VII-3.

²¹⁸ In the preliminary phase of these investigations, the Chinese industry's exports to the United States as a share of total shipments increased steadily from *** percent in 2010 to *** percent in 2012. By comparison, its exports to all other markets as a share of total shipments declined irregularly from *** percent in 2010 to *** percent in 2012. Prelim. CR/PR at Table VII-1.

²¹⁹ In the preliminary phase of these investigations, the Chinese industry's capacity utilization ranged from *** percent to *** percent between 2010 and 2012. CR/PR at Table VII-1 (Preliminary).

²²⁰ In the preliminary phase of these investigations, end-of-period inventories for subject producers from China increased from *** pounds in 2010 to *** pounds in 2012. As a share of total shipments, their inventories increased from *** percent in 2010 to *** percent in 2012. CR/PR at Table VII-1 (Preliminary Staff Report).

U.S. importers' end-of-period inventories fell from *** pounds in 2012 to *** pounds in 2013, but rose as a ratio to imports, from *** percent to *** percent. CR/PR at Table VII-6. In interim 2014, when subject imports from China declined sharply due to these investigations, U.S. importers' inventories of subject imports from China declined as well, ending at *** pounds. *Id.*

²²¹ CR at VII-14; PR at VII-5-VII-6.

In sum, Chinese producers have both the ability and incentive to significantly increase the volume and market penetration of subject imports from China in the imminent future. We find that imports of the subject merchandise are likely to increase significantly in the imminent future in response to a likely increase in U.S. demand, just as they did in 2012 when demand improved.²²³

2. Likely Price Effects

As discussed above, the Commission collected quarterly pricing data for eight products between 2011 and 2014. Sales of subject imports from China were reported for *** of *** pricing products,²²⁴ with the highest volume of subject merchandise from China concentrated in Product 1 (granular/powder chlorinated isos).²²⁵

The record reflects a pattern of mixed underselling by subject imports from China during the POI. Underselling by subject imports from China accounted for *** percent of their total sales volume reported for the pricing products during the POI, while overselling accounted for *** percent of that total sales volume.²²⁶ Subject imports from China undersold the domestic like product in *** of ***, or *** percent, of quarterly price comparisons.²²⁷

As discussed above, chlorinated isos are at least moderately substitutable from all sources, price is important factor in purchasing decisions, and mixed underselling by subject imports from China is likely in the imminent future. In light of these findings, we find that large and increasing volumes of subject imports from China will likely depress or suppress prices for the domestic like product in the imminent future. Underselling by Chinese subject imports is also likely to increase demand for further imports. Faced with such subject imports, the domestic industry will be forced to lower prices or maintain them even if costs increase, or lose sales to subject imports.

(...Continued)

²²² We also observe that among the programs that Commerce found countervailable, two were specifically directed to export activities. In its final countervailing duty determination on subject imports from China, Commerce found ten programs to be countervailable. See Countervailing Duty Investigation of Chlorinated Isocyanurates from the People's Republic of China: Issues and Decision Memorandum for the Final Determination (Sept. 8, 2014) ("Commerce Issues and Decision Memorandum"); CR/PR at Appendix D. Commerce indicated that two of these programs, a grad for export credit insurance and export seller's and buyer's credits for Export-Import Bank of China, are specifically for export activities. CR/PR at Appendix D-12-22 (Commerce Issues and Decision Memorandum).

²²³ There is no evidence on the record either in the preliminary or final phase of these investigations indicating a potential for product-shifting by the chlorinated isos industry in China.

²²⁴ CR/PR at Tables V-3 to V-10 & V-12.

²²⁵ CR/PR at Table V-3; CR at Table V-13, p. V-43, PR at Table V-13, p. V-13.

²²⁶ CR at Table V-13, p. 43; PR at Table V-13, p. V-13.

²²⁷ CR/PR at Table V-12.

3. Likely Impact

As discussed above, subject imports from China are likely to enter the United States in increasing volumes as demand recovers, and will take sales that otherwise would have gone to the domestic industry. The likely increase of subject imports from China will likely negatively affect the domestic industry's production, capacity utilization, shipments, and employment. The likely lower prices of subject imports from China will negatively affect the domestic industry's revenues, profits, and overall financial performance.

We have also considered other factors, including nonsubject imports, to ascertain that we are not attributing likely injury from these factors to subject imports from China. The vast majority of imports from sources other than China are subject imports from Japan,²²⁸ which we have determined neither materially injure nor threaten material injury to the domestic industry. The quantity of U.S. shipments from all other sources was not significant throughout the POI, and the record does not contain any indication that this volume will likely become significant in the imminent future.²²⁹

For the foregoing reasons, we conclude that the domestic industry is threatened with material injury by reason of subject imports from China.²³⁰

D. No Threat of Material Injury by Reason of Subject Imports from Japan

1. Likely Volume

Subject imports from Japan maintained a relatively stable presence in the U.S. market between 2011 and 2013. The volume of subject imports from Japan increased from *** pounds in 2011 to *** pounds in 2012, and decreased to *** pounds in 2013, for an overall increase of *** percent from 2011 to 2013.²³¹ The market share of subject imports from Japan increased from *** percent in 2011 to *** percent in 2012 and *** percent in 2013, for an overall increase of *** percentage points.²³²

The record in the final phase of these investigations does not indicate that the stable presence of subject imports from Japan in the U.S. market is likely to change in the imminent future. The production and production capacity of the chlorinated isos industry in Japan was

²²⁸ CR/PR at Table IV-1.

²²⁹ The quantity of U.S. imports from all sources other than China and Japan was *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013. The market share of imports from these sources was *** percent in 2011, *** percent in 2012, and *** percent in 2013. CR/PR at Table IV-12.

²³⁰ In light of the available data concerning subject import volume from China during the POI, we note that we would not have found material injury by reason of subject imports but for the suspension of liquidation of entries on the subject imports. See 19 U.S.C. §§ 1671d(b)(4)(B), 1673d(b)(4)(B).

²³¹ CR/PR at Table C-1.

²³² CR/PR at Table C-1.

virtually flat between 2011 and 2013.²³³ The Japanese industry projects that its production will decline significantly in the imminent future, while its production capacity will remain stable.²³⁴ The Japanese industry also projects that its exports to third-country markets will increase significantly in 2014 and 2015.²³⁵ Although the industry in Japan possessed some excess capacity during the POI,²³⁶ the absolute volume and market share of subject imports from Japan in the U.S. market were almost the same in 2013 as in 2011, as discussed above. In other words, despite its excess capacity, the chlorinated isos industry in Japan did not significantly increase its shipments of subject merchandise to the U.S. market during the POI. We find that this behavior is unlikely to change in the imminent future, notwithstanding the projected increase in unused capacity.

The chlorinated isos industry in Japan also carried relatively small and declining inventories of chlorinated during the POI, and its inventories are projected to decline in the imminent future.²³⁷ Similarly, U.S. inventories of subject merchandise from Japan were at low levels during the POI.²³⁸ Because subject producers in Japan have dedicated production lines for chlorinated isos, product shifting is not likely with respect to subject imports from Japan.²³⁹

In light of the foregoing, subject imports from Japan will likely maintain the same presence in the U.S. market in the imminent future that they did during the POI. We

²³³ The Japanese industry's production capacity was *** pounds in 2011 and 2012, *** pounds in 2013, and *** pounds in interim 2013 and interim 2014. CR/PR at Table VII-4.

²³⁴ The Japanese industry's production capacity is projected to be *** pounds in 2014 and 2015. CR/PR at Table VII-4.

²³⁵ The Japanese industry projects exports to markets other than the United States of *** pounds in 2014, and *** pounds in 2015; its shipments to these markets in 2013 were *** pounds. As a share of total shipments, the Japanese industry's exports to all other markets were *** percent in 2011, and *** percent in 2012 and 2013; they are projected to be *** percent in 2014, and *** percent in 2014. CR/PR at Table VII-4.

²³⁶ The Japanese industry's capacity utilization rates remained relatively stable between 2011 and 2013, decreasing overall by just *** percentage points during that time. Its capacity utilization was *** percent in 2011, *** percent in 2012, and *** percent in 2013. Its capacity utilization was *** percent in interim 2013 and *** percent in interim 2014. Its capacity utilization is projected to be *** percent in 2014 and *** percent in 2015. CR/PR at Table VII-4. CR/PR at Table VII-4.

²³⁷ The Japanese industry's end-of-period inventories were *** pounds in 2011, *** pounds in 2012, and *** pounds in 2013; they are projected to be *** pounds in 2014 and *** pounds in 2015. As a ratio to production, they were *** percent in 2011, *** percent in 2012, and *** percent in 2013; they are projected to be *** percent in 2014, and *** percent in 2015. As a ratio to total shipments, they were *** percent in 2011, *** percent in 2012, and *** percent in 2013; they are projected to be *** percent in 2014, and *** percent in 2015. CR/PR at Table VII-4.

²³⁸ U.S. importers' end-of-period inventories of subject merchandise from Japan were *** pounds in 2013, or *** percent of U.S. imports that year. CR/PR at Table VII-7.

²³⁹ See e.g., Japanese Respondents' Posthearing Br., Exh. 1., Answers to Commissioners' Questions at 33.

consequently find that there is unlikely to be a significant rate of increase by subject imports from Japan in the U.S. market in the imminent future.

2. Likely Price Effects

Pricing data collected by the Commission accounted for *** percent of the quantity of U.S. shipments of subject imports from Japan during the POI.²⁴⁰ Sales of subject imports from Japan were reported for *** of *** pricing products,²⁴¹ with the highest volume of subject merchandise from Japan concentrated in Product 1 (granular/powder chlorinated isos).²⁴²

The record shows predominant overselling by subject imports from Japan during the POI. Overselling by subject imports from Japan accounted for *** percent of their total sales volume reported for the pricing products during the POI, while underselling accounted for only *** percent of such total sales volume.²⁴³ Thus, underselling was concentrated in lower-volume products and quarters; for Product 1, subject imports from Japan oversold the domestic like product in ***.²⁴⁴ Subject imports from Japan undersold the domestic like product in only *** of ***, or *** percent, of quarterly price comparisons.²⁴⁵

We found above that cumulated subject imports did not depress prices to a significant degree or prevent price increases that would otherwise have occurred to a significant degree during the POI, because the domestic industry's price declines reflected factors other than the subject imports and the domestic industry could not have increased prices in light of the prevailing conditions of competition. The record provides no indication that subject imports from Japan, which are likely to remain at or near current volumes and will likely continue predominantly to oversell the domestic like product, are likely to have any such effects in the imminent future. We consequently find that imports of subject merchandise from Japan are not likely to enter at prices that are likely to have significant depressing or suppressing effect on domestic prices, or that are likely to increase demand for further imports.

3. Likely Impact

As discussed above, we have found that it is likely that the volume of subject imports from Japan will remain at or near the volumes observed during the POI in the imminent future in light of their stable presence in the U.S. market during the POI. Furthermore, subject imports from Japan are not entering at prices that are likely to increase demand for further imports.

²⁴⁰ CR at V-10, PR at V-6.

²⁴¹ Sales of subject imports from Japan were reported for Products ***. CR/PR at Tables V-3 to V-5 & V-7.

²⁴² CR/PR at Tables V-3.

²⁴³ CR at Table V-13, p. V-43, PR at Table V-13, p. V-13.

²⁴⁴ CR/PR at Table V-3.

²⁴⁵ CR/PR at Table V-12.

While the domestic industry encountered declines in its performance over the POI, particularly with respect to its financial performance, we do not find that these were due to subject imports from Japan, which had a stable presence in the U.S. market and generally oversold the domestic like product. Given our conclusion that subject imports from Japan will not imminently increase significantly above the levels they held during the POI and will not likely have significant adverse price effects, we find that subject imports from Japan will not likely have a significant adverse impact on the performance of the domestic industry. Therefore, we find that material injury by reason of subject imports will not occur absent issuance of an antidumping duty order.

Accordingly, we conclude that the domestic chlorinated isos industry is not threatened with material injury by reason of subject imports of chlorinated isos from Japan.

Conclusion

For the reasons discussed above, we find that an industry in the United States is threatened with material injury by reason of imports of chlorinated isos from China that are subsidized by the government of China. We also find that an industry in the United States is not materially injured or threatened with material injury by reason of imports of chlorinated isos from Japan that are sold at LTFV.

SEPARATE VIEWS OF COMMISSIONER DAVID S. JOHANSON

I. INTRODUCTION

I write separately as I do not find that those companies that merely tablet and repackage chlorinated isos (“tableters”) have sufficient production-related activities for me to consider them as part of the domestic industry. Therefore, I would exclude tableters from the domestic industry. My separate finding on this issue nevertheless leads me to the same determination as the majority, and I am able to join the majority’s views in all other respects except where noted.

II. DOMESTIC INDUSTRY AND RELATED PARTIES

In the original investigations of *Chlorinated Isocyanurates from China and Spain*, the Commission divided 3-3 on the question of whether to include the tableters in the domestic industry.¹ In the 2010 first review (expedited) of those orders, a four-vote majority determined not to include the tableters in the domestic industry.² In the preliminary phase of these investigations, the Commission unanimously determined to include the tableters in the domestic industry, but stated that it would examine the issue further in any final phase investigations.³

The following discussion provides my reasoning for not including the tableters in the domestic industry within the framework of the Commission’s standard six factors for analyzing whether a firm’s production-related activities are sufficient to be considered part of the domestic industry.

Source and Extent of the Firm’s Capital Investment.

Capital assets: The responding tableters’ reported total assets were \$*** in 2011, \$*** in 2012, and \$*** in 2013, whereas total assets reported for the granular/powder operations of the integrated producers were \$*** in 2011, \$*** in 2012, and \$*** in 2013.⁴ The ratio of the assets of the tableters to the assets of the granular/powder operations of the integrated producers was therefore never greater than *** percent over the three full years of the POI.⁵ The capital assets of the tableters were *** of the assets employed in the granular/powder operations of the integrated producers. The relatively low level of capital assets held by tableters is consistent with respondents’ estimate that the “total capital required to build a tableting plant can range from ***.”⁶

¹ *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083, USITC Pub. 3782 (Final) (June 2005) (“USITC Pub. 3782”) at 10-14. Chairman Koplán and Commissioners Hillman and Miller included the tableters as part of the domestic industry. Vice Chairman Okun and Commissioners Lane and Pearson did not include the tableters in the domestic industry.

² *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083, USITC Pub. 4184 (Review) (Sept. 2010) (“USITC Pub. 4184”) at 5-7. The three Commissioners who did not include the tableters in the original investigation—Chairman Okun and Commissioners Lane and Pearson—were joined by Commissioner Aranoff. *Id.* at 6 n.25. Commissioners Williamson and Pinkert found that the tableters had sufficient production-related activities to qualify as domestic producers. *Id.* at n.26.

³ *Chlorinated Isocyanurates from China and Japan*, Inv. Nos. 701-TA-501 and 731-TA-1226, USITC Pub. 4431 (Preliminary) (Nov. 2013) (“USITC Pub. 4431”) at 12 n.79.

⁴ CR/PR at Table VI-9.

⁵ Petitioners’ responses to Commissioners’ questions at 49-50.

⁶ Respondents’ prehearing brief at 8. *Compare* Petitioners’ post-conference brief at 9-10 (indicating that Clearon invested \$*** in its granular factory but only \$*** its tableting facility).

Capital expenditures: Responding tableters reported capital expenditures of \$*** in 2011, \$*** in 2012, and \$*** in 2013.⁷ Capital expenditures by the granular/powder operations of integrated producers were \$*** in 2011, \$*** in 2012, and \$*** in 2013.⁸ The capital expenditures of the tableters did not therefore exceed *** percent of those of the granular/powder operations of the integrated producers over the three full years of the POI. These significant differences in the capital involved in the two types of operations (granular/powder production vs. tableting) evince a fundamentally different character as was also captured in the comparative photographs shown by petitioners at the hearing.⁹ The capital expenditures of the tableters were *** of the expenditures for the granular/powder operations of the integrated producers.

Technical Expertise Involved in U.S. Production Activities. The technical expertise involved in creating granular/powder chlorinated isos is much greater than that required to produce tablets from the granulated product. This is apparent from the wage differential. Production-related workers (PRWs) in the granular/powder segment earned on average between \$*** and \$*** per hour, whereas PRWs in the tableting segment earned between \$*** and \$*** per hour.¹⁰ That wages in the granular/powder segment are *** those in the tableting segment is paralleled by similar ratios in unit labor costs: unit labor costs in the granular/powder segment ranged from \$*** to \$*** per pound, whereas unit labor costs in the tableting segment ranged from \$*** to \$*** per pound.¹¹

Petitioners, one of which also has tableting operations, stated that “workers engaged in the tablet formation would not generally be described as performing highly technical skills but would be more akin to assembly line workers.”¹² Photographs provided by petitioner Clearon, which has both granular/powder operations and tableting operations, are illustrative of such differences.¹³ As described by a Clearon executive, their granular/powder factory is “a very large and complex operation, and involves multiple chemicals and processes,” whereas the tableting facility is “primarily a packing and material handling operation, and is located in a warehouse.”¹⁴ While the granular/powder plant operates by reacting multiple chemicals on an industrial scale, the tableting operation involves only “one mechanical process, the pressing of the tablet.”¹⁵

Another measure of the significant difference in the levels of technical expertise is the statement by Clearon that it requires operators in the granular/powder segment to receive as much as three and a half months of training, whereas only 8 hours of training are required of operators in the tableting segment.¹⁶ The differences in the training required contrasts the complexity and risk involved in the two operations. The technical expertise involved in creating granular/powder chlorinated isos is much greater than that required to produce tablets from the granulated product.

⁷ CR/PR at Table VI-8. Such expenditures by the tableters were \$*** in interim 2013 and \$*** in interim 2014. *Id.*

⁸ CR/PR at Table VI-8. Such expenditures by the granular/powder operations of integrated producers were \$*** in interim 2013 and \$*** in interim 2014. *Id.* The ratio did increase to *** percent in interim 2014.

⁹ Petitioners’ prehearing brief, Exhibit 10 (compare Appendix A, photographs of the granular/powder plant, with Appendix B, photographs of the tableting operations) (a subset of these photographs were shown at the hearing and are attached as an appendix to the hearing transcript). See also Hearing Tr. at 29-32 (Mr. Johnson) (explaining relevance of photographs).

¹⁰ CR/PR at Tables III-7 & SUPP-3.

¹¹ CR/PR at Tables III-7 & SUPP-3.

¹² Petitioners’ responses to Commissioners’ questions at 44.

¹³ Petitioners’ prehearing brief, Exhibit 10.

¹⁴ Petitioners’ prehearing brief, Exhibit 10 (Second Declaration of Scott B. Johnson), ¶¶ 2&3.

¹⁵ Petitioners’ prehearing brief, Exhibit 10 (Second Declaration of Scott B. Johnson), ¶ 3.

¹⁶ Petitioners’ prehearing brief, Exhibit 10 (Second Declaration of Scott B. Johnson), ¶ 6 & App. C. See also Hearing Tr. at 51-52 (Mr. Johnson).

Value Added to the Product in the United States. According to responses of three independent tableters to the Commission's questionnaire, the value added by their tableting processes in 2013 ranged from *** to *** percent, excluding SG&A expenses, with an average of *** percent. Including SG&A expenses, their responses ranged from *** to *** percent, with an average of *** percent.¹⁷

Petitioners argue that the Commission's practice has been not to include SG&A expenses or any other cost not directly related to production;¹⁸ therefore, petitioners present their own estimates of value added exclusive of SG&A expenses. Clearon estimates that its tableting costs are \$*** per pound and that tolling fees paid by OxyChem and Arch range from \$*** to \$*** per pound, or between *** and *** percent of the market price.¹⁹ Petitioners' estimates are based on both its own cost for tableting and the tolling fees reported in the Commission's staff report.²⁰ As a point of comparison with the tableters, the value added in 2013 by the granular/powder operations of the integrated producers, excluding SG&A, was *** higher at *** percent.²¹

While there are a fairly wide range of estimates and disagreement over exactly which costs to include or exclude, the data indicate that the value added by tableting is much less than that added by the granular/powder operations of the integrated producers and I consider it insufficient to demonstrate that tableters should be included as part of the domestic industry.

Employment levels. Tableters responding to the Commission's questionnaire reported *** PRWs in 2011, *** in 2012, and *** in 2013.²² By contrast, the granular/powder operations of the integrated producers employed *** PRWs in 2011, *** in 2012, and *** in 2013.²³ Even though the granular/powder operation of the integrated producers had roughly *** the number of employees as did the tableters, petitioners have conceded that "this is not a particularly illuminating factor for purposes of this analysis."²⁴ Petitioners explain that "{s}hear numbers . . . do not change a repackaging operations into manufacturing."²⁵

Quantity and Type of Parts Sourced in the United States. Tableters report that they source granulated/powdered chlorinated isos from both domestic and subject sources.²⁶ Petitioners argue that one tableter in particular (***) relied almost exclusively on subject imports for its tableting operations.²⁷ Petitioners also emphasized that even if the granular/powder operations of the integrated producers were to cease, tableters could "always import or purchase imports to fill their presses."²⁸

Of the three domestic integrated producers, ***.²⁹ These *** domestic production.³⁰

¹⁷ CR/PR at Table VI-7.

¹⁸ Petitioners' responses to Commissioners' questions at 48 n.167 (citing final views of Commission from 1983 investigation); Petitioners' prehearing brief at 47. Including only fabrication costs would lower the range of the tableters' questionnaire responses to *** to *** percent, with an average of *** percent. CR at VI-13 n.7; PR at VI-3 n.7.

¹⁹ Petitioners' responses to Commissioners' questions at 48; Petitioners' prehearing brief at 47.

²⁰ Petitioners' responses to Commissioners' questions at 48 (basing value-added calculations on tolling fees reported in Table IV-2 of staff report).

²¹ Calculation based on CR/PR at Table VI-2 (dividing the sum of direct labor and other factory costs by total COGS).

²² CR/PR at Table SUPP-3.

²³ CR/PR at Table III-7. Petitioners' witnesses explained that staffing at the granular/powder operations of the integrated producers remains at a "fairly stable level throughout the year." This is in contrast to the tableters' employment level that "fluctuates very directly with the pool season." Hearing Tr. at 55-56 (Mr. Johnson).

²⁴ Petitioners' responses to Commissioners' questions at 49.

²⁵ Petitioners' prehearing brief at 47.

²⁶ CR at III-6 to -8; PR at III-3; CR/PR at Tables II-1 & III-10.

²⁷ Petitioners' prehearing brief at 44-45.

²⁸ Petitioners' responses to Commissioners' questions at 48.

²⁹ CR at III-4 & IV-6; PR at III-3 & IV-4.

Other Costs and Activities in the United States Leading to the Production of the Like Product.

Tableters report significant expenses for maintenance of existing tableting plants and complying with necessary licenses.³¹ Integrated producers note that they must typically shut down their granular/powder operations for four weeks every year for maintenance.³² A representative of petitioner OxyChem spoke at the hearing of his desire to consolidate its two production facilities and estimated that this would require a \$30 million investment.³³ The same OxyChem representative also spoke of having “some capital freed up” to complete a current project to “debottleneck” production.³⁴

Summary. I do not find that the tableters have sufficient production-related activities for me to consider them as part of the domestic industry. I conclude that the following factors fully support a finding that the granular/powder operations of the integrated producers perform a fundamentally different function in this market than do the tableters: (1) the capital assets and expenditures of the tableters were only a *** of the expenditures for the granular/powder operations of the integrated producers; (2) the technical expertise involved in creating granular/powder chlorinated isos is much greater than that required to produce tablets from the granulated product; and (3) the tableters contribute comparatively little value added through the forming of the tablets.

III. CONCLUSION

I do not find that tableters have sufficient production-related activities for me to consider them as part of the domestic industry and, therefore, I would exclude tableters from the domestic industry. I nevertheless join the majority’s views in all other respects except where noted.

³⁰ CR/PR at Tables III-8 & IV-1. None of the three integrated producers imported chlorinated isos from nonsubject countries over the POI. CR/PR at Table IV-1.

³¹ Respondents’ prehearing brief at 8; Respondents’ responses to Commissioners’ questions at 94.

³² Petitioners’ prehearing brief at 50.

³³ Hearing Tr. at 72-73 (Mr. Williams).

³⁴ Hearing Tr. at 88-89 (Mr. Williams).

CONCURRING AND DISSENTING VIEWS OF VICE CHAIRMAN DEAN A. PINKERT

Based on the record in the final phase of these investigations, I determine that an industry in the United States is materially injured by reason of imports from China of chlorinated isocyanurates (“chlorinated isos”) that the U.S. Department of Commerce (“Commerce”) has found to have been subsidized by the Government of China and imports of chlorinated isos from Japan that Commerce has found to be sold in the United States at less than fair value (“LTFV”). Consequently, I respectfully dissent from the Commission majority’s negative determination regarding imports from Japan. Although I reach an affirmative determination with respect to imports from China, as does the majority, my reasons for doing so are fundamentally different. Despite my differing approach to this case, I join (except where may be otherwise indicated) the following portions of the Commission’s views: section I (Background), section II (Domestic Like Product), section III (Domestic Industry), section IV (Cumulation), section V.A. (Legal Standards), section V.B. (Conditions of Competition and the Business Cycle); and Section V.C. (Volume of Cumulated Subject Imports).

MATERIAL INJURY BY REASON OF SUBJECT IMPORTS

A. Price Effects Of The Subject Imports

The key question in this case is what factor or factors account for the rapid decline in U.S. producers’ prices over the 2011-2013 period of investigation.¹ For the reasons discussed below, I conclude that this decrease in price levels resulted from intense price competition in the U.S. market for chlorinated isos engendered by the significant volume and market share² of cumulated imports from China and Japan. This decline in domestic producers’ prices led directly to a decline in the financial performance of the industry, as discussed below in section B.

Despite some concerns expressed by purchasers regarding the quality of imports from China,³ chlorinated isos derived from both domestic sources and sources in the subject countries are chemically identical and highly substitutable.⁴ Purchasers ranked price most

¹ CR/PR at Table V-11. Quarterly prices for domestically produced products 1-5 (granular/powder chlorinated isos) declined by between *** and *** percent over the period. CR at V-39, PR at V-11.

² Notably, although the volume of cumulated imports declined over the period, imports from Japan increased by *** percent. CR/PR at Table C-1.

³ CR at II-37 to II-4, PR at II-22 to II-25

⁴ The Commission’s Report indicates staff’s belief “that there is {a} moderate-to-high degree of substitutability between domestically produced chlorinated isos and chlorinated isos imported from subject sources.” CR at II-24, PR at II-13. It cautions, however, that this estimate “depends on the degree and importance of quality differences between Chinese product compared to domestic and Japanese product.” *Id.* I note that the majority of questionnaire respondents reported that U.S. produced chlorinated isos and chlorinated isos from China and Japan were always or frequently interchangeable. *Id.* CR II-35 to II-36, PR at II-20 to II-21. Moreover, despite reported concerns on the part of some purchasers regarding the quality of the Chinese product, the ability of Chinese exporters to penetrate the U.S. market successfully with large quantities of chlorinated isos speaks volumes about the limitations of those concerns.

frequently as one of the top three factors motivating purchasing decisions.⁵ Where price plays such a key role in the market and products from multiple sources are such close substitutes, it is not surprising that prices for products from all suppliers are linked – suppliers face the choice of matching the low prices offered by their competitors or losing sales. The record of this case thus shows vigorous price competition between the domestic industry and the subject imports.

Moreover, chlorinated isos are most often sold under short-term contracts and, to a lesser degree, on the spot market,⁶ which means that sellers generally have no long-term security against downward price changes. In addition, many contracts provide flexibility with respect to the renegotiation of prices,⁷ and the majority of producers and importers reported that contracts allowed for price renegotiation.⁸ Thus, industry practices with respect to contracting create conditions that enable purchasers to put continuous pressure on suppliers to lower their prices or lose sales.⁹

Admittedly, the quarterly price data collected in these investigations show that, in the aggregate, imports from China and Japan sold at higher prices more frequently than domestic chlorinated isos,¹⁰ although there are nevertheless numerous instances of underselling by imports from China and Japan, including predominant underselling by imports from China with respect to product 2 (** possible comparisons) and by imports from Japan with respect to products 3 (** possible comparisons) and 5 (** possible comparisons).¹¹ Under the circumstances of this case,¹² it is helpful to perform a closer examination of pricing than merely tallying instances of quarterly underselling versus overselling by imports. As discussed below, such an examination reveals a dynamic of intense price competition among the various players in the chlorinated isos market that had an adverse impact on domestic prices. This competition for sales was heightened by the declining U.S. market for chlorinated isos over the period of investigation.¹³

Quarterly prices for the imports from China and Japan for which the Commission has pricing information declined over the period of investigation, as did domestic prices.¹⁴ It is

⁵ CR/PR at Table II-5.

⁶ CR at V-5, PR at V-3 to V-4.

⁷ CR at V-6, PR at V-4.

⁸ CR at V-6, PR at V-4.

⁹ As discussed in the Report, in agreeing with a lost sales allegation, ** CR at V-47, PR at V-15.

¹⁰ I also acknowledge that, in the aggregate, a substantially greater volume of imports from China and Japan oversold the domestic product than undersold the domestic product.

¹¹ CR/PR at Tables V-5 and V-7, Figures V-5 and V-7. Moreover, some of the quarterly price information collected in these investigations is of questionable value. For example, the pricing data for product 4, which show ** by imports from China, are based on **.

¹² In addition to the circumstances discussed above, it is notable that the Commission's pricing data capture a far lower percentage of U.S. shipments of imports from China than of either U.S. producers' shipments or U.S. shipments of imports from Japan. CR at V-10, PR at V-6 to V-7 (pricing data cover ** percent of domestic producers' U.S. shipments, ** percent of U.S. shipments of imports from Japan, and ** percent of U.S. shipments of imports from China). Thus, without a more detailed analysis, it is difficult to conclude on the record of these investigations that the aggregate quarterly pricing data provide a sufficient picture of what is taking place with respect to pricing.

¹³ Apparent U.S. consumption declined from ** million pounds in 2011 to ** million pounds in 2013, a decline of ** percent. CR/PR at Table C-1.

¹⁴ CR/PR at Tables V-3 to V-7 and V-10 and Figures V-3 to V-7 and V-10. Because I have joined with my

significant in this regard that prices for imports from Japan – which increased in volume over the period – almost uniformly trended downward over the period.¹⁵ In addition, and importantly, a review of the trends in prices for products 1 and 2, which are high-volume granular products, demonstrates instances in which the quarterly U.S. price approached or briefly exceeded the higher quarterly price for Japanese imports, only to fall again in succeeding quarters.¹⁶ This plainly demonstrates that the imports from Japan effectively acted as a ceiling coming down on U.S. producers' prices, preventing domestic producers from obtaining price increases and, together with imports from China, forcing domestic producers instead to lower prices.

Moreover, Petitioners have pointed out that the Commission's data for certain pricing products may in some instances compare prices for domestic and imported isos at different levels of trade.¹⁷ Domestic tableters' purchaser price data, however, are unquestionably at a consistent level of trade.¹⁸ Those data show an equal number of instances (***) of overselling and underselling overall and, with respect to imports from China, nearly uniform underselling (***) possible comparisons).¹⁹ In addition, they show that a greater volume of subject imports undersold rather than oversold the domestic product (***) pounds versus *** pounds).²⁰

Information regarding allegations of lost sales and revenues provides some additional concrete evidence of the price competition between subject imports and domestic chlorinated isos and its impact on domestic producers. Purchasers confirmed *** instances in which domestic producers lost sales to lower-priced subject imports.²¹ One purchaser also agreed with an allegation of revenues lost to subject imports. In addition, the record confirms some of Petitioners' claims of lost sales raised in its post-hearing brief.²²

Altogether, the information discussed above demonstrates that during the period of investigation the domestic industry producing chlorinated isos was locked in intense competition for sales with imports from China and Japan during a period of declining consumption. Subject imports sometimes undersold the domestic product and sometimes oversold the domestic product. Especially in light of the substitutability of chlorinated isos regardless of source, the importance of price in this market, and the significant volume and market share of the imports (to say nothing of the increase in the volume of imports from Japan), it is clear that this competition drove down prices for chlorinated isos from all sources.

colleagues in including U.S. tableters in the domestic industry, the quarterly pricing data that are relevant to my analysis are those for pricing products 1-5 and 8. There are no possible price comparisons for products 6 and 7 when mixed-origin product is classified as domestic product.

¹⁵ CR/PR at Tables V-3 to V-7 and V-10 and Figures V-3 to V-7 and V-10. The trend in prices for imports from China was less consistent over the period, although they too trended downward overall.

¹⁶ CR/PR at Tables V-3 to V-7 and Figures V-3 to V-7.

¹⁷ Petitioners' Post-Hearing Br. at 13.

¹⁸ Purchase price data were reported by nine tableters (***) . Analysis of domestic tableters' purchase price data includes only granular products 1-5.

¹⁹ EDIS Doc. 544102.

²⁰ Id. The data are similar in showing near-equal instances of underselling and overselling if purchase prices from domestic purchasers that also import directly are excluded. Id.

²¹ CR at Table V-13, pp. V-52-V-53, PR at Table V-13, p. V-16.

²² U.S. purchaser questionnaire responses of ***, sections V-1 - V-3; Petitioners' Post-Hearing Br. at 9-10.

Consequently, I find that imports from China and Japan significantly depressed domestic prices for chlorinated isos during the period of investigation.²³

B. Impact of the Subject Imports

A number of indicators of the domestic industry's performance declined over the period examined.²⁴ Some, such as production quantity, capacity utilization, and shipments, were affected by the downturn in apparent U.S. consumption over the period as well as by the subject imports, and any independent effect of the subject imports on the domestic industry's performance in these areas is difficult to parse out.

The decline in the domestic industry's prices over the period, however, is readily reflected in the industry's financial performance. Although the industry's quantity of net sales for chlorinated isos in granular/powder form *** over the period of investigation, the value of those sales *** percent and their unit value *** percent.²⁵ Despite declines in the aggregate cost of goods sold ("COGS") and selling, general, and administrative ("SG&A") expenses, the industry's operating income for granular/powder chlorinated isos dropped *** percent over the period, and the operating income margin dropped from *** percent in 2011 to *** percent in 2013.²⁶ For tableted chlorinated isos, the domestic industry's net sales quantity declined by *** percent, while the value of net sales declined *** percent.²⁷ Although both COGS and SG&A expenses for tableted product both declined substantially, the industry nevertheless *** in its operating income of *** percent from 2011 to 2013 and a *** in its operating income margin, from *** percent to *** percent.²⁸

I find that the domestic industry's poor and declining financial performance is linked to competition from imports from China and Japan. The volume and market share of subject imports were significant over the period, and imports from Japan increased. In addition, as discussed above, I find significant depression of domestic prices for chlorinated isos by the subject imports, as well as confirmed lost sales and instances in which domestic producers reduced prices to compete with lower priced subject imports. These adverse price effects resulted in the downward trend in the industry's finances.

I have considered the role of other factors that may have affected the industry's performance in order to avoid attributing harm from such factors to subject imports. Given the decline in demand and the U.S. industry's sales volume, at least some of which is likely

²³ The record supports the existence of no other significant plausible factors that would account for the rapid decline of domestic prices in these investigations. The parties and the witnesses in these investigations disagreed about the degree of impact on the industry of competition with salt water pools. This competition, however, is a factor that reflects a long-term trend in consumption in the U.S. market and could not effect such a quick decline in market prices. Similarly, weather patterns in recent years, particularly 2013, may have affected consumption to a degree but could not have driven down prices to the extent seen in these investigations. Finally, raw material costs as a percentage of the domestic industry's net sales actually trended upward during the period of investigation and thus could not have influenced the downward trend in prices. CR/PR at Table VI-1.

²⁴ CR/PR at Table C-1.

²⁵ CR/PR at Table C-1.

²⁶ CR/PR at Table C-1.

²⁷ CR/PR at Table C-1.

²⁸ CR/PR at Table C-1.

attributable to competition with salt water pools and weather patterns in recent years, some decrease in the industry's profitability would be expected. The decline in sales volume, however, does not explain the rapid declines in prices and financial performance indicated by the record in these investigations. I have also considered any impact that nonsubject imports may have had. The share of the U.S. market held by nonsubject imports,²⁹ however, did not exceed *** percent at any time during the period examined.³⁰ Thus, I cannot conclude that nonsubject imports played a meaningful role in contributing to the industry's weak financial performance.

CONCLUSION

Accordingly, for the foregoing reasons, I determine that an industry in the United States is materially injured by reason of imports from China of chlorinated isos that Commerce has found to have been subsidized by the Government of China and imports of chlorinated isos from Japan that Commerce has found to be sold in the United States at LTFV.

²⁹ There is no information on the record of this investigation to permit a comparison of prices between nonsubject imports and either subject imports or domestically produced chlorinated isos.

³⁰ CR/PR at Table C-1.

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Clearon Corp. (“Clearon”), South Charleston, WV, and Occidental Chemical Corporation (“Oxy”), Dallas, TX, on August 29, 2013 (the “Petitioners”), alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of chlorinated isocyanurates (“chlorinated isos”)¹ from China and less-than-fair-value (“LTFV”) imports of chlorinated isos from Japan. The following tabulation provides information relating to the background of these investigations.^{2 3}

Effective date	Action
August 29, 2013	Petition filed with Commerce and the Commission; institution of Commission investigation (78 FR 55293, September 10, 2013)
September 25, 2013	Commerce’s notice of initiation on Japan (78 FR 58997); Commerce’s notice of initiation on China (78 FR 59001)
October 31, 2013	Commission’s preliminary determinations (78 FR 66767, November 6, 2013)
February 24, 2014	Commerce’s preliminary CVD determination on China (79 FR 10097, February 24, 2014);
April 24, 2014	Commerce’s preliminary AD determination on Japan (79 FR 22800, April 24, 2014); scheduling of final phase of Commission investigations (79 FR 28771, May 19, 2014)
September 18, 2014	Commerce’s final AD determination on Japan (79 FR 56059, September 18, 2014)
September 22, 2014	Commerce’s final CVD determination on China (79 FR 56560, September 22, 2014)
September 9, 2014	Commission’s hearing
October 9, 2014	Commission’s vote
November 3, 2014	Commission’s views

¹ See the section entitled “The Subject Merchandise” in *Part I* of this report for a complete description of the merchandise subject to these investigations.

² Pertinent *Federal Register* notices are referenced in app. A, and may be found at the Commission’s website (www.usitc.gov).

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

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the “Act”) (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission—

shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that—

In evaluating the volume of imports of merchandise, the Commission shall 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.

. . .

In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . . (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.

. . .

In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to . . . (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) 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

domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.

Organization of report

Part I of this report presents information on the subject merchandise, subsidy/dumping margins, and domestic like product. *Part II* of this report presents information on conditions of competition and other relevant economic factors. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. *Parts IV* and *V* present the volume of subject imports and pricing of domestic and imported products, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

MARKET SUMMARY⁴

Chlorinated isos are chemical compounds used primarily as sanitizing agents for swimming pools, spas, and industrial water, and as disinfecting and bleaching agents for detergents, bleaches, and cleansers. The three U.S. producers of powder/granular chlorinated isos are BioLab Inc. ("BioLab"), Clearon, and Oxy. U.S. tableters of chlorinated isos include ***.⁵ The leading U.S. importer of chlorinated isos from China is ***, while the leading importer of chlorinated isos from Japan is **. Leading importers of product from nonsubject countries (primarily Mexico and Taiwan⁶) include **. Leading producers of chlorinated isos outside the United States include ** in China and ** in Japan.

Apparent U.S. consumption of chlorinated isos totaled approximately *** pounds (\$***) in 2013. U.S. producers' U.S. shipments of powder/granular chlorinated isos totaled *** pounds (\$***) in 2013, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. producers' U.S. shipments of tableted chlorinated isos totaled *** pounds (\$***) in 2013, and accounted for *** percent of apparent U.S. consumption by

⁴ Two firms (***) provided U.S. producer questionnaires in the preliminary phase of these investigations on their repackaging and toll arrangements and were considered part of the domestic industry analysis. In the final phase, staff confirmed that these two firms do not operate tableting facilities or own any tableting facilities and therefore they are not considered part of the domestic industry. They are tollees and/or repackagers of chlorinated isos only.

⁵ Two small tableters, *** did not provide the Commission with responses to the U.S. producer questionnaire, but they did provide some information on their capacity and production from 2011 to June 2014. Their information is not included in the overall data.

⁶ Petitioners allege that there is no chlorinated isos production in Taiwan and the material imported from Taiwan "are being transshipped, almost certainly from China." Petitioners' comments concerning draft questionnaires, May 27, 2013, p. 11.

quantity and *** percent by value. Reported U.S. imports from subject sources totaled *** pounds (\$***) in 2013 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. Reported U.S. imports from nonsubject sources totaled *** pounds (\$***) in 2013 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

The Commission sent purchasers' questionnaires to approximately 45 firms believed to have purchased chlorinated isos since January 1, 2011. Twenty-five purchasers, two of which are U.S. producers of chlorinated isos, seven of which are tableters,⁷ and five of which are importers of chlorinated isos, provided purchaser questionnaire responses, accounting for 82 percent of U.S. apparent consumption of chlorinated isos in 2013. Nine of the responding purchasers reported that they were distributors, six reported that they were retailers, and two reported they were repackagers. The top three largest purchasers during the period of investigation were distributor ***, tableter and retailer ***, and retailer ***.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of three producers of chlorinated isos and six firms⁸ that performed tableting operations on chlorinated isos from January 2011 to June 2014. U.S. imports are based on questionnaire responses of ten U.S. firms that account for the majority of subject imports of chlorinated isos and supplemented with proprietary Customs data for HTS number 2933.69.6015 for U.S. importers of chlorinated isos from China that did not respond to the Commission's questionnaire. Data for producers in China and Japan are from questionnaire responses of one producer in China and three producers in Japan.

PREVIOUS AND RELATED INVESTIGATIONS

Chlorinated isocyanurates have been the subject of several prior antidumping duty investigations and subsequent five-year reviews in the United States. In 1984, the Commission and Commerce conducted an antidumping investigation on cyanuric acid (a raw material used in the production of chlorinated isos) and its chlorinated derivatives, including the subject products, that resulted in an antidumping duty order on such products from Japan. In the absence of any review request or objection from a domestic interested party, Commerce revoked the order in 1995 (60 FR 28576, June 1, 1995).

⁷ ***, provided a U.S. purchasers' questionnaire response, but did not respond to requests to provide a U.S. producers' questionnaire response.

⁸ Additional tableters that did not provide the Commission with questionnaire responses are: ***.

On May 14, 2004, a petition was filed with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of less-than-fair-value (“LTFV”) imports of chlorinated isocyanurates from China and Spain. On June 3, 2005, the Commission made affirmative final determinations,⁹ and Commerce subsequently issued antidumping duty orders on chlorinated isos from China and Spain.¹⁰ In 2010, the Commission made affirmative determinations in its five-year reviews regarding imports of chlorinated isos from China and Spain¹¹ and Commerce issued continuation of antidumping orders of chlorinated isos from China and Spain.¹²

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Nature of the subsidies

On September 22, 2014, Commerce published a notice in the *Federal Register* of its final determination of countervailable subsidies for producers and exporters of chlorinated isos from China.¹³ Table I-1 presents Commerce’s findings of subsidization of chlorinated isos from China. In its final determination of countervailable subsidy programs, Commerce found ten programs to be countervailable.¹⁴ For a full discussion on these programs, see appendix D.

Table I-1
Chlorinated isos: Commerce’s final subsidy determination with respect to imports from China

Entity	Final countervailable subsidy margin (percent)
Hebei Jiheng Chemicals Co., Ltd.	20.06
Juancheng Kangtai Chemical Co., Ltd.	1.55
All others	10.81

Source: 79 FR 56560, September 22, 2014.

⁹ *Chlorinated Isocyanurates from China and Spain: Investigation Nos. 731-TA-1082 and 1083 (Final)*, USITC Publication 3782, June 2005 and *Chlorinated Isocyanurates from China and Spain: Determinations*, 70 FR 36205, June 22, 2005.

¹⁰ *Notice of Antidumping Duty Order: Chlorinated Isocyanurates from the People’s Republic of China*, 70 FR 36561, June 24, 2005 and *Notice of Antidumping Duty Order: Chlorinated Isocyanurates from Spain*, 70 FR 36562, June 24, 2005.

¹¹ *Chlorinated Isocyanurates from China and Spain: Determinations*, 75 FR 61772, October 6, 2010.

¹² *Chlorinated Isocyanurates from Spain and the People’s Republic of China: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 75 FR 49464, August 13, 2010.

¹³ *Chlorinated Isocyanurates from the People’s Republic of China: Final Affirmative Countervailing Duty Determination*, 79 FR 56560, September 22, 2014.

¹⁴ *Department of Commerce, Countervailing Duty Investigation of Chlorinated Isocyanurates from the People’s Republic of China: Issues and Decision Memorandum for the Final Determination*, Inv. No. C-570-991, September 8, 2014.

Sales at LTFV

On September 18, 2014, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports from Japan.¹⁵ Table I-2 presents Commerce's dumping margins with respect to imports of product from Japan.

Table I-2
Chlorinated isos: Commerce's final weighted-average LTFV margins with respect to imports from Japan

Exporter/ Producer	Final dumping margin (percent)
Nankai Chemical Co., Ltd	151.80
Shikoku Chemicals Corporation	60.65
All others	60.65

Source: 79 FR 56059, September 19, 2014.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of these investigations as follows:

Chlorinated isocyanurates are derivatives of cyanuric acid, described as chlorinated s-triazine triones. There are three primary chemical compositions of chlorinated isocyanurates: (1) Trichloroisocyanuric acid ("TCCA") ($\text{Cl}_3(\text{NCO})_3$), (2) sodium dichloroisocyanurate (dihydrate) ($\text{NaCl}_2(\text{NCO})_3 \times 2\text{H}_2\text{O}$), and (3) sodium dichloroisocyanurate (anhydrous) ($\text{NaCl}_2(\text{NCO})_3$). Chlorinated isocyanurates are available in powder, granular and solid (*e.g.*, tablet or stick) forms.

Chlorinated isocyanurates are currently classifiable under subheadings 2933.69.6015, 2933.69.6021, 2933.69.6050, 3808.50.4000, 3808.94.5000, and 3808.99.9500 of the Harmonized Tariff Schedule of the United States ("HTSUS"). The tariff classification 2933.69.6015 covers sodium dichloroisocyanurates (anhydrous and dihydrate forms) and trichloroisocyanuric acid. The tariff classifications 2933.69.6021 and 2933.69.6050 represent basket categories that include chlorinated isocyanurates and other compounds including an unfused triazine ring. The tariff classifications 3808.50.4000, 3808.94.5000 and 3808.99.9500 cover disinfectants that include chlorinated isocyanurates. The HTSUS subheadings are provided for convenience and

¹⁵ *Chlorinated Isocyanurates from Japan: Final Determination of Sales at Less Than Fair Value*, 79 FR 56059, September 19, 2014.

customs purposes. The written description of the scope of the investigation is dispositive.¹⁶

Tariff treatment

Based upon the scope set forth by the U.S. Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is classified in subheadings 2933.69.60 (statistical reporting numbers 2933.69.6015, 2933.69.6021, or 2933.69.6050) or 3808.99.95 of the Harmonized Tariff Schedule of the United States (2013). These subheadings have general rates of duty of 3.5 percent ad valorem (for the separate chemically identifiable compounds) and 5 percent ad valorem (for the disinfectants containing such compounds), respectively.

THE PRODUCT

Description and applications

Chlorinated isos are chemical compounds used primarily as sanitizing agents for swimming pools, spas, and industrial water, and as disinfecting and bleaching agents for detergents, bleaches, and cleansers. For actual application, these products are sold as a solid, usually in granular, tablet, or stick form. The active ingredient for sanitizing purposes is chlorine, which acts as a biocide, killing algae and other microbes. Trichlor and dichlor differ mainly in the percentage of chlorine each has available for sanitizing and the rate of release of that chlorine in water. The rate of release of chlorine in water is also affected by the physical form of the product, with the granular form releasing chlorine more rapidly than tablet or stick forms. Trichlor, containing 90 percent available chlorine, has the highest chlorine content, but its chlorine is released relatively slowly in water and therefore it is more widely used for water treatment applications. Dihydrate and anhydrous dichlor contain less available chlorine, 56 percent and 63 percent, respectively, but the chlorine is released relatively quickly, making them more widely used in detergents, bleaches, and cleansers and as “shock” treatments to quickly and temporarily instill chlorine in swimming pools to counteract bacteria.¹⁷

Although trichlor and dichlor generally perform the same function, one slower and one faster, one or the other is usually specified for any specific application. Trichlor’s relatively slow release allows consumers to maintain a chlorine level within safety guidelines (less than four parts per million) with weekly tablet applications. Dichlor’s rapid release of chlorine is appropriate for “shock” swimming pool treatments as well as uses in detergents, bleaches, and cleansers. The petitioners noted that there are differences in quality between chlorinated isos

¹⁶ *Chlorinated Isocyanurates from Japan: Final Determination of Sales at Less Than Fair Value*, 79 FR 56059, September 18, 2014 and *Chlorinated Isocyanurates from the People’s Republic of China: Final Affirmative Countervailing Duty Determination*; 79 FR 56560, September 22, 2014.

¹⁷ Hearing transcript, p. 28 (Johnson).

produced in the U.S., Japan, and China, such as impurities and moisture content that can lead to the release of chlorine-containing gas¹⁸, but asserted that such quality differences between are not of sufficient scale to affect customer purchase decisions.¹⁹ The respondents noted that granule size and consistency are additional factors affecting quality, and asserted that for tableters, differences in quality can affect the efficiency of production, costs of maintenance, worker safety, and quality of end product. Respondents stated that quality differences therefore are of sufficient importance to affect purchasing decisions and noted that chlorinated isos from China are generally of lower quality than those produced in the U.S. or Japan.²⁰

Some of the trichlor tablets produced in the United States and China contain active ingredients other than chlorine that provide functions other than sanitizing, and are called “blended” tablets. The ingredients in these tablets include aluminum sulfate, which acts as an algaecide, and copper sulfate, which acts as a water clarifier.

Swimming pool and spa applications account for the bulk of the U.S. chlorinated isos market. Industrial applications, *e.g.*, industrial water treatment, and use in cleansers and detergents, account for most of the remaining 10-15 percent of the market.²¹ For U.S. and foreign producers, the pool and spa segment of the market consists mostly of (1) converting and repackaging distributors, which buy not only tablets and a stick form of the product but also granular product that they convert to tablets and package for sale to commercial users, such as hotels and public pools, and to retailers, such as pool retail stores, pool service companies, mass merchants, and grocery and hardware stores; (2) non-converting and repackaging distributors that sell to the same types of commercial users and retailers; and (3) large retailers to whom producers sell directly. To supplement their needs, U.S. producers and distributors may also buy product from each other. The industrial segment consists largely of manufacturers of cleansers, bleaches, and detergents, and a few distributors that serve the market independently.

In the United States, sanitizing agents such as trichlor and dichlor are statutorily controlled pesticides and must be approved by the United States Environmental Protection Agency (EPA) for public use. Accordingly, any chlorinated isos destined for use in the pool and spa market must be tested and approved prior to sale. The EPA testing and approval process, known as registration, is generally maintained by the producer, whether U.S. or foreign.²²

Manufacturing processes

The raw materials for the production of both trichlor and dichlor are cyanuric acid, caustic soda, and chlorine gas. Cyanuric acid, which U.S. chlorinated isos producers make from urea, is refined and purified and then neutralized with caustic soda to become sodium

¹⁸ Hearing transcript, pp. 98-99 (Johnson).

¹⁹ Hearing transcript, pp. 20-22 (Williams) and p. 97 (Johnson).

²⁰ Hearing transcript, pp. 134-135 (Pettoruto) and pp. 142-144 (Eisch).

²¹ Hearing transcript, p. 14 (Williams).

²² Conference transcript, p. 18 (Kuechler) and p. 73 (Keuchler).

cyanurate, the basic feedstock for both trichlor and dichlor. The feedstock then goes through dedicated production lines to produce either trichlor or dichlor. To produce trichlor, chlorine gas is introduced into the feedstock and carefully controlled, resulting in a granular solid that is either packaged in 2,205-pound sacks or 300-pound drums and sold as such, or further processed into tablets or sticks and packaged in 10- to 50-pound pails. The bulk of trichlor is ultimately consumed as tablets. To produce dichlor, a smaller amount of chlorine gas is introduced into the feedstock, resulting in an acid that is neutralized with caustic soda to produce the dichlor salt. This product can be further dried at higher temperatures to produce the anhydrous forms.

Most dichlor is sold and used in granular form and is packaged in sacks or drums. For the most part production is continuous, and the equipment and production workers used in the production of chlorinated isos are specific to that purpose.

A number of byproducts result from the production process, including ammonia gas, nitrogen, and chlorine-containing compounds, but virtually all are either waste products and must be subjected to further treatment prior to disposal to comply with government environmental regulation, or are used as a source of energy in the production process. The exception is a relatively small quantity of excess cyanuric acid, which is either sold or traded.

Three firms in the United States produce the subject product from raw materials. However, several other firms convert granular trichlor into tablets and package the product for sale. They acquire the granular product produced by U.S. and/or foreign producers and use industrial presses to form tablets.²³ Petitioners characterize tableting as smaller in scale and simpler in technology than production of dichlor and trichlor, with lower capital investments, less worker skill, lower wages, and greater seasonal variation in workforce size.²⁴ Respondents noted that while tableting operations are smaller and less complex than dichlor and trichlor production facilities,²⁵ they require specialized equipment and maintenance, measures to control caustic gases and moisture, and a trained staff with knowledge of chemical reactions.²⁶

***.

THE DOMESTIC INDUSTRY

The petitioners assert that tableters should not be considered as part of the U.S. industry, stating that producing chlorinated isos from raw materials involves different chemical materials and requires much higher levels of capital investment and technical expertise than pressing granular trichlor into tablets.²⁷ Specifically, *** should be excluded from the domestic industry because it ***.²⁸ The remaining tableters should also be excluded from the domestic industry due to

²³ Hearing transcript, p. 29 (Johnson).

²⁴ Hearing transcript, pp. 29-32 (Johnson) and pp. 55-56 (Johnson).

²⁵ Hearing transcript, pp. 163-164 (Janzen)

²⁶ Hearing transcript, p. 140 (Eisch) and p. 165 (Eisch).

²⁷ Hearing transcript, pp. 50-51 (Johnson).

²⁸ Petitioners' prehearing brief, p. 45.

their low value-added (“the cost of tableting is *** and the fee paid to a toll processor is no more than ***.”²⁹ Further, tableters “will continue to operate, largely unaffected, even if the U.S. manufacturers of chlorinated isos close their factories. Tableters can always import or purchase imports to fill their presses. Their employment and profitability do not rise and fall with the impact of dumped and subsidized imports. Instead, as above, tableters may even profit by using imported isos as their feedstock.”³⁰ Shikoku contends that firms that transform granular product into tablets and package them are part of the U.S. industry. Shikoku adds that tableters have significant capital investments in their operations; that tableting adds significant value and requires considerable expertise; and that tableters employ significant numbers of personnel.³¹ In the case of ***, Shikoku argues that it should be included in the domestic industry for the following reasons: *** has a very small share of the domestic tableting production, *** percent, *** does not benefit from LTFV sales or subsidies and *** imports *** of its granular product used its tableting operations and is “not reliant on these imports to continue production; and that *** given that it accounts for *** percent of domestic granular production and *** percent of domestic tablet production.”³²

The petitioners propose that the domestic industry should include the three producers of powder/granular chlorinated isos, BioLab, Clearon, and Oxy, and exclude tableters of chlorinated isos.³³ Japanese respondent Shikoku argues that tableters should be included in the domestic industry.³⁴ In the preliminary phase of these investigations, the Commission found that the “tableters engaged in sufficient production-related activities to qualify as domestic producers.”³⁵

DOMESTIC LIKE PRODUCT ISSUES

The petitioners consider the domestic like product to be coextensive with the product scope, i.e., all products specified as “chlorinated isocyanurates.”³⁶ Respondent Shikoku “does not contest the Commission’s preliminary determination that there is one domestic like product covering all the different chemical compositions and forms of chlorinated isos.”³⁷ The Chinese exporters also did not raise any like product issues. In the preliminary phase of these

²⁹ Petitioners’ prehearing brief, p. 47.

³⁰ Petitioners’ prehearing brief, p. 48.

³¹ Shikoku posthearing brief, p. 3.

³² Shikoku’s posthearing brief, exh. 1, pp. 105-107.

³³ Petitioners contend that the Commission should give strong consideration to the limited amount of technical expertise involved in the tablet-making process and the relatively small amount of value-added to the product by that process.” Petitioners’ posthearing brief, pp. 43-44.

³⁴ Shikoku’s prehearing brief, p. 6.

³⁵ *Chlorinated Isocyanurates from China and Japan: Investigation Nos. 701-TA-501 and 731-TA-1226 (Preliminary)*, USITC Publication 4431, November 2013, p. 12.

³⁶ Petitioners’ prehearing brief, p. 3.

³⁷ Shikoku’s prehearing brief, pp. 3-4.

investigations, the Commission found “a single domestic like product, consisting of all chlorinated isos, coextensive with Commerce’s scope of investigation.”³⁸

³⁸ *Chlorinated Isocyanurates from China and Japan: Investigation Nos. 701-TA-501 and 731-TA-1226 (Preliminary)*, USITC Publication 4431, November 2013, p. 9.

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

Chlorinated isos are used primarily by the swimming pool and spa market to maintain chlorine levels in pools and spas, although there is also demand from makers of detergents and cleansers for industrial and institutional use and for uses such as cooling tower applications for water treatment at commercial plants.¹

As discussed in *Part I*, chlorinated isos are commonly sold in two forms, trichlor and dichlor. The pool and spa market uses both dichlor and trichlor. The cleansers and sanitizers market generally uses dichlor, although there is some use of trichlor for toilet bowl cleansers, while the industrial water treatment segment generally uses trichlor.²

Trichlor dissolves more slowly in water than dichlor and is generally sold in the residential pool market as a tablet or stick. Trichlor tablets are then generally used to maintain chlorine levels in a pool. Dichlor dissolves more quickly and is used in residential pool market to “shock” a pool by raising the level of chlorine quickly to kill off algae or other organisms that may have developed at lower chlorine levels. However, dichlor also may be used to maintain a pool’s chlorine level, and trichlor (in granular form) can be used to shock a pool. Dichlor is sold primarily in granular form, as it would dissolve too quickly as a tablet, although it can be tableted for some uses.³ In addition, some firms sell a “blended” tablet that mixes trichlor with other chemicals (e.g., anti-algae and water clarifying chemicals such as aluminum sulfate and copper sulfate). These blended tablets are proprietary and patented products.⁴

Levels of production

Chlorinated isos are first produced in granular form, then may be sold as such or converted into tablets. Eventually, both granular and tableted chlorinated isos are sold to consumers through a variety of retail channels.

There are three manufacturers of granular chlorinated isos in the United States. Clearon and Oxy make dichlor and trichlor, while BioLab manufactures trichlor. Clearon makes tablets from its internal production of granular chlorinated isos and does not import granular product nor have tablets toll produced. Oxy produces bulk bags of dichlor and/or trichlor, and then

¹ *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-1 and petition, pp. 11-13.

² *Ibid.*

³ *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-1 and petition, pp. 11-13.

⁴ *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-1 and petition, p. 12.

either ships these bulk bags directly to retailers or to toll processors, if the customers purchase in retail packaging.^{5 6} ***. See *Part III* for more information on U.S. producers.⁷

The largest importer of chlorinated isos from China is *** which accounted for *** percent of imports from China during the period of investigation. ***.⁸

The largest importer of chlorinated isos from Japan is ***, which accounted for *** percent of imports from Japan during the period of investigation. *** during the period of investigation. ***. *** indicated that it purchases granular chlorinated isos from *** and resells them to tableters ***.

In addition to BioLab and Clearon, there are approximately ten other U.S. tableters currently operating in the United States.⁹ Tableters may purchase granulated chlorinated isos from U.S. producers or from importers, and they may also import directly.¹⁰ They then may toll produce as well as produce their own tablets. For example, ***.¹¹

The U.S. chlorinated isos market also consists of approximately *** distributors, of which *** operate on a national or regional level, while the others are small, often family-owned businesses.¹² The largest distributors are ***.¹³ The leading independent tableters/repackers are ***.

At the consumer level, chlorinated isos are sold through mass merchant retailers, large pool products chain Leslie's, pool service companies, and to a lesser degree through grocery and hardware stores. Mass merchandiser retailers offer less expertise and a more narrow range of products to consumers than pool specialty stores but often sell chlorinated isos at a lower price.^{14 15} The major retail customers for U.S. producers *** are big box retail stores. *** and

⁵ Hearing transcript p. 14 (Williams).

⁶ Oxy reported that it sells super sacks to large players like Leslie's, Poolcorp, and BioLab. Leslie's resells in the retail market; Poolcorp is a distributor to the professional pool service industry, and BioLab is a manufacturer of trichlor tablets that supplies mass merchant and big box stores. Hearing transcript, p. 14 (Williams). ***.

⁷ For purposes of this part, "producer" refers to the producers of granular chlorinated isocyanurates (those who produce chlorinated isos from cyanuric acid and chlorine gas), i.e., Clearon, Oxy, and BioLab. "Tableter" refers to firms that convert granular/powdered isocyanurates into tablets, and filled out a producers' questionnaire.

⁸ ***.

⁹ These ten firms only make tablets and do not produce granular chlorinated isos. The Commission received questionnaire responses from six of these tableters. See *Part III* for more information on tableters.

¹⁰ Of the six tableters that submitted a U.S. producer questionnaire, only *** import directly.

¹¹ ***.

¹² ***, in petition at exhibit GEN-9.

¹³ ***.

¹⁴ *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-2-4. Additionally, ***. See staff interview with ***.

¹⁵ Until the 1990s, most retailing of chlorinated isos was done by specialty pool shops, but currently, about 35 percent of chlorinated isos for pool sanitizers are sold by large retailers such as ***. ***, in petition at exhibit GEN-9.

*** reported that *** was their principal supplier in 2013.¹⁶ *** indicated that almost half of its 2013 sales went to ***.¹⁷ *** reported that its largest customers were ***. Importer *** reported that its largest customers were to ***.¹⁸ Importer *** reported that it sold primarily to independent tableters and its largest customers in 2013 were ***.¹⁹ As shown in table II-1, 23 purchasers reported the source of their purchases of granular and tableted chlorinated isos and their top suppliers during the period of investigation.

Table II-1

Chlorinated isos: Purchases of chlorinated isos by product form, country source, and their principal suppliers as reported by U.S. purchasers, January 2011-June 2014

* * * * *

CHANNELS OF DISTRIBUTION

Granular

Granular/powder chlorinated isos are sold to all four channels of distribution (distributors, repackers/tableters, retailers, and industrial market), but primarily to repackers/tableters or to distributors. As shown in table II-2, U.S. producers ***. ***.²⁰ ***.²¹ ²²

¹⁶ U.S. purchaser questionnaire response, section II-4.

¹⁷ U.S. producer questionnaire response, section IV-20.

¹⁸ *** accounted for *** percent of *** 2013 sales. Importer questionnaire response, section III-20.

¹⁹ U.S. importer questionnaire response, section III-20.

²⁰ Three importers *** reported their commercial shipments by channels of distribution. *** is the largest importer of granular chlorinated isos from China. ***, the second largest import of granular chlorinated isos from China, reported that all of its commercial sales were sold to distributors for 2012-13 and interim 2013. ***.

²¹ Four importers *** reported their commercial shipments by channels of distribution. However, ***, the largest importer of Japanese product drives the trends. It reported that it ***.

²² Petitioners argue that there is no difference in channels of distribution between Japanese and Chinese imports for purposes of cumulation. It contends that although SIC sells granular chlorinated isos to tableters while Arch engages toll processors to produce tablets, both Japanese and Chinese tablets are sold to retailers. Petitioners' posthearing brief, p.4 and petitioners responses to questions, section I-A. p. 4. However, respondents argue that the differences in distribution channels limit the competitive overlap between imports from China and Japan. Respondents contend that "a tableter manufacturer's decision to purchase granular material to produce tablets that it will sell is fundamentally different from a tableter's further manufacturing of granular material delivered to it under a tolling arrangement in which the finished tablets are returned to the tollee/importer." Respondent's posthearing brief, p. 59.

Table II-2
Chlorinated isos: U.S. producers' and U.S. importers' channels of distribution for all firms, of granular/powder chlorinated isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

Tableted

Tableted chlorinated isos are sold to all four channels of distribution, but are sold mainly to retailers. As shown in table II-3, U.S. producers sold more than half of their commercial shipments of tableted chlorinated isos to retailers, with the remaining shipments split between distributors and repackers/tableters. Imports from China were sold to *** in 2011-2014 but then shifted to *** in the first half of 2014.²³ Imports from Japan were sold primarily to ***.²⁴

As a result of the varied methods of distribution in the chlorinated isos market, U.S. producers often end up competing with companies that they have supplied.²⁵ U.S. producers of granular chlorinated isos sell both granular product to tableters (which then in turn sell to retailers) as well as tablets to big box retailers and national pool retailers.²⁶ Thirteen of 20 responding purchasers reported that they compete directly with U.S. producers or importers from which they purchase chlorinated isos. Two purchasers indicated that they compete with importers which also sell directly to their retail customers. Four purchasers reported that they compete with Clearon and one purchaser indicated that it also competes with BioLab and Oxy.

Table II-3
Chlorinated isos: U.S. producers' and U.S. importers' channels of distribution for all firms, of tableted chlorinated isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers and importers reported selling chlorinated isos to all regions in the contiguous United States (table II-4). For U.S. producers, *** percent of sales were between 101 and 1,000 miles, *** percent were over 1,000 miles, and the remaining *** percent were shipped within 100 miles of their production facility. Importers of product imported from China sold *** percent between 101 and 1,000 miles, *** percent within 100 miles of their U.S. point

²³ Two importers *** reported commercial shipments of imports from China. ***. ***; it reported that it shipped all of its commercial sales of tableted chlorinated isos to***. ***.

²⁴ ***.

²⁵ *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-2-4.

²⁶ According to U.S. tableter ***, because of the competition between U.S. producers and tableters for the sale of tablets to downstream customers, ***. Respondents' posthearing brief, p. 84.

of shipment, and *** percent over 1,000 miles. Importers of chlorinated isos imported from Japan sold *** percent within 100 miles of their U.S. point of shipment and the remaining *** percent between 101 miles to 1,000 miles of their U.S. point of shipment.

Table II-4

Chlorinated isos: Geographic market areas in the United States served by U.S. producers and importers, by number of responding firms

Region	U.S. producers	U.S. imports from		
		China	Japan	Total subject countries
Northeast	7	5	5	8
Midwest	7	5	4	7
Southeast	7	5	4	7
Central Southwest	7	5	5	8
Mountains	4	5	2	6
Pacific Coast	4	4	3	6
Other ¹	3	2	1	2

¹ All other U.S. markets, including AK, HI, PR, and VI, among others.

Source: Compiled from data submitted in response to Commission questionnaires.

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of chlorinated isos have the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced chlorinated isos to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of some unused capacity and the existence of some inventories, constrained by the lack of alternative markets and an inability to produce alternative products.

Industry capacity

Domestic capacity utilization for producers of granular chlorinated isos decreased from *** percent in 2011 to *** in 2013. Capacity utilization was *** percent in the first half of 2013 compared to *** percent in the first half of 2014. Capacity utilization is often higher in the first six months of the year due to the seasonal demand of the product. This relatively moderate level of capacity utilization suggests that U.S. producers have capacity to increase production of chlorinated isos in response to an increase in prices. The overall capacity of these three producers remained unchanged during the period of investigation.

Alternative markets

U.S. producers' exports were a very small percentage of total shipments, ranging from *** to *** percent during the period of investigation. This low level of exports suggests that U.S. producers likely have little if any ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

U.S. producers' inventories of granular chlorinated isos, as a share of total shipments, remained relatively stable ranging from *** percent in 2011 to *** percent in 2013. U.S. producers' inventories of granular chlorinated isos, as a share of total shipments, were lower in interim 2014 (*** percent) than they were in interim 2013 (*** percent). U.S. producers' inventories of tableted product were lower, ranging from *** percent in 2011 to *** percent in 2013. U.S. producers' inventories of tableted chlorinated isos, as a share of total shipments, were lower in interim 2013 (*** percent) compared to interim 2014 (*** percent). These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Oxy reported that its shipments of chlorinated isos occur within the first six months of the year and that it begins to build inventories in the first quarter of every year.²⁷ According to ***, producers tend to operate their plants at a fairly consistent production level throughout the year, despite demand being highly seasonal. In off-season times (fall and winter), producers build inventories that are worked off during the higher demand spring and summer seasons.²⁸

Production alternatives

No responding U.S. producer reported that they could switch production from chlorinated isos to other products.

Supply constraints

No producer of granular chlorinated isos reported that they had not been unable to supply chlorinated isos since January 1, 2011. Two of 6 tableters reported that they had been unable to supply chlorinated isos since 2011. *** reported that due to a delay in shipments of raw materials in May 2014, it began to limit its availability of tablets to its customers. *** reported that U.S. producers would not sell granular chlorinated isos to it until the anti-dumping investigation was filed.

²⁷ Hearing transcript, p. 16 (Williams).

²⁸ ***, in petition at exhibit GEN-9.

Subject imports from China

The Commission received one questionnaire from a Chinese producer of chlorinated isos, ***.²⁹ Based on available information, producers of chlorinated isos from China have the ability to respond to changes in demand with large changes in the quantity of shipments of chlorinated isos to the U.S. market. The main contributing factors to the large degree of responsiveness of supply are the large Chinese production capacity and the existence of alternative markets.

Industry capacity

*** indicated that there were *** Chinese producers of chlorinated isos with a total capacity of more than *** metric tons per year. However, it noted that Chinese capacity to produce product acceptable in the United States and Western Europe is lower at *** metric tons per year.³⁰ With a reported capacity of *** tons, the sole responding Chinese producer represented only a fraction of the capacity estimates described above.

Alternative markets

*** indicated that “almost all” Chinese chlorinated producers are export-oriented, as Chinese consumption is not large. It noted that some Chinese producers also export lower-quality product to Africa and other developing nations for drinking water disinfection.³¹ Among Chinese producers responding to Commission questionnaires, exports to non-U.S. markets accounted for a large majority of total shipments. The sole responding Chinese producer reported that *** percent of its shipments were sold to ***.

Inventory levels

*** inventory levels were *** percent in 2013. U.S. importers’ inventories of Chinese imports, as a share of U.S. shipments of imports, ranged from *** percent to *** percent during 2011-2013.

Production alternatives

*** reported that it was unable to produce other products on the same equipment used to produce chlorinated isos.

²⁹ The one responding Chinese producer only reported data ***. ***.

³⁰ Chlorinated Isocyanurates from China and Japan, Inv. Nos. 701-TA-501 and 731-TA-1226 (Preliminary), USITC Publication 4431, November 2013, p. II-6. ***, in petition at exhibit GEN-9.

³¹ ***, in petition at exhibit GEN-9.

Supply constraints

*** responding importers of chlorinated isos from China reported that they had not been unable to supply chlorinated isos since January 1, 2011.

Subject imports from Japan

The Commission received three questionnaires from Japanese producers of chlorinated isos.³² Based on available information, producers of chlorinated isos from Japan have the ability to respond to changes in demand with moderate changes in the quantity of shipments of chlorinated isos to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the existence of alternative markets and some inventories; however, high capacity utilization and a lack of alternative products constrain the supply responsiveness.

Industry capacity

The three responding Japanese producers reported capacity was *** pounds in 2013. Capacity utilization ranged from *** percent to *** percent during 2011-13; capacity utilization was higher in interim 2013 (*** percent) compared to interim 2014 (*** percent).³³

Alternative markets

In Japanese producers' responses to Commission questionnaires, exports of granular chlorinated isos to the United States were between *** and *** percent of total shipments during 2011-13, with exports to all other markets between *** and *** percent of total shipments. The remaining *** to *** percent was sold to the Japanese market during 2011-13.³⁴

Inventory levels

Japanese producers' inventories of chlorinated isos, as a share of total shipments, fell from *** percent in 2011 to *** percent in 2013. U.S. importers' inventories of Japanese imports, as a share of U.S. shipments of imports, ranged from *** percent to *** percent during 2011-2013.

³² These three firms' exports to the United States accounted for virtually all U.S. imports of chlorinated isos during the period of investigation.

³³ *** indicated that there were four Japanese producers of chlorinated isos with an estimated capacity of ***. ***, in petition at exhibit GEN-9.

³⁴ *** indicated that Japanese producers exported approximately *** percent of their production to the United States and Western Europe. ***, in petition at exhibit GEN-9.

Production alternatives

No Japanese producer reported being able to produce other products on the same production equipment used to produce chlorinated isos.

Supply constraints

Three importers of chlorinated isos from Japan reported that they had been unable to supply chlorinated isos since January 1, 2011. *** reported that production could not keep pace with customers' requests. *** reported that lead times are longer during the summer season due to peak demand; it stated that customers were unable to accept the longer lead times and therefore, purchased from its competitors. *** stated that ***.

Nonsubject imports

After China and Japan, the amount of U.S. imports of chlorinated isos from other sources is low. There is production of chlorinated isos in Italy and Spain.³⁵ Nonsubject imports accounted for *** percent of the total imports of chlorinated isos in 2013.

Factors affecting supply

All responding producers (except ***), tableters, and importers reported that there had been no changes in the product range, product mix, or marketing of chlorinated isos since January 1, 2011. *** stated that while the products have remained the same, pricing is now driven by imports from China and Japan.

New suppliers

Seven of 25 purchasers indicated that new suppliers entered the U.S. market since 2011. Purchasers cited Cactus Valley, Chemicals International, Heze Huayi, Taiwan KK Corporation (broker), W&W Marketing Sherman Wang, and Zucheng (manufacturer/exporter).

U.S. demand

Based on available information, the overall demand for chlorinated isos is likely to experience moderate changes in response to changes in price. The main contributing factors are the somewhat limited range of substitute products and the large cost share of chlorinated isos in most of its end-use products.

³⁵ There are currently U.S. antidumping duties on Spanish product.

End uses

Demand for chlorinated isos consists of three major segments: residential pool sanitizers; detergents and cleansers (i.e., bleaches, toilet bowl cleansers, industrial and institutional detergents); and industrial water treatment (i.e., cooling tower applications). Approximately 85-90 percent of demand comes from the residential pool segment, including spas and hot tubs³⁶ Chlorinated isos are generally used in residential pools rather than commercial pools, which tend to use other types of sanitizers.³⁷ Of the 25 responding purchasers, 23 reported that the major end-use application for its purchases of chlorinated isos was swimming pools, 4 reported water treatment applications, 3 reported tablet production, 2 reported toilet bowl cleaners, and one reported bleaches/scouring powders.

Business cycles

According to ***, approximately two-thirds of retail chlorinated isos sales are made in the second and third quarters of the year.³⁸ Consumers tend to “shock” their pool with dichlor in May or June, and then use trichlor for maintenance thereafter. Thus, chlorinated isos manufacturers and importers will usually begin shipping (to retailers) in the first quarter of the year, with shipments peaking in the second quarter.³⁹

The majority of producers, tableters, importers, and purchasers indicated that the chlorinated isos market was subject to both business cycles and conditions of competition, citing the seasonal demand for chlorinated isos in the pool market and changes in weather affecting demand at a given time. One purchaser stated that the market is dominated by a few large players who can dictate selling prices.

Ten purchasers, six importers and two producers or tableters stated that there had not been changes to the business cycles or conditions of competition for chlorinated isos since 2011. However, six producers or tableters, three importers, and eleven purchasers stated that there had been, citing U.S. granular chlorinated isos producers selling directly to retailers, substitution by salt systems, changes in weather (one importer reported an earlier season due to warm weather resulting in increased demand and one importer reported “terrible” weather in 2013 resulting in decreased demand), the preliminary anti-dumping duties on chlorinated isos, and an increase of low-priced Chinese product on the market.

Apparent consumption

Apparent U.S. consumption of chlorinated isos decreased during the period of investigation. Overall, apparent U.S. consumption in 2013 was *** percent lower than in 2011.

³⁶ Hearing transcript p.14 (Williams).

³⁷ *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-1, and ***, petition, exhibit GEN-9.

³⁸ ***, in petition at exhibit GEN-9. See also conference transcript, p. 22 (Williams).

³⁹ Petition, p. 118.

Demand trends

Most firms reported decreased or unchanged U.S. demand for chlorinated isos since 2011 (table II-5). Firms reported a loss of market share to salt water pools, a reduction in new pool construction, weather, and the overall weak economy as reasons for decreasing and/or unchanged demand. Seven purchasers indicated that the increase in salt water generator systems has impacted the demand for chlorinated isos. Purchaser *** reported that salt chlorine generators have had a significant impact on its business, with an annual volume decrease of *** percent for both 2012 and 2013. Purchaser *** indicated that a large percentage of new pool construction (80 percent) is sold with salt chlorine generators. Five purchasers reported that poor weather have affected the length of the pool season which then impacted the demand for chlorinated isos. According to respondents, the last two pool seasons (i.e. 2013 and 2014) have experienced relatively wet and cool springs in many regions of the United States, which delayed opening of pools.⁴⁰

Table II-5

Chlorinated isos: Firms' responses regarding U.S. demand, by number of responding firms

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers and tableters	0	1	6	2
Importers	1	4	3	1
Purchasers	2	10	7	5
Demand outside the United States:				
U.S. producers	0	0	2	0
Importers	1	1	1	1
Purchasers	1	1	2	0

Source: Compiled from data submitted in response to Commission questionnaires.

Substitute products

Overall substitutes

Oxy described chlorinated isos as the “dominant” product for adding chlorine to pools based on its ease of use, storage stability, and high chlorine content. Nonetheless, it added that elemental chlorine, sodium hypochlorite, calcium hypochlorite, and salt systems can also perform the same role.^{41 42}

⁴⁰ Respondents' prehearing brief, p. 17.

⁴¹ Conference transcript, pp. 14-16 (Kuechler).

⁴² *** listed calcium hypochlorite and sodium hypochlorite as the major substitutes for chlorinated isos. It described calcium hypochlorite as the predominant residential pool sanitizer used in the North while chlorinated isos are the predominant pool sanitizers used in the Midwest and South. It further described sodium hypochlorite (usually used in a liquid solution) as more difficult to use and store for

(continued...)

Most firms (6 of 8 producers and/or tableters, four of 7 importers, and 16 of 23 purchasers) indicated that there were substitutes for chlorinated isos. Firms identified calcium hypochlorite, bromine, liquid chlorine, sodium hypochlorite, biguanide, and saltwater systems (discussed below) as possible substitutes for chlorinated isos. Most firms that changes in the prices of these substitutes had not affected the price of chlorinated isos. However, *** and purchaser *** stated that decreases in the prices of calcium hypochlorite and sodium hypochlorite have contributed to decreases in the price of chlorinated isos.

Saltwater pool systems

A small but increasing number of pools, especially in luxury hotels and on cruise ships, are “saltwater” pools. These pools use a generator to release chlorine gas from salt in the water in order to sanitize the pool, and so do not need any additional chlorinated isos. The salinity of the water in saltwater pools is much lower than in ocean water, and the smell of chlorine is “virtually nonexistent.”⁴³ However, maintenance on saltwater pools may present more difficulties than maintenance on standard pools sanitized with chlorinated isos, and saltwater pools may have a higher energy footprint.⁴⁴ Nonetheless, petitioners forecast that the increasing use of saltwater pools may mean that long-term demand for chlorinated isos will rise at a lower rate, *** percent, than historically (*** percent).⁴⁵ Moreover, SIC provided documentation that as much as 85 percent of new pool construction may come from saltwater pools.⁴⁶ Petitioners pointed out that the high percentage of new pools (they estimated *** percent) using saltwater should be viewed in the context of the small number of new pools relative to the installed base that use chlorinated isos.⁴⁷

Among questionnaire respondents, ***, ***, ***, ***, ***, ***, and ***, named saltwater systems as potential substitutes for chlorinated isos, and indicated that salt systems had taken market share from pools sanitized with chlorinated isos. They added that lower prices for saltwater systems had affected the price of chlorinated isos.

(...continued)

many homeowners, even though it can be less expensive than chlorinated isos. It added that pool service companies, which are more cost-conscious, more comfortable with handling liquid bleach, and more accustomed to performing regular pool cleanings, often use sodium hypochlorite rather than chlorinated isos. ***, in petition at exhibit GEN-9. However, at the conference, petitioners described selling nationally and not noting any regional differences. Conference transcript, p. 63 (Helmstetter).

⁴³ Petition, p. 119 and exhibit GEN-9, citing ***, and Green, Stephanie, “Saltwater pools: Is the water fine?” *Washington Times*, July 29, 2009.

⁴⁴ Petitioners also noted that even salt-system users may wish to use chlorinated isos to “shock” their pools. Conference transcript, pp. 88-90 (Helmstetter and Johnson) and p. 103 (Pettoruto).

⁴⁵ Petition, p. 119 and exhibit GEN-9, citing ***, and Green, Stephanie, “Saltwater pools: Is the water fine?” *Washington Times*, July 29, 2009.

⁴⁶ The documentation also noted that saltwater pool systems are not currently subject to the same EPA regulations as chlorinated isos. Postconference brief of SIC, exhibit 2.

⁴⁷ Petitioners’ postconference brief, p. 48.

Cost share

Chlorinated isos accounts for a large share of the cost of the end-use products in which it is used. Producers, importers, and purchasers reported that the cost share of chlorinated isos in pool sanitizers ranged between 57 percent to 100 percent, with more than half of responding producers and importers reporting ranges of 99 to 100 percent.⁴⁸ Two producers reported that 100 percent of the cost of industrial water treatment was chlorinated isos. One firm, ***, indicated that about 34 percent of the cost of a toilet cleaning tablet was chlorinated isos.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported chlorinated isos depends upon such factors as relative prices, quality (*e.g.*, grade standards, reliability of supply, defect rates, etc.), and conditions of sale (*e.g.*, price discounts/rebates, lead times between order and delivery dates, payment terms, chlorinated isos services, etc.). Based on available data, staff believes that there is moderate-to high degree of substitutability between domestically produced chlorinated isos and chlorinated isos imported from subject sources. This estimate depends on the degree and importance of quality differences between Chinese product compared to domestic and Japanese product.

Lead times

Chlorinated isos are primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments of granular chlorinated isos were from inventory, with an average lead time of 2 days. U.S. producers reported that the remaining *** percent was produced-to-order with lead time of 2-14 days. The vast majority (***) percent) of imports of granular chlorinated isos from China were shipped from U.S. or foreign inventory, with roughly half of all commercial shipments from U.S. inventory. Lead times averaged 1-3 days for importers' sales from inventory, and were 30 to 90 days for product produced-to-order. The majority of imports of granular product from Japan (***) percent) were shipped from inventory and the remaining *** percent was produced-to-order. Average lead times ranged from 10-45 days for Japanese importers' sales from inventory and ranged 10-90 days for produced-to-order. Oxy noted that chlorinated isos importers maintain inventories in the United States, and thus, U.S. producers had no delivery time advantage over importers.⁴⁹

For tablets, U.S. producers reported that *** percent of their commercial shipments of tableted chlorinated isos were from inventory, with an average lead time of 2 days. U.S. producers reported that the remaining *** percent was produced-to-order with lead time of 2-14 days. *** imports of tableted chlorinated isos from China were shipped from U.S. or foreign

⁴⁸ ***, indicated that only 57 to 75 percent of the cost of pool sanitizer was chlorinated isos. *** also reported that the cost share of chlorinated isos in blended swimming pool tablets was 63 percent.

⁴⁹ Conference transcript, p. 21 (Williams).

inventory. Lead times averaged 1-3 days for importers' sales from inventory. There were no imports of tableted chlorinated isos imported from Japan.

Knowledge of country sources

All 25 responding purchasers indicated they had marketing/pricing knowledge of domestic chlorinated isos, fourteen of Chinese chlorinated isos, twelve of Japanese chlorinated isos, and 5 of nonsubject countries (Italy and Spain).

As shown in table II-6, most purchasers (17 of 25) reported that they always or usually make purchasing decisions based on the producer. However, the majority of purchasers (14 of 20) reported that their customers never make purchasing decisions based on the producer. Most purchasers and their customers never make purchasing decisions based on country of origin. Of the ten purchasers that reported that they always make decisions based on the manufacturer, seven firms cited high quality or consistent product quality, other reasons cited include price, availability and brand recognition.

Table II-6

Chlorinated isos: Purchasing decisions based on producer and country of origin, by number of reporting firms

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	10	7	3	5
Purchaser's customers make decision based on producer	1	3	3	14
Purchaser makes decision based on country	5	4	3	13
Purchaser's customers make decision based on country	0	1	6	13

Source: Compiled from data submitted in response to Commission questionnaires.

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for chlorinated isos were price (24 firms), quality (22 firms), and availability (13 firms) as shown in table II-7. Quality was the most frequently cited first most important factor (cited by 14 firms); price was the most frequently reported second most important factor (11 firms); and price was the most frequently reported third most important factor (9 firms) followed by availability (7 firms).

Table II-7

Chlorinated isos: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by number of reporting firms

Factor	First	Second	Third	Total
Availability	4	2	7	13
Price	4	11	9	24
Quality	14	6	2	22
Other ¹	4	7	8	19

¹ Other factors include "strategic and corporate philosophy", existing long-term contract, and supplier service for the first factor; brand, credit, delivery, extension of credit, product line, and service for the second factor; and contract, delivery time, supply reliability, sales terms, and traditional supplier for the third factor.

Source: Compiled from data submitted in response to Commission questionnaires.

Quality

Purchasers were asked to identify the factors that determine the quality of chlorinated isos. Twenty-four purchasers reported several specific factors including: purity, consistency of particle size,⁵⁰ material density, low off-gassing,⁵¹ slow dissolving rates,⁵² available chlorine levels, color, and durability of tablets during transit.

A plurality of purchasers (12 of 24) reported that they only “sometimes” purchase the lowest-priced chlorinated isos for their purchases, 6 reported “usually”, 4 reported “never”, and 2 reported “always”. When asked if they purchased chlorinated isos from one source although a comparable chlorinated isos was available at a lower price from another source, 16 purchasers reported reasons including quality, delivery time, product specs, distribution contract, sustainability of supply, diversification of supply, availability, lead time, brand recognition, and contractual terms. Five of 23 purchasers reported that certain types of chlorinated isos were only available from a single source. *** reported that China offers tablets but that, other countries do not. *** stated that tablets from China dissolve more slowly. *** and *** stated that Japan produces unique products; *** noted that SIC is the only supplier of a product with “low odor chlorine.” *** reported that *** is only available in the United States (in terms of quality and available volume), however, smaller volumes are available in Japan and China.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 15 factors in their purchasing decisions (table II-8). The factors rated as “very important” by more than half of responding purchasers were availability (24 firms), delivery terms (17), delivery time (18), discounts offered (14), price (23) product consistency (23) quality meets industry standards (22), and reliability of supply (24).

⁵⁰ Uniform particle size allows tableters to more efficiently press granular chlorinated isos into a tablet. Hearing transcript, pp. 142-143 (Eisch).

⁵¹ According to Suncoast, off-gassing is extremely important at the consumer level. A product with high levels of off-gassing will release large amounts of chlorine into the air. It stated that large amounts of chlorine are caustic to the stores infrastructure and deters customers. Hearing transcript, pp. 160-161 (Eisch).

⁵² According to respondents, “Tablet density is integral to ensuring that the chlorine in the tablet is released at the desired rates and at the appropriate levels of concentration. Tablets are specifically engineered to provide optimal dissolve rates in swimming pools that are strong enough to effectively kill bacteria while delivering safe levels of chlorine. A tablet that dissolves too rapidly may elevate the chlorine content to levels that are unsafe for humans.” Respondents’ prehearing brief, p. 10. However, according to petitioners, the nature of the chlorine is a function of the type of chemical that is being used. If the tablets are made with trichlor, then the tablet releases the chlorine at a defined rate. Petitioners argue that the chemistry is exactly the same whether it is a tablet produced in United States, China, or Japan and therefore, the dissolution rates are the same. Hearing transcript, pp. 60-61 (Johnson).

Table II-8**Chlorinated isos: Importance of purchase factors, as reported by U.S. purchasers, by number of responding firms**

Factor	Very important	Somewhat important	Not important
Availability	24	1	0
Delivery terms	17	5	3
Delivery time	18	5	2
Discounts offered	14	6	5
Extension of credit	9	9	7
Minimum quantity requirements	5	6	14
Packaging	10	11	4
Price	23	2	0
Product consistency	23	2	0
Product range	5	12	8
Quality exceeds industry standards	10	13	2
Quality meets industry standards	22	3	0
Reliability of supply	24	1	0
Technical support/service	8	11	6
U.S. transportation costs	9	14	2

Source: Compiled from data submitted in response to Commission questionnaires.

Supplier certification

Sixteen of 25 responding purchasers require that all of the chlorinated isos they purchase be certified. In addition to being registered with the EPA (see *Registration* below), several purchasers reported that suppliers must pass a vendor qualification process and quality testing to review particle size and purity. Purchasers reported that the time to qualify a new supplier ranged from 3 to 180 days. Three of 25 purchasers reported that a foreign supplier had failed in its attempt to qualify chlorinated isos, or had lost its approved status since 2011. *** reported that it will no longer run granular product from China in its facility. *** reported that the following three firms did not pass its certification process: ***.

Registration

As with all biocidal chemicals, chlorinated isos must be registered with the U.S. Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). The EPA requires that manufacturers submit data on chemical and physical properties of chlorinated isos before receiving registration. Petitioners, as well as some respondents, are members of the “Ad Hoc Committee” that owns the EPA-required data for chlorinated isos. Petitioners stated that most of these data are no longer compensable, i.e., there is no fee for a manufacturer to use the data in order to obtain an EPA registration.⁵³ Oxy added that registration is the responsibility of the firm under which label the chlorinated isos

⁵³ Conference transcript, pp. 18-19, 74 (Kuechler).

will be sold, and not the responsibility of a producing plant. Thus, a seller may use any U.S. or foreign plant as long as the seller has registered the chemical.⁵⁴

Changes in purchasing patterns

Purchasers reported a variety of changes in their purchasing patterns from different sources since January 1, 2011 (table II-9); reasons reported for increased or fluctuated purchases from sources included growth in business, fluctuating market conditions, weather, and prices. Reasons reported for decreased purchases from sources included limited or unavailable supply, quality, and price. Eight of 25 purchasers reported that they had changed suppliers since 2011. Specifically, one firm dropped or reduced purchases from Blocean, a Chinese supplier, for unfavorable prices as a result of the preliminary duties in place in 2013. One purchaser dropped both Kingtai and AquaEnjoy due to price. One purchaser dropped Oxy in 2013 for a lack of available product but has since added Oxy back on its list of suppliers. Firms added or increased purchases from 3V, KIK, Lonza, Sagax, Tianjin Pool and Spa Corp., WaterTech and Wego because of product availability and supply diversification.

Table II-9
Chlorinated isos: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	1	4	7	4	8
China	8	3	4	0	6
Japan	6	3	3	1	5
Other	16	0	1	0	2

Source: Compiled from data submitted in response to Commission questionnaires.

Contracts

Chlorinated isos are generally purchased through short-term contracts. Twenty-one purchasers provided their share of 2013 purchases by sale type. Approximately 48 percent of reported purchases in 2013 were under short-term contracts, 29 percent were under long-term contracts, and 23 percent were spot sales. However, three large purchasers (***) reported at least 95 percent of their 2013 purchases were under long-term contracts.⁵⁵ Contracts are discussed in greater detail in *Part V* of this report.

⁵⁴ *Chlorinated Isocyanurates from China and Japan, Inv. Nos. 701-TA-501 and 731-TA-1226 (Preliminary)*, USITC Publication 4431, November 2013, p. II-8. Conference transcript, p. 73-74 (Kuechler and Helmstetter).

⁵⁵ ***.

Importance of purchasing domestic chlorinated isos

The majority of purchasers reported that purchasing U.S.-produced chlorinated isos was not an important factor in their purchasing decisions. Twenty-one of the 23 responding purchasers reported that none of their purchases had a domestic requirement in 2013; one purchaser reported that it was required by its customers (for 50 percent of its purchases); and two purchasers reported other preferences for domestic chlorinated isos. *** reported that *** percent of its purchases were domestic because of its contract with a domestic supplier of granular chlorinated isos. *** reported that *** percent of its purchases were domestic because of availability.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing chlorinated isos produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 15 factors (table II-10) for which they were asked to rate the importance.

More than half of responding purchasers reported that U.S. product was superior to chlorinated isos from China on availability, delivery time, quality exceeding industry standards, reliability of supply, and technical service and was comparable on all other factors.⁵⁶ The majority of purchasers reported that U.S. product and chlorinated isos from Japan were comparable on all factors. The majority of purchasers reported that U.S. product was superior to product imported from nonsubject sources on availability, delivery terms, delivery times, and reliability of supply and was comparable on all other categories. The exception to this was price, wherein one purchaser reported that the U.S. product was superior, three reported that the products were comparable, and three reported that U.S. product was inferior. Ten purchasers compared chlorinated isos from China with that from Japan, and reported that chlorinated isos from both countries were comparable on all factors except for quality exceeding industry standards, on which one purchaser reported that the Chinese product was superior, four reported that the products comparable, and five reported that the Chinese product was inferior to Japanese product.

⁵⁶ Tabletters *** reported issues with long lead times or missed delivery dates with products sourced from China. Respondents' prehearing brief, Exhibits 1C-1G.

Table II-10

Chlorinated isos: Purchasers' comparisons between U.S.-produced and imported chlorinated isos

Factor	U.S. vs. China			U.S. vs. Japan			U.S. vs. nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	9	6	2	2	13	1	6	1	0
Delivery terms	8	8	0	2	12	1	4	2	0
Delivery time	11	5	0	3	11	0	4	3	0
Discounts offered	1	10	1	1	9	0	2	3	0
Extension of credit	6	8	0	2	10	0	2	4	0
Minimum quantity requirements	3	10	1	1	12	0	2	4	0
Packaging	4	13	0	1	14	1	2	4	0
Price ¹	0	8	8	0	12	3	1	3	3
Product consistency	8	9	0	1	12	3	3	3	0
Product range	3	11	1	1	11	1	2	4	0
Quality exceeds industry standards	9	8	0	1	10	4	3	3	0
Quality meets industry standards	4	13	0	1	15	0	2	4	0
Reliability of supply	8	7	2	1	15	0	4	2	0
Technical support/service	8	9	0	2	12	1	3	3	0
U.S. transportation costs ¹	4	9	3	1	12	1	2	3	1
Factor	China vs. Japan			China vs. nonsubject			Japan vs. nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	1	7	3	1	3	0	4	1	0
Delivery terms	0	6	5	0	4	0	3	2	1
Delivery time	0	7	4	0	4	0	3	2	0
Discounts offered	0	5	2	0	3	0	2	2	0
Extension of credit	0	5	4	0	2	2	3	2	0
Minimum quantity requirements	0	6	2	0	3	1	2	3	0
Packaging	0	10	1	0	3	1	2	3	0
Price ¹	4	7	0	2	2	0	0	3	2
Product consistency	0	6	4	1	2	1	3	1	1
Product range	1	5	4	1	3	0	0	4	1
Quality exceeds industry standards	1	4	5	0	3	1	3	2	0
Quality meets industry standards	0	8	3	0	4	0	1	4	0
Reliability of supply	1	5	5	1	3	0	3	2	0
Technical support/service	0	6	5	0	4	0	2	3	0
U.S. transportation costs ¹	1	8	1	0	4	0	0	4	1

¹ A rating of superior means that price/U.S. transportation costs is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. chlorinated isos was generally priced lower than the imported chlorinated isos.

Note: S=first listed country's chlorinated isos is superior; C=both countries' products are comparable; I=first list country's chlorinated isos is inferior.

Source: Compiled from data submitted in response to Commission questionnaires.

In order to determine whether U.S.-produced chlorinated isos can generally be used in the same applications as imports from China and Japan, U.S. producers, importers, and purchasers were asked whether the products can “always,” “frequently,” “sometimes,” or “never” be used interchangeably. Firms were asked to compare 1) granular products from one source to granular/powder products from another source, 2) granular products from one source compared to tableted products from another source, and 3) tableted product from one source with tableted products from another source.

As shown in table II-11, the majority of firms reported that U.S. granular/powder chlorinated isos were always or frequently interchangeable with granular/powder product imported from both subject countries. When comparing U.S. produced granular/powder product to tableted product from subject countries, the majority of producers, tableters, and importers reported that the two were always or frequently interchangeable. However, importers were split; two importers reported that they were frequently interchangeable and two importers reported that they were sometimes or never interchangeable. When comparing U.S.-produced tablets to imports from China and Japan, most producers/tableters and purchasers reported that they were always or frequently interchangeable. Responses from the four responding importers were varied.

Table II-11

Chlorinated isos: Interchangeability between various forms of chlorinated isos produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of U.S. purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
Granular-to-granular comparisons												
U.S. vs. subject countries:												
U.S. vs. China	6	1	2	0	3	1	2	0	14	1	3	1
U.S. vs. Japan	7	1	0	0	3	2	1	0	12	3	0	0
Subject countries comparisons:												
China vs. Japan	6	1	1	0	3	1	2	0	11	0	2	1
Nonsubject countries comparisons:												
U.S. vs. nonsubject	4	1	1	0	3	1	1	0	5	2	1	1
China vs. nonsubject	4	1	1	0	2	1	1	0	6	1	2	0
Japan vs. nonsubject	5	0	1	0	2	1	1	0	6	1	1	1
Granular-to-tableted comparisons												
U.S. vs. subject countries:												
U.S. powder vs. China tablets	5	2	1	1	0	2	1	1	12	0	3	3
U.S. powder vs. Japan tablets	6	1	0	1	0	2	1	1	8	0	2	2
Subject countries comparisons:												
China powder vs. Japan tablets	5	2	0	1	0	2	1	1	6	0	2	2
Nonsubject countries comparisons:												
U.S. powder vs. nonsubject tablets	3	2	0	1	1	2	1	1	4	0	0	3
China powder vs. nonsubject tablets	3	2	0	1	0	2	1	1	4	0	0	2
Japan powder vs. nonsubject tablets	4	1	0	1	0	2	1	1	4	0	0	2
Tableted-to-tableted comparisons												
U.S. vs. subject countries:												
U.S. vs. China	6	1	2	0	1	1	1	0	14	0	2	2
U.S. vs. Japan	7	1	0	0	1	1	1	0	10	2	0	0
Subject countries comparisons:												
China vs. Japan	6	1	1	0	1	1	1	0	8	0	1	1
Nonsubject countries comparisons:												
U.S. vs. nonsubject	4	1	1	0	2	1	1	0	5	0	1	1
China vs. nonsubject	4	1	0	0	1	1	1	0	5	0	0	0
Japan vs. nonsubject	5	0	0	0	1	1	1	0	5	0	0	1

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

Source: Compiled from data submitted in response to Commission questionnaires.

In further comments, *** stated that granular and tableted chlorinated isos are not typically used in the same application. SIC and purchaser Suncoast stated that tableters do not mix bulk product from multiple sources into one tablet, nor do they tablet other products with the same equipment with which they tablet chlorinated isos.⁵⁷ ***, ***, ***, ***, ***, ***, and *** indicated that powder from multiple sources are “never” mixed into one tablet. *** reported that powder from multiple sources is “sometimes” mixed into one tablet. Importer *** stated that “because chlorinated isos require EPA registration, the existence or absence of a particular country/manufacturer’s product as an approved source on a registration can determine interchangeability.” Furthermore, *** reported that only one Japanese manufacturer’s product is EPA registered and NSF certified for use in industrial water treatment; however, all other countries, including China, is not registered or certified for use in potable water.

*** and *** reported that Chinese material have higher levels of chlorine off-gassing which results in worker exposure issues during processing and can lead to packaging degradation of the final product.⁵⁸ *** and *** reported that both Chinese granular product and tableted product does not meet their quality specifications. *** reported that Chinese material has a coarser and less consistent particle size distribution than domestic and Japanese-produced material. *** stated that imported tableted product is not interchangeable with granular product because tableted product is sold directly to distributors and retailers, while the granular product must be further manufactured into the tableted form. Furthermore, *** noted that “***.”

As can be seen from table II-12, the majority of responding purchasers reported that domestically-produced chlorinated isos “always” met minimum quality specifications. Most responding purchasers reported that both imports of chlorinated isos from China and Japan “always” met minimum quality specifications.

Table II-12
Chlorinated isos: Ability to meet minimum quality specifications, by source and number of reporting firms¹

Source	Always	Usually	Sometimes	Rarely or never	Don't know
United States	17	3	0	0	2
China	8	5	2	1	6
Japan	10	4	1	0	7
All other sources	3	0	3	0	11

¹ Purchasers were asked how often domestically produced or imported chlorinated isos meets minimum quality specifications for their own or their customers’ uses.

Source: Compiled from data submitted in response to Commission questionnaires.

⁵⁷ Conference transcript, pp. 142-144 (Pettoruto, Eisch, and Klett).

⁵⁸ *** reported that for granular, the degree of interchangeability between Chinese and Japanese produced chlorinated isos is almost never due to the inferior quality of the Chinese product.

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of chlorinated isos from the United States, subject, or nonsubject countries. As seen in table II-13, producers and importers usually described differences other than price as “sometimes” or “never” being significant between granular form chlorinated isos from different countries. However, two tableters (***) reported that differences other than price were “always” significant between granular product from the United States and China as well as China and Japan.⁵⁹ Purchasers’ responses were more varied. Most purchasers (12 of 19) reported that differences other than price were “always” or “frequently” significant between granular product from the United States and China. Most purchasers also reported that differences other than price were “always” or “frequently” significant when comparing granular product from China and product from Japan.

According to respondents, Chinese and Japanese product differs greatly; it stated that Chinese granular product has high moisture levels that generate off-gassing, contains fines and granules of different sizes and shapes, and contains impurities.⁶⁰ However, for comparisons between U.S. granular product and product from Japan, most purchasers (10 of 15) reported that differences other than price were “sometimes” or “never” significant.

⁵⁹ Six tableters *** reported that they had experienced substantial issues with inconsistent granule size and off-gassing with chlorinated isos from China. Respondent’s prehearing brief, exhibits 1C-IG.

⁶⁰ Respondents’ prehearing brief, p. 34.

Table II-13

Chlorinated isos: Significance of differences other than price between chlorinated isos produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting				Number of U.S. purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
Granular-to-granular comparisons												
U.S. vs. subject countries:												
U.S. vs. China	2	0	3	3	1	1	3	1	8	4	4	3
U.S. vs. Japan	0	0	4	3	1	0	3	2	3	2	5	5
Subject countries comparisons:												
China vs. Japan	2	0	2	3	2	0	3	1	6	3	1	2
Nonsubject countries comparisons:												
U.S. vs. nonsubject	0	0	2	2	1	1	1	1	2	3	1	1
China vs. nonsubject	0	0	2	2	1	0	1	1	2	1	2	1
Japan vs. nonsubject	1	0	1	2	1	0	1	1	4	2	0	1
Tableted-to-tableted comparisons												
U.S. vs. subject countries:												
U.S. vs. China	1	0	4	3	0	0	2	1	6	1	5	3
U.S. vs. Japan	0	0	2	4	0	0	3	1	2	0	2	4
Subject countries comparisons:												
China vs. Japan	1	0	2	3	0	0	2	1	3	0	1	2
Nonsubject countries comparisons:												
U.S. vs. nonsubject	0	0	1	2	0	1	1	1	1	1	0	1
China vs. nonsubject	0	0	2	2	0	0	1	1	1	0	2	1
Japan vs. nonsubject	0	0	1	2	0	0	1	1	2	0	0	1

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

Source: Compiled from data submitted in response to Commission questionnaires.

For tableted products, firms described similar differences between tableted chlorinated isos from different countries as they did for granular product. Most producers and importers described differences other than price as “sometimes” or “never” being significant between tableted chlorinated isos from different countries. A plurality of purchasers (7 of 15) reported that differences other than price were “always” or “frequently” significant between tableted product from the United States and China. Nine of 12 responding purchasers also reported that differences other than price were “always” or “frequently” significant when comparing granular product from China and product from Japan. However, for comparisons between U.S. granular product and product from Japan, most purchasers (10 of 15) reported that differences other than price were “sometimes” or “never” significant.

In further comments, *** stated that while U.S.- and Japanese-produced chlorinated isos are often interchangeable, there are several non-price factors that distinguish Chinese and Japanese product which include: quality, reliability, and availability. *** noted that Chinese product is typically supplied through brokers and on a spot market basis, while *** supply relationships are based on long-term relationships. *** stated that Japanese material from *** and domestic material are similar in quality, however it noted that the quality of Chinese material is poor. *** reported that lead time is a frequent factor and only U.S. suppliers can ship quickly enough, as ocean freight can take a month. *** also reported that the quality of Chinese product and product from nonsubject countries does not meet its required specifications. Suncoast reported that the Chinese product is very powdery with very inconsistent granulation, and off-gasses because of its high moisture content.⁶¹

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates in their prehearing or posthearing brief but did not provide any comments.

U.S. supply elasticity

The domestic supply elasticity⁶² for chlorinated isos measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of chlorinated isos. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced chlorinated isos. Analysis of these factors earlier indicates that the U.S. industry has the ability to moderately increase or decrease shipments to the U.S. market; an estimate in the range of 3 to 5 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for chlorinated isos measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of chlorinated isos. This estimate depends on factors discussed earlier such as the existence, availability, and commercial viability of substitute products, as well as the component share of the chlorinated isos in the production

⁶¹ According to Suncoast, a very powdery product creates a caustic environment in which dust particulates in the air release high levels of chlorine that results in an unsafe work environment for workers without respirators. Hearing transcript, p. 159 (Eisch).

⁶² A supply function is not defined in the case of a non-competitive market.

of any downstream products. Based on the available information, the aggregate demand for chlorinated isos is likely to be inelastic; a range of -0.5 to -0.75 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of chlorinated isos differentiation between the domestic and imported products.⁶³ Chlorinated isos differentiation, in turn, depends upon such factors as quality (*e.g.*, chemistry, appearance, etc.) and conditions of sale (*e.g.*, availability, sales terms/discounts/promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced chlorinated isos and imported chlorinated isos is likely to be in the range of 3 to 5.

⁶³ The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of three firms that accounted for the all of U.S. production of granular/powder chlorinated isos and six firms that are involved in U.S. tableting operations of chlorinated isos during 2013.

U.S. PRODUCERS

The Commission sent U.S. producer questionnaires to three firms that produce chlorinated isos from cyanuric acid and chlorine gas (referred to herein as “producers”) based on information contained in the petition, and six firms that tablet chlorinated isos (referred to herein as “tableters”).¹ Data presented for U.S. granular producers are from the questionnaire responses of three firms, BioLab, Clearon, and Oxy that accounted for all production of chlorinated isos (in granular form) in the United States during 2011-13. In addition, data are presented for eight U.S. tableters, ***.² Two out of eight tableters are also granular producers (BioLab and Clearon) and form tablets from their own production of granular chlorinated isos. The remaining six tableters purchase domestically produced granular chlorinated isos and/or purchase imported granular chlorinated isos and form these into tablets.³ For more information on U.S. producers’ and tableters’ source of granular material used to tablet chlorinated isos, please see chart E-1.

Table III-I lists U.S. production of chlorinated isos for the responding producers and tableters, their production locations, positions on the petition, total production, and shares of total production.

¹ Six additional tableters, ***, did not provide the Commission with U.S. producers’ questionnaire responses. Two additional firms, ***, are tollers for U.S. importer Haviland and provided only their production and capacity data for their tolling operations.

² One tableter, ***.

³ Two tableters (***) also directly import chlorinated isos from subject sources although one of them, ***, does not tablet its imports.

Table III-1

Chlorinated isos: U.S. producers and U.S. tableters, their positions on the petition, location of production, and share of reported production from January 2011 to June 2014

Firm	Position on petition	Production location(s)	Share of granular/powder production (percent)	Share of tablet production (percent)
BioLab	***	Lawrenceville, GA Westlake, LA Conyers, GA	***	***
Clearon (Petitioner)	Support	South Charleston, WV	***	***
LPM	***	Phoenix, AZ	***	***
N. Jonas	***	Bensalem PA	***	***
Oreq	***	Temecula, CA	***	***
Oxy (Petitioner)	Support	Dallas, Texas	***	***
Qualco	***	Passaic, NJ	***	***
Stellar	***	Sauget, IL	***	***
Suncoast	***	Clearwater, FL	***	***
Total			***	***

Source: Compiled from data submitted in response to Commission questionnaires.

As indicated in table III-1, one U.S. tableter, ***. In addition, as discussed in greater detail below, two U.S. producers/tableters *** directly imported the subject merchandise and six U.S. tableters purchased the subject merchandise from U.S. importers and domestic granular producers.

OVERVIEW OF U.S. PRODUCERS OF CHLORINATED ISOS

BioLab produces and tablets granular/powder trichlor⁴ chlorinated isos produced internally and ***.⁵ ***. In addition, BioLab ***. It does not ***.⁶ BioLab reported that it ***.⁷

Clearon, a petitioner in these investigations, produces granular trichlor, granular dichlor, and trichlor tablets at its facility in South Charleston, WV. This facility is capable of producing a combined *** of granular chlorinated isos annually. In addition, Clearon reported that ***.⁸

Oxy, a petitioner in these investigations, produces granular trichlor and granular dichlor at its facilities in Sauget, IL and Luling, LA. Oxy ***. Oxy reported that ***.⁹

OVERVIEW OF U.S. TABLETERS OF CHLORINATED ISOS¹⁰

LPM is a tableter and *** of chlorinated isos. It ***. LPM has ***. It reported ***.¹¹ N. Jonas is a *** of chlorinated isos. It ***. N. Jonas reported that *** ***. In addition, N. Jonas notes that ***.¹²

Oreq is a ***.¹³ It ***. ***. Oreq reported that it ***.

Qualco, ***. It ***.¹⁴

Stellar, a *** of chlorinated isos at its facility in Sauget, IL., is ***.¹⁵ It reported production/capacity constraints ***.¹⁶ Stellar ***.¹⁷ It also ***. Stellar reported ***.

Suncoast is ***.¹⁸ It ***. Suncoast ***. Suncoast reported that it ***.¹⁹

⁴ BioLab ***.

⁵ The granular/powder chlorinated isos ***.

⁶ BioLab reported ***. E-mail from ***.

⁷ BioLab's U.S. producer questionnaire, section II-2.

⁸ Clearon's U.S. producer questionnaire, sections II-2 and II-4.

⁹ Oxy's U.S. producer questionnaire, section II-4.

¹⁰ ***.

¹¹ LPM's U.S. producer questionnaire, sections II-4, II-6, and II-14.

¹² N. Jonas' U.S. producer questionnaire, section II-15a, attachment.

¹³ Oreq reported that it ***.

¹⁴ E-mail from ***.

¹⁵ Stellar ***.

¹⁶ Stellar's U.S. producer questionnaire, sections II-4 and II-15a.

¹⁷ Stellar's ***.

¹⁸ Suncoast ***.

¹⁹ Suncoast's U.S. producer questionnaire, section II-15a.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 presents U.S. producers' and U.S. tableters' production, capacity, and capacity utilization. U.S. producers' capacity to produce granular/powder chlorinated isos remained the same from 2011 to 2013 and during interim 2013 and 2014. U.S. tableting capacity increased slightly from 2011 to 2013 and increased in January to June 2014 compared to January to June 2013. Production of granular/powder declined from 2011 to 2013. Production of tableted chlorinated isos declined from 2011 to 2012 then increased in 2013 and decreased, from January to June 2014 compared to January to June 2013.

Table III-2

Chlorinated isos: Capacity, production, and capacity utilization for all firms, 2011-13, January to June 2013, and January to June 2014

* * * * *

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-3 presents data on U.S. producers' shipments of granular/powder chlorinated isos and table III-4 presents data on U.S. tableters' shipments of tableted chlorinated isos. Commercial shipments and internal consumption were the majority of granular/powder chlorinated isos shipments from January 2011 to June 2014. Unit values for granular/powder isos were lower than unit values for tableted chlorinated isos throughout January 2011 to June 2014. Interim January to June 2014 was the only period with transfers to related firms and this is accounted for by ***.

Table III-3

Chlorinated isos: U.S. producers' U.S. shipments, export shipments, and total shipments of granular/powder chlorinated isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

Table III-4

Chlorinated isos: U.S. shipments, export shipments, and total shipments of tableted chlorinated isos by all firms, 2011-13, January to June 2013, and January to June 2014

* * * * *

U.S. PRODUCERS' INVENTORIES

Table III-5 presents combined data for U.S. producers' and U.S. tableters' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. From January 2011 to June 2014, the majority of inventories for both U.S. producers and tableters were held in the granular/powder form from January 2011 to June 2014.

Table III-5

Chlorinated isos: U.S. producers' and U.S. tableters' inventories, 2011-13, January to June 2013, and January to June 2014

* * * * *

U.S. PRODUCERS' AND U.S. TABLETERS' SHIPMENTS BY TYPE OF CHLORINATED ISOS

Table III-6 presents data of U.S. producers' and U.S. tableters' U.S. commercial shipments, broken out by the type of chlorinated isos. The majority of U.S. commercial shipments of trichlor is in the form of tablets, which are used to maintain the chlorine levels of pools in a consistent application. The majority of U.S. commercial shipments of dichlor is in the form of power/granular, which is used as a "shock" treatment to quickly raise the chlorine level in pools. Granular/powder dichlor has a higher unit value than granular/powder trichlor. However, tableted dichlor has a lower unit value than tableted trichlor.

Table III-6

Chlorinated isos: U.S. producers' U.S. commercial shipments types of isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-7 shows U.S. producers' and U.S. tableters' employment-related data from January 2011 to June 2014. The hourly wages for PRWs engaged in producing granular/powder chlorinated isos was more than double the wages for tableters.

Table III-7

Chlorinated isos: U.S. producers' and U.S. tableters' employment related data, 2011-13, January to June 2013, and January to June 2014

* * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

Table III-8 presents data on *** and table III-9 presents data on ***. Table III-10 presents data on all U.S. producers' and U.S. tableters' purchases of chlorinated isos. As previously noted, U.S. producer ***. BioLab ***.²⁰ One U.S. tableter (***) directly imported the subject product, the ***.

Table III-8

Chlorinated isos: * imports, 2011-13, January to June 2013, and January to June 2014**

* * * * *

Table III-9

Chlorinated isos: * imports, 2011-13, January to June 2013, and January to June 2014**

* * * * *

Table III-10

Chlorinated isos: U.S producers' purchases of imports, 2011-13, January to June 2013, and January to June 2014

* * * * *

²⁰ BioLab reported that it ***.

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 28 firms believed to be importers of subject chlorinated isos, as well as to all U.S. producers of chlorinated isos.^{1 2} From January 2011 to June 2014, approximately *** percent of U.S. imports of chlorinated isos from China were imported by ***³ and approximately *** percent of U.S. imports of chlorinated isos from Japan was imported by SIC.⁴ Usable questionnaire responses were received from ten companies plus proprietary Customs data, representing the majority of total imports from China and Japan between January 2011 to June 2013 under HTS subheading 2933.69.6015.⁵ Table IV-1 lists all responding U.S. importers of chlorinated isos from China, Japan, and all other sources (“AOS”), their locations, and their shares of U.S. imports from January 2011 to June 2014.

¹ The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection (“Customs”), may have accounted for a large percent of total imports under HTS subheading 2933.69.6015 in 2013.

² Tariff classifications 2933.69.6021 and 2933.69.6050, and 3808.99.9500 represent basket categories that include chlorinated isos and nonsubject compounds such as unfused triazine ring, disinfectants and other nonsubject products. Petition, p. 8. Petitioners contend that, for purposes of analyzing import data, HTSUS 2933.69.6015 “most accurately corresponds to the relevant imports in bulk form and includes chlorinated isos not blended with other additives or tableted and packaged for retail sale. Petition, vol. 1. ***.

³ Arch China ***. Petitioners contend that ***. Petitioners’ postconference brief, p. 6.

⁴ SIC is owned by Japanese producer Shikoku.

⁵ Staff supplemented the questionnaire responses with proprietary Customs data for HTS number 2933.69.6015 for U.S. importers of chlorinated isos from China that did not respond to the Commission’s questionnaire. The HTS subheadings 2933.69.6021, 2933.69.6050, 3808.50.4000, 3808.94.5000, and 3808.99.9500 in the scope are “basket” categories that include many nonsubject products. One importer, ***, did not provide a questionnaire for these final phase investigations but did submit a usable importers’ questionnaire in the preliminary phase. Staff used ***.

Table IV-1
Chlorinated isos: U.S. importers, their headquarters, and share of total imports by source,
January 2011 through June 2014

Firm	Headquarter	Share of granular/powder form imports by source (percent)				
		China	Japan	Subject countries	AOS	Total imports
AllChem	Gainesville, FL	***	***	***	***	***
American KK	Bear, DE	***	***	***	***	***
Arch	Alpharetta, GA	***	***	***	***	***
BioLab	Lawrenceville, GA	***	***	***	***	***
Customs data	Not applicable	***	***	***	***	***
Eco-Chem	Allentown, PA	***	***	***	***	***
Haviland	Grand Rapids, MI	***	***	***	***	***
Oreq Corporation	Lake Elsinore, CA	***	***	***	***	***
SIC	Orange, CA	***	***	***	***	***
Toyota Tsusho	Georgetown, KY	***	***	***	***	***
Wego	Great Neck, NY	***	***	***	***	***
Total		***	***	***	***	***
Firm	Headquarters	Share of tablet form imports by source (percent)				
		China	Japan	Subject countries	AOS	Total imports
AllChem	Gainesville, FL	***	***	***	***	***
American KK	Bear, DE	***	***	***	***	***
Arch	Alpharetta, GA	***	***	***	***	***
BioLab	Lawrenceville, GA	***	***	***	***	***
Customs data	Not applicable	***	***	***	***	***
Eco-Chem	Allentown, PA	***	***	***	***	***
Haviland	Grand Rapids, MI	***	***	***	***	***
Oreq Corporation	Lake Elsinore, CA	***	***	***	***	***
SIC	Orange, CA	***	***	***	***	***
Toyota Tsusho	Georgetown, KY	***	***	***	***	***
Wego	Great Neck, NY	***	***	***	***	***
Total		***	***	***	***	***

Table continued on next page.

Table IV-1--Continued

Chlorinated isos: U.S. importers, their headquarters, and share of total imports by source, January 2011 through June 2014

Firm	Headquarters	Share of imports in any form by source (percent)				
		China	Japan	Subject countries	AOS	Total imports
AllChem	Gainesville, FL	***	***	***	***	***
American KK	Bear, DE	***	***	***	***	***
Arch	Alpharetta, GA	***	***	***	***	***
BioLab	Lawrenceville, GA	***	***	***	***	***
Customs data	Not applicable	***	***	***	***	***
Eco-Chem	Allentown, PA	***	***	***	***	***
Haviland	Grand Rapids, MI	***	***	***	***	***
Oreq	Lake Elsinore, CA	***	***	***	***	***
SIC	Orange, CA	***	***	***	***	***
Toyota Tsusho	Georgetown, KY	***	***	***	***	***
Wego	Great Neck, NY	***	***	***	***	***
Total		***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and supplemented with proprietary Customs data for HTS number 2933.69.6015 for U.S. importers of chlorinated isos from China that did not respond to the Commission's questionnaire.

OVERVIEW OF U.S. IMPORTERS OF CHLORINATED ISOS

AllChem is ***.⁶ It ***.

American KK is ***. It is ***. Petitioners allege that there is no chlorinated isos production ***.⁷

Arch is ***,⁸ ***⁹ of chlorinated isos. Arch is ***. Arch ***. It has ***. Table IV-2 presents data on Arch's imports by type from 2011 to June 2014. Arch reported that the reason that it experienced ***.¹⁰ In addition, Arch's ***.¹¹

Table IV-2

Chlorinated isos: U.S. importer *, 2011-13, January to June 2013, and January to June 2014**

* * * * *

⁶ AllChem ***.

⁷ Petitioners' comments concerning draft questionnaires, May 27, 2013, p. 11.

⁸ Arch ***.

⁹ In the preliminary phase of these investigations, Arch ***.

¹⁰ E-mail from ***.

¹¹ Ibid.

BioLab is a U.S. producer of granular trichlor chlorinated isos, tableter, and ***. It stated that the ***.¹² BioLab ***. It does not ***.¹³

Eco-Chem is an importer of ***. It is ***. Eco-Chem reported ***.¹⁴

Haviland is an importer of ***. It does ***. It reported ***.¹⁵

Oreq is ***. It has ***.¹⁶ Shikoku and SIC are ***.

SIC is an U.S. importer and ***. It imports chlorinated isos from its sister company, Shikoku.¹⁷ SIC reported that it ***.¹⁸ SIC reported ***. In addition, SIC's parent, Shikoku, is ***. SIC also ***.

Toyota Tsusho America, Inc. ("Toyota Tsusho") is an importer of ***. It does ***.

Wego Chemical & Mineral Corp. ("Wego") is an importer of ***. It does ***.

U.S. IMPORTS

Tables IV-3, IV-4, and IV-5 present data for U.S. imports of chlorinated isos from China, Japan and all other sources. From January 2011 to June 2014, the majority of U.S. imports from China and all U.S. imports from Japan were the granular/powder form of chlorinated isos. U.S. imports of both granular/powder and tableted forms of chlorinated isos from China declined from 2011 to 2013 while imports from Japan increased from 2011 to 2013. Only one responding firm, ***, reported importing tableted chlorinated isos from subject sources (China) from 2011 to June 2014. Nonsubject sources of U.S. imports of granular chlorinated isos include Canada, India, Italy, Mexico, and Vietnam.¹⁹ All nonsubject imports of tableted chlorinated isos were accounted for by one responding importer, ***.²⁰

Table IV-3

Chlorinated isos: U.S. importers' U.S. imports of granular/powder form of chlorinated isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

Table IV-4

Chlorinated isos: U.S. importers' U.S. imports of finished tablets of chlorinated isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

¹² BioLab's U.S. importer questionnaire response, II-2, and ***.

¹³ E-mail from ***.

¹⁴ Data for Eco-Chem is ***.

¹⁵ Haviland's U.S. importer questionnaire, section II-6.

¹⁶ Oreq reported that it ***.

¹⁷ SIC reported that ***. Shikoku reported that ***. Shikoku's foreign producers' questionnaire response, attachment and Shikoku's posthearing brief, exh. 6, no. 17.

¹⁸ SIC's U.S. importer questionnaire, section II-6.

¹⁹ U.S. imports from Vietnam ceased after 2011. ***. Petitioners' postconference brief, exh. 2 and app. E.

²⁰ Petitioners allege that ***. Petitioners' prehearing brief, p. 15.

Table IV-5
Chlorinated isos: U.S. importers' U.S. imports of all forms of chlorinated isos, 2011-13, January to June 2013, and January to June 2014

* * * * *

U.S. IMPORTERS' SHIPMENTS BY TYPE OF CHLORINATED ISOS

Table IV-6 presents data of U.S. importers' U.S. commercial shipments of chlorinated isos from China, broken out by the type of chlorinated isos. In powder/granular form, commercial U.S. shipments from China fluctuated markedly for trichlor from 2011 to 2013 while commercial U.S. shipments from China for dichlor declined during the same period. In tablet form, all imports were trichlor and declined from 2011 to June 2014.

Table IV-6
Chlorinated isos: U.S. importers' commercial U.S. shipments by type from China, 2011-13, January to June 2013, and January to June 2014

* * * * *

Table IV-7 presents data of U.S. importers' U.S. commercial shipments of chlorinated isos from Japan, broken out by the type of chlorinated isos. In powder/granular form, commercial U.S. shipments for both dichlor and trichlor increased in quantity from 2011 to 2013 but were lower in January to June 2014 compared to January to June 2013. In tablet form, *** in 2011 and 2012.

Table IV-7
Chlorinated isos: U.S. importers' commercial U.S. shipments by type from Japan, 2011-13, January to June 2013, and January to June 2014

* * * * *

Table IV-8 presents data of U.S. importers' U.S. commercial shipments of chlorinated isos from all other sources, broken out by the type of chlorinated isos. The majority of imports from all other sources from January 2012 to June 2014 were small amounts of trichlor tablets.

Table IV-8
Chlorinated isos: U.S. importers' commercial U.S. shipments by type from all other sources, 2011-13, January to June 2013, and January to June 2014

* * * * *

NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.²¹ Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.²² None of the respondents have argued negligibility. Table IV-9 presents data on U.S. imports of chlorinated isos from August 2012 to July 2013.

Table IV-9
Chlorinated isos: U.S. imports of chlorinated isos, August 2012 to July 2013

Item	August 2012 through July 2013	
	Quantity (1,000 pounds)	Share
U.S. imports.--		
China	46,002	46.5
Japan	45,286	45.7
Subject	91,288	92.2
All other sources	7,704	7.8
Total U.S. imports	98,992	100.0

Source: Official import statistics.

CUMULATION CONSIDERATIONS

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information concerning fungibility and channels of distribution are discussed in Part II of this report.

²¹ Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

²² Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Presence in the market

Official Commerce data for U.S. imports were used to evaluate subject import presence in the market as shown in table IV-10. Imports from China and Japan were present in every month from January 2011 to June 2014. China and Japan were the largest sources for imports of chlorinated isos from January 2011 to June 2014.

Table IV-9
Chlorinated isos: Subject U.S. imports by month, 2011-13 and January to June 2014

Item	Calendar year			Jan.-June
	2011	2012	2013	2014
Quantity (1,000 pounds)				
U.S. imports from China.--				
January	3,080	7,590	6,047	2,051
February	5,670	4,748	4,731	2,813
March	3,614	4,332	3,302	0
April	5,337	6,340	5,117	411
May	3,658	8,523	4,326	1,639
June	3,393	6,597	2,339	1,822
July	1,171	6,854	2,004	
August	1,321	3,425	1,592	
September	910	3,678	2,120	
October	692	1,980	2,971	
November	2,066	4,515	2,303	
December	2,480	4,538	1,926	
Quantity (1,000 pounds)				
U.S. imports from Japan.--				
January	1,149	2,631	4,027	1,929
February	475	3,243	3,491	1,502
March	1,360	5,074	4,960	4,160
April	1,124	6,782	5,427	992
May	916	4,193	4,253	0
June	1,014	3,113	3,167	0
July	631	2,238	5,078	
August	606	4,093	2,689	
September	1,122	2,772	2,087	
October	857	2,307	1,325	
November	1,874	2,439	2,468	
December	1,762	3,271	1,246	

Source: Official import statistics for HTS subheading 2933.69.6015.

Geographical markets

Official Commerce statistics show that subject imports entered the United States in most geographical regions during the period of investigation. U.S. imports from China entered through the ports of (in order of quantity in 2013) New York, NY; Los Angeles, CA; Savannah, GA; Dallas-Fort Worth, TX; Tampa, FL; Houston-Galveston, TX; Miami, FL; Seattle, WA; San Francisco, CA; Chicago, IL; San Juan PR; and Buffalo, NY. U.S. imports from Japan entered through the ports of Los Angeles, CA; New York, NY; Tampa, FL; Savannah, GA; Seattle, WA;

Miami, FL; Chicago, IL; Houston-Galveston, TX; and San Francisco, CA. Table IV-11 presents data on U.S. imports of chlorinated isos by customs districts for January 2011 through June 2014.

Table IV-11

Chlorinated isos: Subject U.S. imports by Customs districts, January 2011 through June 2014

Item	January 2011 through June 2014	
	Quantity (1,000 pounds)	Share
U.S. Imports from China:		
New York, NY	73,776	51.2
Los Angeles, CA	54,415	37.8
Savannah, GA	4,884	3.4
Dallas-Fort Worth, TX	4,028	2.8
Tampa, FL	1,865	1.3
Houston-Galveston, TX	1,683	1.2
Miami, FL	1,262	0.9
Seattle, WA	891	0.6
San Francisco, CA	510	0.4
Chicago, IL	480	0.3
San Juan, PR	220	0.2
Buffalo, NY	11	0.0
Total imports from China	144,025	100.0
U.S. Imports from Japan:		
Los Angeles, CA	60,945	58.7
New York, NY	15,840	15.3
Tampa, FL	11,576	11.1
Savannah, GA	6,668	6.4
Seattle, WA	3,470	3.3
Miami, FL	2,183	2.1
Chicago, IL	2,144	2.1
Houston-Galveston, TX	545	0.5
San Francisco, CA	479	0.5
Grand Total	103,849	100.0

Source: Official import statistics for HTS subheading 2933.69.6015.

Apparent U.S. consumption

Table IV-12 presents data on apparent U.S. consumption and U.S. market shares for chlorinated isos for U.S. producers and U.S. tableters combined. The share of the U.S. chlorinated isos market (on a quantity basis) accounted for by Chinese imports declined from *** percent in 2011 to *** percent in 2013 and was at *** in January to June 2014 compared with *** percent in January to June 2013. The market share for Japanese imports (on a quantity basis) increased from *** percent in 2011 to *** percent in 2013. However, the market share of Japanese imports in January to June 2014 (*** percent) was lower than in January to June 2013 (***). Collectively, subject imports' share of apparent U.S. consumption from China and Japan fluctuated from 2011 to 2013, with an overall decline from *** percent to *** percent from 2011 to 2013. In January-June 2014 subject imports were *** percent compared to *** percent in January-June 2013.

Table IV-12

Chlorinated isos: Apparent U.S. consumption, 2011-13, January to June 2013, and January to June 2014

* * * * *

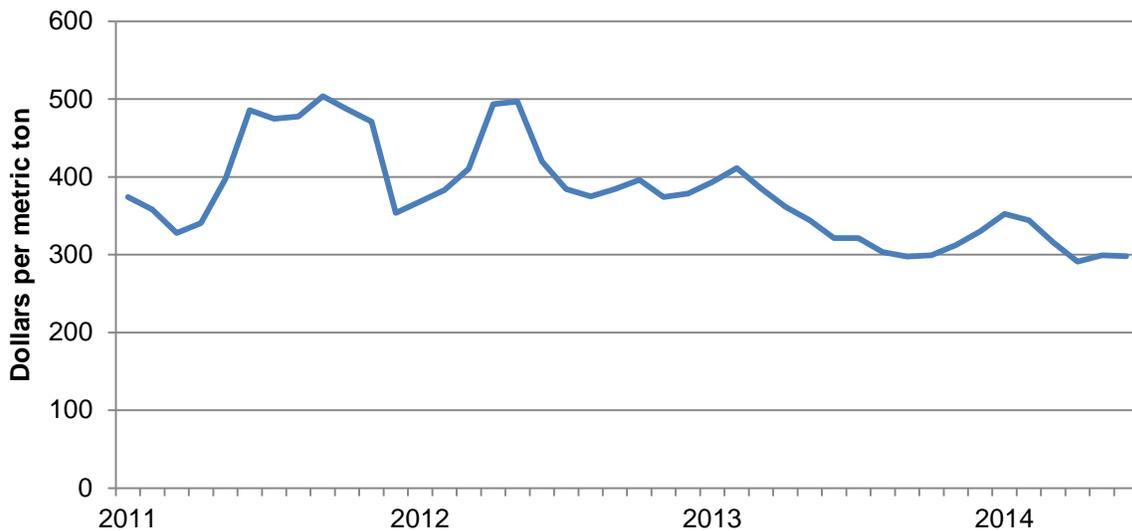
PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

Raw materials make up a significant part of the costs of producing granular chlorinated isos. Raw materials represented between *** and *** percent of U.S. granular chlorinated isos producers’¹ cost of goods sold during the period of investigation. The primary inputs used to produce granular/powder chlorinated isos are chlorine, caustic soda, and urea. Urea and natural gas are both inputs into cyanuric acid, which, with further processing, yields chlorinated isos.² Prices for urea and natural gas are presented in figure V-1 and V-2.³

Figure V-1
Chlorinated isos: Prices of urea, by month, January 2011-June 2014



Source: World Bank, “Global Economic Monitor (GEM) Commodities,” <http://data.worldbank.org/data-catalog/commodity-price-data>, retrieved on July 11, 2014.

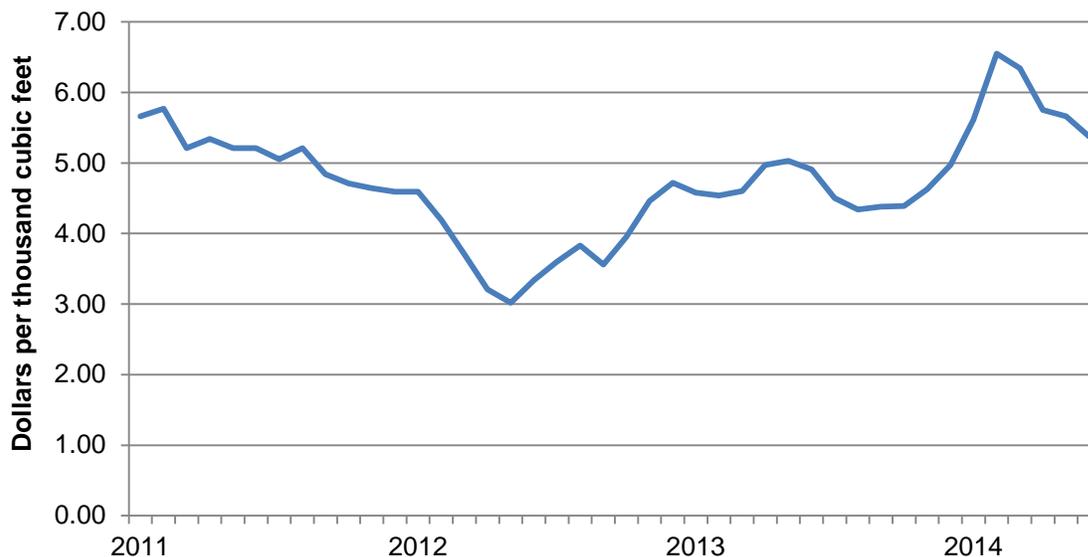
¹ For purposes of this part of the report, “producer” refers to the producers of granular chlorinated isocyanurates (those who produce chlorinated isos from cyanuric acid and chlorine gas), i.e., Clearon, Oxy, and BioLab. “Tableter” refers to firms that convert granular/powdered isocyanurates into tablets, and filled out a producers’ questionnaire.

² There is no public source for pricing data on other inputs, including caustic soda and chlorine. *Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082-1083 (Final)*, USITC Publication 3782, June 2005, p. II-1. Clearon noted that urea prices doubled from 2010 to 2012 before easing in 2013. Conference transcript, pp. 36-37 (Johnson).

³ Petitioners also provided data on urea prices. These data are consistent with the data in figure V-1. Petitioners’ postconference brief, p. 48 and exhibit 10.

Figure V-2

Chlorinated isos: Prices of natural gas, by month, January 2011-June 2014



Source: U.S. Energy Information Administration, <http://www.eia.doe.gov>, retrieved on September 24, 2014.

U.S. producers and tableters reported a wide range of trends in raw material prices. *** reported that raw material prices have increased since 2011. However, both *** reported that prices began to fall in 2013 to prior levels. *** anticipates that the lower natural gas prices will decrease the cost of raw material inputs including chlorine, caustic soda, and cyanuric acid. Among tableters, *** stated that urea prices are trending downward and the price of natural gas continues to fluctuate. *** stated that the lower cost of energy in the United States (natural gas), should lower manufacturers' cost of producing granular isos. *** stated that since May 2014, the price of domestic chlorinated isos has increased over imported product, while *** reported that prices of chlorinated isos have dropped overall due to the pressure to compete with Chinese products. The four largest responding tableters (***), reported that the average cost for tableting and repackaging chlorinated isos ranged from \$0.04 per pound to \$0.18 per pound.⁴ Six firms reported that the average cost for repackaging without tableting ranged from \$0.13 per pound to \$0.15 per pound.

U.S. inland transportation costs

All responding U.S. producers/tableters and importers reported that they typically arrange transportation to their customers. U.S. producers and tableters reported that their U.S.

⁴ One additional tableter reported that the average cost for tableting and repackaging was \$0.35 per pound. Purchaser questionnaire responses, section III-27.

inland transportation costs ranged from 0.1 to 5 percent while importers reported U.S. inland transportation costs of 1 to 7 percent, although *** reported a cost of 36 percent ***.

PRICING PRACTICES

Pricing methods

As presented in table V-1, U.S. producers/tableters and importers reported using transaction-by-transaction negotiations, contracts, and price lists. In addition to these three methods, two U.S. producers reported using separate price lists for each individual customer, two producers reported matching competitors' pricing, and one importer reported using a base price that is adjusted based on freight and raw material costs.

Table V-1

Chlorinated isos: U.S. producers/tableters and importers reported price setting methods, by number of responding firms¹

Method	U.S. producers/tableters	Importers
Transaction-by-transaction	3	8
Contract	3	5
Set price list	4	2
Other	4	1

¹ The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

Source: Compiled from data submitted in response to Commission questionnaires.

Eighteen of 24 responding purchasers reported that negotiating with suppliers when purchasing chlorinated isos. The majority of purchasers reported that they generally negotiate on price. Other factors commonly reported were availability, quality, payment terms, service and volumes. Six purchasers stated that they do not quote competing prices. Oxy reported that price negotiations occur at the end of the pool season for the following season, and noted that negotiations are typically complete by the end of September.⁵

Contracts

Chlorinated isos are most often sold under short-term contracts. *** reported that at least 80 percent of their sales were under short-term contracts, while *** reported that *** percent of its sales were under long-term contracts. Tableters *** reported that *** percent of their sales were spot sales. Five importers also reported that at least 80 percent of their sales were under short-term contracts. Importer *** reported that *** percent of its sales were spot sales. Importer *** reported that *** percent of its sales were under long-term contracts, ***

⁵ Hearing transcript, p. 16 (Williams).

percent were under short-term contracts, and the remaining *** percent were spot sales. As shown in table V-2, U.S. producers/tableters and importers reported their 2013 U.S. commercial shipments of chlorinated isos by type of sale.

Table V-2

Chlorinated isos: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2013

* * * * *

For U.S. producers and tableters, the length of short-term contracts was 90 days for *** but 365 days for ***. For importers, the length of short-term contracts also ranged from 90 to 365 days. The length of long-term contracts ranged from two years for *** to three years for ***.

Many contracts in the chlorinated isos market provide flexibility for purchasers with regard to allowances for price negotiations and meet-or-release provisions; however, target quantities may be set or percentages of purchases obligated (see Lost Sales and Lost Revenue section below). The majority of producers and importers reported that contracts allowed for price renegotiation. *** and *** reported that their contracts do include meet-or-release provisions.

On the issue of whether contracts fix price and/or quantity, *** described contracts as fixing price, while *** described contracts as fixing price and quantity. Among importers, *** described contracts as fixing price and quantity.

Most (18 of 24) purchasers contact 1 to 4 suppliers before making a purchase. Nine purchasers reported that they purchase product monthly, four purchase quarterly, four purchase weekly, three purchase daily and three purchase annually. The majority of responding purchasers (22 of 25) reported that their purchasing patterns did not change since January 1, 2011. However, *** reported that its purchasing frequency has increased due to a volume increase; *** noted that with the preliminary duties in place on Chinese product, it had to secure additional supply in 2013; and *** reported that it was decreasing its weekly deliveries due to lost business.

Sales terms and discounts

U.S. producers and importers typically quote prices on a delivered basis. *** reported pricing on both an f.o.b. and delivered basis.

Among U.S. producers, *** reported a multitude of sales terms while *** reported sales terms of net 30 days and *** sales terms of net 60 days. In addition to net 30 days, *** also reported allowing payments in which ***. *** reported primarily using net 30 days, but also using 3/10 net 30 days.

Among importers, *** reported sales terms of net 30 days and 60 days, and added that it ***. Similarly, *** reported using net 30 days and noted that ***. *** reported using net 60

to 120 days, *** reported using net 60 days and net 90 days, and *** reported using net 60 days. *** reported that its pricing terms varied depending on the time of the year.

*** U.S. producers reported offering quantity and annual total volume discounts, with *** adding that it provides ***. *** reported that it offers “early buy” discounts. *** reported no discount policy. Among importers, five reported offering no discounts. *** reported offering quantity and annual total volume, as well as ***.⁶ *** reported that it offers a discount to customers who order for the entire year in advance. *** reported that it offers a discount of three percent for early payment.

Price leadership

Purchasers reported a variety of firms including producers, importers and large retailers as price leaders. Firms identified as price leaders include: Alden Leeds, Arch, Bio-Lab, Clearon, Leslie’s, Oreq, Oxy and Wal-Mart. Oxy was the most frequently identified price leader, with purchasers noting that Oxy is the largest U.S. producer. One purchaser stated that Oxy raises prices when its supply is limited or sold out and that competitors follow with prices increases. Bio-Lab, Arch, LPM, and Wal-Mart were identified as price leaders in the retail market. Several purchasers noted that Arch and Clearon offer “dealer prices.” *** stated that Bio- Lab, Arch, Clearon and Oxy are the leading firms that supply directly all of the big box and club stores such as Wal-Mart, Lowes, Home Depot, Sam’s Club, Costco and BJ's.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following chlorinated isos products shipped to unrelated U.S. customers during January 2011-June 2014.^{7 8}

Product 1-- Granular trichloroisocyanuric acid with approximately 90 percent available chlorine content (similar to ACL®90 PLUS Chlorinating Composition or CDB®90), sold in bulk packages equal to or greater than 1,000 pounds and less than or equal to 2,205 pounds.

⁶ *** noted that its “early buy” discounts include product discounts and delayed payment terms.

⁷ Staff received suggestions to modify all five price definitions used in the preliminary investigations in order to improve the pricing coverage. In addition, parties suggested two new granular products and one new tableted product. Price product suggestions were received equally from both the petitioners and Japanese respondents. Staff accepted the majority of parties’ requested changes.

⁸ Purchasers were asked to report the delivered quantity and value for purchases of chlorinated isos by pricing product and country source during the period of investigation. These purchase price data are presented in appendix F.

Product 2.-- Granular sodium dichloroisocyanurate (dihydrate) with approximately 56 percent available chlorine content (similar to ACL®56 Chlorinating Composition or CDB®56), sold in bulk packages equal to or greater than 1,000 pounds and less than or equal to 2,205 pounds, for repackaging for pool treatment use.

Product 3.-- Granular sodium dichloroisocyanurate (dihydrate) with approximately 56 percent available chlorine content (similar to ACL®56 Chlorinating Composition or CDB®56), sold in approximately 300 pound packages, for use in cleanser and/or sanitizer applications.

Product 4.-- Granular sodium dichlorisocyanurate (dihydrate) with approximately 56 percent available chlorine content (similar to ACL®56 Chlorinatin Composition or CDB®56), sold in retail or pool service packages greater than 24 pounds and less than or equal to 55 pounds, for use in pool treatment.

Product 5.— Granular sodium dichlorisocyanurate (anhydrous) with approximately 62 percent available chlorine content (similar to ACL®60 Chlorinatin Composition), bulk packages equal to or greater than 1,000 pounds and less than or equal to 2,205 pounds, for repackaging for pool treatment use.

Product 6.— 3-inch or comparable trichlor tablets, with tablet volume of 6 to 8 ounces, with 85 to 90 percent available chlorine content, in 35-40 pound containers.

Product 7.— 3-inch or comparable trichlor tablets, with tablet volume of 6 to 8 ounces, with 85 to 90 percent available chlorine content, in 49-55 pound containers.

Product 8.-- Blended 3-inch or comparable trichlor tablets, with tablet volume of 6 to 8 ounces, with 85 to 90 percent available chlorine content, in 24-26 pound containers.

Products 1, 2, 3, 4, and 5 are granular chlorinated isos products, while products 6, 7, and 8 are tableted chlorinated isos products. Firms were requested to report their sales of tableted products made from domestically produced granular chlorinated isos separately from tableted products made from imported granular chlorinated isos. Three U.S. producers, four U.S. tableters, and five importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of chlorinated isos, *** percent of U.S. shipments of subject imports from China and *** percent

of U.S. shipments of subject imports from Japan during the period of investigation.⁹ ¹⁰ Among U.S. producers, ***.¹¹ Price data for Chinese product was provided by ***.¹² ¹³ Price data for Japanese product was provided by ***.

Petitioners argue that the price data for bulk granular products are flawed because the sales occur at different “levels of trade.” It argues that ***. Petitioners report that *** reported quarterly price data of its sales to ***. They argue that price data for products 1-5 do not compare the domestic producers’ prices for granular chlorinated isos with the actual import price data that the domestic producers must compete against. Instead, these price tables compare *** prices to *** with the “resale” price quoted by these firms. Petitioners stated that Arch imports directly from China as well as purchases from Oxy, thereby forcing Oxy to compete with direct prices from China. Similarly, petitioners reported that Oxy sold bulk trichlor (price product 1) to SIC. Petitioners argue that the pricing data is not at the same level of trade because the data is comparing Oxy’s price to SIC with SIC’s sale price to its customers.¹⁴

Respondents argue that the Commission should reject Petitioners’ arguments regarding the validity or accuracy of the pricing data. Respondents argue that there are no price

⁹ These calculations are made using the data which includes mixed-origin product classified as domestic product; imports of granular product which were shipped for toll production of tablets were subtracted from total imports. If using the data which includes mixed-origin product classified as the country-of-origin of the powder, then the price data accounts for *** percent of U.S. producers’ shipments, *** percent of shipments of Chinese imports, and *** percent of shipments of Japanese imports.

¹⁰ Petitioners argue that the price data coverage for China is low and state price data should be supplemented with the pricing data reported by purchasers. Petitioners note that while the price data reported by producers and importers are not comparable to the delivered prices reported by purchasers. However, it argues that the purchase data show underselling by Chinese imports that were not captured in the sales data. Petitioners’ prehearing brief, pp. 39-43. Purchaser pricing data is presented in appendix F.

¹¹ ***. Respondents questioned whether *** price data (showing relatively high prices) included delivery costs. Respondents’ prehearing brief, pp. 62-63. Respondents also state that the tablet prices reported by *** are much higher than those reported by ***. It argues that with both firms selling to major “big box” stores (***) it is unlikely that *** would pay a price that is significantly higher than its competitor. Using staff’s calculations, *** domestic prices for product 8 are significantly higher than reported prices from all other tableters. In 2011, *** price is \$0*** higher (***) percent) than *** domestic price for product 8. By 2014, the price gap narrows, but *** domestic price is still \$*** higher (***) percent) than *** domestic price for product 8. Staff contacted *** to confirm the accuracy of its price data. ***. In addition, *** prices are consistent with what it reported during the preliminary investigations.

¹² *** reported price data in its questionnaire response during the preliminary investigations but did not provide a questionnaire response during these current investigations. Its preliminary questionnaire data for sales of granular products have been included in these final investigations.

¹³ ***.

¹⁴ Hearing transcript, pp. 92-93 (Cannon). Petitioners’ posthearing brief, pp. 11-13.

distortions caused by different levels of trade. Respondents contend that ***; therefore, there are no distortions in price data comparisons.¹⁵ Respondents also argue that ***.¹⁶

Price data for granular products 1-5 are presented in tables V-3 to V-7 and figures V-3 to V-7. Price data for tableted products 6-8 are presented in tables V-8 to V-10 and figures V-8 to V-10. Product 1 (granular trichlor sold in bulk packages) is the largest pricing product overall, accounting for 69.7 percent of all granular pricing products.¹⁷ Among the tableted pricing products, product 6 is the largest (accounting for 43.0 percent of tableted pricing products) followed by product 7 (accounting for 41.0 percent). The price data for tableted products 6-8 are presented in three ways depending on whether U.S. tableters are counted as either U.S. producers or as U.S. importers (see tabulation below).

Presentation of price data	United States price data	Subject price data
Excludes mixed-origin product	<ul style="list-style-type: none"> • U.S.-produced tablets made with domestic granular chlorinated isos; excludes mixed-origin tablets 	<ul style="list-style-type: none"> • Imported tablets that are tableted in the subject country
Includes mixed-origin product classified as domestic product	<ul style="list-style-type: none"> • U.S.-produced tablets made with domestic granular chlorinated isos • U.S.-produced tablets made with granular/powder chlorinated isos from subject countries 	<ul style="list-style-type: none"> • Imported tablets that are tableted in the subject country
Includes mixed-origin product classified as country-of-origin of powder	<ul style="list-style-type: none"> • U.S.-produced tablets made with domestic granular chlorinated isos 	<ul style="list-style-type: none"> • Imported tablets that are tableted in the subject country • U.S.-produced tablets made with granular/powder chlorinated isos from subject countries

Table V-3

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 1¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

* * * * *

¹⁵ ***. Petitioners' posthearing brief, p. 11 fn. 28

¹⁶ Respondents' posthearing brief, p. 77.

¹⁷ Product 1 accounted for 37.9 percent of all pricing products.

Table V-4

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 2¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

* * * * *

Table V-5

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 3¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

* * * * *

Table V-6

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 4¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

* * * * *

Table V-7

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 5¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

* * * * *

Figure V-3

Chlorinated isos: Weighted-average prices and quantities of granular domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Figure V-4

Chlorinated isos: Weighted-average prices and quantities of granular domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Figure V-5

Chlorinated isos: Weighted-average prices and quantities of granular domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Figure V-6

Chlorinated isos: Weighted-average prices and quantities of granular domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Figure V-7

Chlorinated isos: Weighted-average prices and quantities of granular domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Table V-8

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 6¹, and margins of underselling/(overselling), by quarter, January 2011-June 2014

* * * * *

Table V-9

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 7¹, and margins of underselling/(overselling), by quarter, January 2011-June 2014

* * * * *

Table V-10

Chlorinated isos: Weighted-average f.o.b. prices and quantities of domestic and imported product 8¹, and margins of underselling/(overselling), by quarter, January 2011-June 2014

* * * * *

Figure V-8

Chlorinated isos: Weighted-average prices and quantities of tableted domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Figure V-9

Chlorinated isos: Weighted-average prices and quantities of tableted domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Figure V-10

Chlorinated isos: Weighted-average prices and quantities of tableted domestic and imported product, by quarters, January 2011-June 2014

* * * * *

Price trends

Prices generally decreased during the period of investigation. Table V-11 summarizes the price trends, by country and by product. As shown in the table, for granular/powder products 1-5, domestic price decreases ranged from *** to *** percent during January 2011-June 2014. Prices decreases for imported granular chlorinated isos from China ranged from *** to *** percent and Japanese price decreases ranged from *** to *** percent.

Table V-11
Chlorinated isos: Summary of weighted-average f.o.b. prices for products 1-8 from the United States, China, and Japan

Item	Number of quarters	Low price (per pound)	High price (per pound)	Change in price ¹ (percent)
Product 1				
United States	14	***	***	***
China	9	***	***	***
Japan	14	***	***	***
Product 2				
United States	14	***	***	***
China	8	***	***	***
Japan	14	***	***	***
Product 3				
United States	14	***	***	***
China	0	---	---	---
Japan	8	***	***	***
Product 4				
United States	14	***	***	***
China	0	***	***	***
Japan	0	---	---	---
Product 5				
United States	13	***	***	***
China	0	---	---	---
Japan	14	***	***	***

Table continued on next page.

Table V-11—Continued.

Chlorinated isos: Summary of weighted-average f.o.b. prices for products 1-4 from the United States, China, and Japan

Item	Number of quarters	Low price (per pound)	High price (per pound)	Change in price ¹ (percent)
Product 6—excludes mixed-origin				
United States	14	1.60	1.87	0.2
China	0	---	---	---
Japan	0	---	---	---
Product 6—mixed as U.S.				
United States	14	1.60	1.84	(2.6)
China	0	---	---	---
Japan	0	---	---	---
Product 6—mixed as imported				
United States	14	***	***	***
China	14	***	***	***
Japan	14	***	***	***
Product 7-- excludes mixed-origin				
United States	14	1.27	1.44	(1.5)
China	0	---	---	---
Japan	0	---	---	---
Product 7—mixed as U.S.				
United States	14	1.35	1.45	(2.9)
China	0	---	---	---
Japan	0	---	---	---
Product 7—mixed as imported				
United States	14	***	***	***
China	14	***	***	***
Japan	14	***	***	***
Product 8-- excludes mixed-origin				
United States	14	1.47	2.04	16.6
China	12	***	***	***
Japan	0	---	---	---
Product 8—mixed as U.S.				
United States	14	1.49	1.89	12.5
China	12	***	***	***
Japan	0	---	---	---
Product 8—mixed as imported				
United States	14	***	***	***
China	14	***	***	***
Japan	14	***	***	***

¹ Percentage change from the first quarter in which data were available to the last quarter in which price data were available, based on rounded data.

Source: Compiled from data submitted in response to Commission questionnaires.

For tableted products 6-7, domestic prices decreased (when mixed-origin product is classified as domestic product). However, domestic prices for product 8 increased over the period of investigation. Price data for imports of tablets which were tableted in a subject country were only reported for product 8 from China; prices for product 8 from China increased slightly (***) . When mixed-origin product is classified as the country-of-origin of the powder, prices trends of subject imports of products 6-8 varied. Prices for product 6 from China declined while prices for products 7 and 8 from China increased. Prices for all tableted products from Japan (products 6-8) decreased.

Price comparisons

Tables V-12 and V-13 summarize underselling/overselling from the pricing data, presented in three categories based on the country-of-origin of the granular chlorinated isos and whether U.S.-produced tablets made with granular chlorinated isos from subject countries is classified as domestic or imported product.

Table V-12

Chlorinated isos: Instances of underselling/overselling and the range and average of margins, by country, January 2011-June 2014

* * * * *

Table V-13

Chlorinated isos: Quantities of underselling/overselling, by product and country, January 2011-June 2014

* * * * *

Price comparisons between domestic chlorinated isos and products imported from China show slightly more overselling than underselling.¹⁸ When mixed-origin product is classified as domestic product, prices for chlorinated isos imported from China were below those for U.S.-produced product in 17 of 37 instances (***) ; margins of underselling ranged from *** to *** percent. In the remaining 20 instances (***) , prices for chlorinated isos from China were between *** to *** percent above prices for the domestic product.

When mixed-origin product is classified as the country-of-origin of the powder, prices for chlorinated isos imported from China were below U.S. producers' prices in 32 of 67 instances (***) ; margins of underselling ranged from *** to *** percent. In the remaining 35 instances (***) , prices for chlorinated isos from China were between from *** to *** percent above prices for the domestic product.

¹⁸ *** . *** . *** .

Price comparisons between domestic chlorinated isos and products imported from Japan show generally more overselling than underselling. When mixed-origin product is classified as domestic product, prices for chlorinated isos imported from Japan were higher than U.S. producers' prices in 28 of 49 instances (***) ; margins of overselling ranged from *** to *** percent. In the remaining 21 instances (***) , prices for chlorinated isos from Japan were between *** to *** percent below prices for the domestic product.

When mixed-origin product is classified as the country-of-origin of the powder, prices of product imported from Japan continue to be higher than U.S. producers' prices. Prices for chlorinated isos imported from Japan were higher than U.S. producers' prices in 58 of 91 instances (***) ; margins of overselling ranged from *** to *** percent. In the remaining 33 instances (***) , prices for chlorinated isos from Japan were between *** to *** percent below prices for the domestic product.

Petitioners argue that the price data reflect pricing differences caused by the size of the customer and the volume of sales. By including these large-volume customers in the pricing data, the average domestic price reflects *** rather than typical sales by domestic producers and importers to comparable-sized customers. When *** , imports undersold domestic producers prices in *** comparisons. These comparisons are using mixed-origin product classified as the country-of-origin of the powder.¹⁹ Petitioners also argue that the pricing data reflect "different marketing strategies pursued by different suppliers." Petitioners contend that the volume of purchases by *** creates an incentive for chlorinated isos manufacturers to pursue this business aggressively in order to obtain sales volume to fill capacity and spread fixed costs. ***.²⁰ Petitioners note that SIC's top customers *** , while Arch *** . Oxy *** . Therefore, it argues since SIC's largest customers *** .^{21 22}

LOST SALES AND LOST REVENUE

In the preliminary and final phase of these investigations, the Commission requested U.S. producers of chlorinated isos to report any instances of lost sales or revenue they experienced due to competition from imports of chlorinated isos from China and Japan. Four producers reported reducing prices and three producers reported rolling back announced price increases to avoid losing sales to competitors selling chlorinated isos from China and Japan. During the final phase of these investigations, U.S. producers reported an additional three lost sales allegations and seven lost revenue allegations.

¹⁹ Petitioners' posthearing brief, petitioners' responses to questions, section II-A, pp. 14-16.

²⁰ Petitioners' posthearing brief, petitioners' responses to questions, section II-D, pp. 24-25.

²¹ Petitioners' posthearing brief, petitioners' responses to questions, section II-B, pp. 18-19.

²² Staff notes that SIC's customers are purchasing bulk granular chlorinated isos while the majority of retailers served by Arch and Oxy are purchasing tablets and, to a lesser extent, granular dichlor in non-bulk packaging. Purchaser questionnaire responses, sections V-1 and V-2.

The 26 lost sales allegations totaled an estimated²³ \$*** million and involved an estimated *** million pounds of chlorinated isos. The 20 lost revenue allegations totaled an estimated \$*** million and involved an estimated *** million pounds of chlorinated isos.²⁴ Staff attempted to contact all of these purchasers and a summary of the information obtained follows in the descriptions below and the subsequent tables V-13 and V-14.²⁵

Lost Sales

***.

***.

***.

***.

***.

***.

***.

***.

Lost Revenue

***.²⁶

***.

***.

***.

***.

²³ During the preliminary phase investigations, both the lost sales and lost revenue allegations involved some allegations with quantity ranges and/or incomplete information. Staff made estimates based on the information available, but noted that ***.

²⁴ ***. See staff interview with ***.

²⁵ One additional lost revenue allegation provided in the final phase of these investigations, which totaled \$*** and involved approximately *** pounds of chlorinated isos were received without valid fax numbers from a questionnaire respondent.

²⁶ See also ***.

Table V-13
Chlorinated Isos: U.S. producers' lost sales allegations

* * * * *

Table V-14
Chlorinated Isos: U.S. producers' lost revenue allegations

* * * * *

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Three U.S. producers (Bio-Lab, Clearon, and Oxy) provided financial data on their product-specific operations of chlorinated isos.¹ In addition, two firms *** provided financial data on their tableting operations as tollers, and two firms *** provided financial data on their tableting operations as tableters with no reported tolling arrangements. These data are believed to account for the large majority of known U.S. production of chlorinated isos in 2013. All firms reported a fiscal year end of December 31 with the exception of ***, which reported a fiscal year end of September 30. *** reported transfers to related firms which accounted for approximately *** percent of net sales during the period examined. These data are not shown separately in this section of the report.

Based on the responses of the aforementioned firms, ***.

OPERATIONS ON CHLORINATED ISOS

Results of the U.S. producers and tableters on their chlorinated isos operations (both overall and on an individual product basis) are presented in tables VI-1 through VI-3. Selected financial data, by firm, are presented in tables VI-4 through VI-6.

As shown in table VI-1 (all chlorinated isos), the reported financial condition of U.S. producers Bio-Lab, Clearon, and Oxy declined from 2011 to 2013, and also declined between the comparable interim periods. The reported aggregate net sales quantity declined by *** percent from 2011 to 2013, while the aggregate net sales value declined by *** percent during this time. Collectively, the aggregate cost of goods sold (“COGS”) and selling, general, and administrative (“SG&A”) expenses declined by *** percent during this time. The *** decline in net sales value as compared to operating costs and expenses resulted in a *** decline in operating income from 2011 to 2012, ***. Between the comparable interim periods, net sales quantity increased by *** percent, net sales value increased by *** percent, and combined operating costs and expenses increased by *** percent. The *** increase in operating costs and expenses as compared to net sales value resulted in ***.²

¹ Bio-Lab was acquired by KIK International LLC of Toronto, Canada, on December 31, 2013.

² Operations on granular isos (table VI-2) and tableted isos (table VI-3) generally followed similar overall trends in net sales, COGS, and profitability during the period examined; however, operations on granular isos *** than tableted isos.

Table VI-1

All chlorinated isos: Results of operations of U.S. producers Bio-Lab, Clearon, and Oxy, 2011-13, January-June 2013, and January-June 2014

* * * * *

Table VI-2

Granular isos: Results of operations of U.S. producers Bio-Lab, Clearon, and Oxy, 2011-13, January-June 2013, and January-June 2014

* * * * *

Table VI-3

Tableted isos: Results of operations of U.S. producers and tableters Bio-Lab, Clearon, N. Jonas, Oreq, Oxy, Stellar, and Suncoast, 2011-13, January-June 2013, and January-June 2014

* * * * *

Table VI-4

All chlorinated isos: Selected results of operations of U.S. producers Bio-Lab, Clearon, and Oxy, by firm, 2011-13, January-June 2013, and January-June 2014

* * * * *

Table VI-5

Granular isos: Selected results of operations of U.S. producers Bio-Lab, Clearon, and Oxy, by firm, 2011-13, January-June 2013, and January-June 2014

* * * * *

Table VI-6

Tableted isos: Selected results of operations of U.S. producers and tableters Bio-Lab, Clearon, N. Jonas, Oreq, Oxy, Stellar, and Suncoast, 2011-13, January-June 2013, and January-June 2014

* * * * *

Per-pound raw material costs for all chlorinated isos increased in 2012, declined in 2013, and were unchanged between the comparable interim periods. Raw materials accounted for an average *** percent of total COGS for the reporting period, while direct labor, other factory costs, and tolling fees accounted for an average ***, ***, and *** percent, respectively.^{3 4}

As a ratio to net sales, raw material costs, direct labor, and other factory costs for all chlorinated isos increased from 2011 to 2013, ***. Between the comparable interim periods, raw material costs and direct labor increased, ***. In combination, total COGS for all

³ ***.

⁴ ***. Email from ***, August 11, 2014.

chlorinated isos consistently increased as a ratio to net sales from 2011 to 2013, as well as between the comparable interim periods.

VALUE ADDED BY TABLETING

The value added by U.S. tableters as a share of total processing costs is presented in table VI-7. The analysis shows two ratios: (A) a ratio of reported raw materials other than granular isos (such as packaging materials and pallets) and conversion costs (costs other than raw material costs, primarily labor and overhead) to reported total costs excluding SG&A expenses; and (B) a ratio of reported raw materials other than granular isos and conversion costs to reported total costs including SG&A expenses.^{5 6 7}

Table VI-7
Chlorinated Isos: Value added by U.S. tableters, by firm, fiscal year 2013

* * * * *

CAPITAL EXPENDITURES, RESEARCH AND DEVELOPMENT EXPENSES, AND TOTAL ASSETS

The responding firms' data on capital expenditures, research and development ("R&D") expenses, and total assets are shown in tables VI-8 and VI-9. Additional information on the capital investment required to begin tableting operations are included in appendix G.

Table VI-8
Chlorinated Isos: Capital expenditures and R&D expenses of U.S. producers and tableters, 2011-13, January-June 2013, and January-June 2014

* * * * *

Table VI-9
Chlorinated Isos: Assets of U.S. producers and tableters, 2011-13

* * * * *

⁵ ***.

⁶ ***.

⁷ Petitioners argue that the value added calculations should include only fabrication costs and exclude all raw material costs and SG&A expenses (petitioners' posthearing brief, p. 48). Using this approach, the value added calculations are as follows: ***.

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of chlorinated isos to describe any actual or potential negative effects of imports of chlorinated isos from China or Japan on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Responses by U.S. producers follow.

Actual Negative Effects:

* * * * *

Potential Negative Effects:

* * * * *

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (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 subject merchandise, the Commission shall consider, among other relevant economic factors¹--

- (I) if a countervailable 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 countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
- (II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
- (III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
- (IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
- (V) inventories of the subject merchandise,*

¹ Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that “The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition.”

- (VI) *the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,*
- (VII) *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),*
- (VIII) *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 domestic like product, and*
- (IX) *any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).²*

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-

² 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 WTO member markets against 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."

country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

THE INDUSTRY IN CHINA

The Commission issued foreign producers'/exporters' questionnaires to fifteen firms believed to produce and/or export chlorinated isos from China.³ Useable responses to the Commission's questionnaire were received from one firm, ***.⁴ *** is a new company, ***.⁵ It has no exports to the United States and reported that ***. It reported that ***. *** does not have estimates of the overall Chinese trichlor tablet production or exports in 2013. Table VII-1 presents information on the types of chlorinated isos produced by responding Chinese producer *** and VII-2 presents information on the chlorinated isos operations of ***.

China began exporting "sizeable quantities" of chlorinated isos to the global market in 2002.⁶ ***⁷ The petitioners assert that much of chlorinated isos production in China exists as a result of expansion in the upstream chlor-alkali sector, leading to increased production of chlorine and industrial infrastructure suitable for production of chlorinated isos.⁸ SRI Consulting reports that "almost all" Chinese producers of chlorinated isos are export-oriented,⁹ ***¹⁰

Table VII-1
Chlorinated isos: Summary data for *, January 2011 through June 2014**

* * * * *

³ These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records.

⁴ In the preliminary phase of these investigations, two firms, *** submitted useable questionnaires. ***. E-mail from Gregory S. Menegaz, Counsel to Huayi and Kangtai, July 22, 2014. Based on the data from ***'s questionnaire responses from the preliminary phase, these two firms' exports to the United States accounted for approximately *** percent of U.S. imports from China and approximately *** percent of overall production of chlorinated isos in China from 2010 to 2012. Their combined capacity was *** pounds of chlorinated isos in 2012 and they produced *** pounds of chlorinated isos in 2012.

⁵ E-mail from William Sjoberg, Counsel to Nankai Chemical Co., Ltd., August 18, 2014.

⁶ Chemical Economics Handbook *Chlorinated Isocyanurates* abstract <http://www.ihs.com/products/chemical/planning/ceh/chlorinated-isocyanurates.aspx>, retrieved September 27, 2013.

⁷ ***.

⁸ Conference transcript, p. 71 (Cannon).

⁹ Chemical Economics Handbook, abstract.

¹⁰ ***.

Table VII-2
Chlorinated isos: Data on *, 2011-13, January to June 2013, and January to June 2014 and projection calendar years 2014 and 2015**

* * * * *

THE INDUSTRY IN JAPAN

The Commission issued foreign producers'/exporters' questionnaires to four firms believed to produce and/or export chlorinated isos from Japan.¹¹ Useable responses to the Commission's questionnaire were received from three firms: Nankai Chemical Co., Ltd. ("Nankai Japan"), Nissan Chemical Industries, Ltd. ("Nissan"), and Shikoku.¹² These firms' exports to the United States accounted for virtually all U.S. imports of chlorinated isos from Japan from 2011 to June 2014. Responding Japanese producers account for almost all known production of chlorinated isos in Japan. Table VII-3 presents information on the types of chlorinated isos produced by responding Japanese producers and table VII-4 presents information on the chlorinated isos operations of the responding producers and exporters in Japan.

Shikoku is the largest chlorinated isos producer in Japan, accounting for an estimated *** percent of all powder/granular production and *** percent of all tableting production in Japan. It is also the largest exporter of chlorinated isos to the United States, accounting for an estimated *** percent of all exports from Japan in 2013. Shikoku is related to U.S. importer SIC. Shikoku reported that it is attempting to ***. Shikoku's reported that its ***.¹³ Secondly, Shikoku ***.¹⁴

Japanese producers began supplying chlorinated isos to the U.S. market in the late 1960s.¹⁵ Shikoku stated that the "production capacity made available through its co-production agreement with Oxy is intended to prepare its Tokushima plant to manufacture ***."¹⁶ In addition, Shikoku has entered into ***.¹⁷

***.¹⁸

¹¹ These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records.

¹² *** provided a useable questionnaire in the preliminary phase of these investigations, but has not provided a questionnaire in these final investigations. Its 2012 reported capacity and production were ***, respectively.

¹³ Shikoku reported that ***.

¹⁴ ***. Shikoku is ***. Shikoku's foreign production questionnaire response, attachment and Shikoku's posthearing brief, exh. 6, no. 17.

¹⁵ Conference transcript, p. 98 (Pettoruto).

¹⁶ Shikoku's posthearing brief, exh. 1, p. 109.

¹⁷ Shikoku's posthearing brief, exh. 1, p. 110.

¹⁸ ***.

Table VII-3
Chlorinated isos: Summary data on reporting firms in Japan, January 2011 through June 2014

* * * * *

Table VII-4
Chlorinated isos: Data on the industry in Japan, 2011-13, January to June 2013, and January to June 2014 and projections 2014 and 2015

* * * * *

FOREIGN INDUSTRY DATA FOR CHINA AND JAPAN COMBINED

Table VII-5 presents information on chlorinated isos of the reporting producers and exporters of chlorinated isos in China and Japan.

Table VII-5
Chlorinated isos: Data on the industry of subject countries combined, 2011-13, January to June 2013, and January to June 2014 and projections 2014 and 2015

* * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-6 presents data on U.S. importers' reported inventories of granular/powder and tableted chlorinated isos.

Table VII-6
Chlorinated isos: U.S. importers' end-of-period inventories of both granular and tableted forms of imports, by source, 2011-13, January-June 2013, and January-June 2014

* * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of chlorinated isos from China or Japan after June 30, 2014. No firm reported imports from China or Japan after June 30, 2014. Only one firm, ***, arranged for *** pounds of nonsubject chlorinated isos to be imported after June 30, 2014 from ***.

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

The European Council imposed antidumping duties ranging from 7.3 percent to 42.6 percent on imports of trichloroisocyanuric acid originating in China in July 2005. The duty applied to one company, Heze Huayi, was lowered to 3.2 percent in September 2009. A

December 2011 review resulted in continuation of the duties.¹⁹ Foreign producers reported no other antidumping or countervailing duty orders in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury “by reason of subject imports,” the legislative history states “that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) ‘to ensure that it is not attributing injury from other sources to the subject imports.’”²⁰

In the three year period 2011-13, nonsubject countries accounted for less than 10 percent of total U.S. imports of chlorinated isos. Chlorinated isos are imported under three HTS subheadings. However, only HTS 2933.69.6015 is used to assess imports of chlorinated isos from nonsubject countries. From 2011 to 2012, the quantity of U.S. imports for consumption in this subheading increased by 120 percent (from 50.6 million pounds to 111.6 million pounds). U.S. imports from nonsubject countries increased by 45 percent (from 4.4 million pounds to 6.3 million pounds) but declined as a share of total U.S. imports under HTS 2933.69.6015 from 8.6 to 5.7 percent. In 2013 total U.S. imports for consumption decreased by 20.8 percent from the previous year, to 88.4 million pounds, as the share of nonsubject imports increased to 10.6 percent (9.4 million pounds). Over the period 2011–13, imports from China accounted for 54.0 percent of the total and imports from Japan accounted for thirty eight percent. During the same time period, imports from Mexico and Italy accounted for the highest percentage of any nonsubject countries with each totaling 3.5 and 2.7 percent, respectively. U.S. imports from Spain subject to a previous U.S. antidumping action, were 37.9 percent of total U.S. imports in 2008, but declined to 11.2 percent in 2009, then zero percent during 2011-13.²¹

January to June data for 2013 and 2014 indicate the effects of the preliminary finding on non-subject imports. Imports from nonsubject countries increased by a total of twenty eight thousand pounds (0.6 percent), with the biggest increases coming from Italy (1.8 million pounds) and Spain (two hundred thousand pounds). Imports from all other nonsubject countries (Brazil, Canada, Mexico, India, Ireland, and the Philippines) decreased.²²

¹⁹ Official Journal of the European Union, December 30, 2011, pp. 6-15.

²⁰ *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir., Sept. 18, 2008), quoting from *Statement of Administrative Action on Uruguay Round Agreements Act*, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

²¹ USITC Dataweb.

²² USITC Dataweb.

APPENDIX A

***FEDERAL REGISTER* NOTICES**

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, *Federal Register* notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
79 FR 28771, May 19, 2014	<i>Scheduling of final phase of Commission investigations</i>	http://www.gpo.gov/fdsys/pkg/FR-2014-05-19/pdf/2014-11426.pdf
79 FR 56059, September 18, 2014	<i>Commerce's final AD determination on Japan</i>	http://www.gpo.gov/fdsys/pkg/FR-2014-09-18/pdf/2014-22311.pdf
79 FR 56560, September 22, 2014	<i>Commerce's final CVD determination on China</i>	http://www.gpo.gov/fdsys/pkg/FR-2014-09-22/pdf/2014-22501.pdf

APPENDIX B
HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Chlorinated Isocyanurates from China and Japan

Inv. Nos.: 701-TA-501 and 731-TA-1226 (Final)

Date and Time: September 9, 2014 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioners (**James R. Cannon, Jr.**, Cassidy Levy Kent (USA) LLP)

Respondents (**Bernd Janzen**, Akin Gump Strauss Hauer & Feld LLP)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Cassidy Levy Kent (USA) LLP
Washington, DC
on behalf of

Clearon Corp. ("Clearon")
Occidental Chemical Corporation ("OxyChem")

Jeffrey L. Williams, Senior Business Manager, ACL, Silicates and
Sodium Chlorites, OxyChem

K. Bradleigh LeBlanc, Senior Counsel, OxyChem

Scott B. Johnson, Executive Vice President, Clearon

Dave Helmstetter, Vice President of Sales and Marketing,
Clearon

**In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):**

Matthew C. White, Controller, Clearon

Anthony J. Repaso, Corporate Counsel, Clearon

Carl P. Moyer, Director of Economic Analysis, Cassidy Levy
Kent (USA) LLP

James R. Cannon, Jr.)

) – OF COUNSEL

Ulrika Swanson)

**In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:**

Akin Gump Strauss Hauer & Feld LLP
Washington, D.C.
on behalf of

Shikoku Chemicals Corporation
Shikoku International Corporation (collectively “Shikoku”)

Hiroataka Ide, General Manager, Operational Management and
Planning Department, Shikoku

Nicolas Pettoruto, President, DelCal, Inc.

James Eisch, Chief Operating Officer, Suncoast Chemicals, Inc.

Daniel Klett, Principal, Capital Trade Inc.

Bernd Janzen)

) – OF COUNSEL

Valerie A. Slater)

REBUTTAL/CLOSING REMARKS:

Petitioners (**James R. Cannon, Jr.**, Cassidy Levy Kent (USA) LLP)
Respondents (**Valerie A. Slater**, Akin Gump Strauss Hauer & Feld LLP)

APPENDIX C
SUMMARY DATA

Table C-1
Chlorinated isos: Summary data concerning the U.S. market, 2011-13, January to June 2013, and
January to June 2014

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APPENDIX D

**COMMERCE'S COUNTERVAILING DUTY INVESTIGATION OF CHLORINATED
ISOCYANURATES FROM CHINA: ISSUES AND DECISION MEMORANDUM
FOR THE FINAL DETERMINATION**

The following programs in China were determined to be countervailable:¹

1. Grants for export credit insurance
2. Special funding for energy saving technology
3. Export seller's and buyer's credits from Export-Import Bank of China
4. Corporate income tax law article 33: reduction of taxable income for the revenue derived from the manufacture of products that are in line with state industrial policy and involve synergistic utilization of resources
5. Grants under the Haixing County science and technology research & development plan project
6. Special national bond fund for energy conservation and waste recycling projects
7. VAT tax rebate for comprehensive utilization of resources
8. Shandong industrial structure adjustment entrusted loan
9. Enterprise income tax reduction for high and new technology enterprises
10. Electricity for LTAR

¹ DOC, ITA, *Countervailing Duty Investigation of Chlorinated Isocyanurates from the People's Republic of China: Issues and Decision Memorandum for the Final Determination*, September 8, 2014. Department of Commerce Memorandum C-570-991 can be found on EDIS (public), doc. ID #542814.

APPENDIX E

CHART ON THE U.S. INDUSTRY

Chart E-1
Chlorinated isos: U.S. domestic industry, granular and tableting activities, 2011 to June 2014

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APPENDIX F
PURCHASER PRICE DATA

Purchasers were requested to report the delivered quantity and value for purchases of U.S.-produced and imported chlorinated isos from China and Japan. Of the 22 responding purchasers, nine tableters/repackagers, seven distributors, five retailers, and one importer *** provided usable quarterly price data for purchases of the requested products. Purchase price data reported by these purchasers accounted for approximately *** percent of U.S. apparent consumption in 2013.

U.S. producers and tableters reported purchase price data primarily for granular pricing products 1-5, however two tableters reported purchase price data for tableted products 7 and 8. Distributors reported purchase price data for all products except for product 3. *** reported purchase price data for products 1-3 and 5. Retailers provided purchase price data primarily for tableted products (6-8), and two retailers reported data for product 4. For tableted products, purchasers were not requested to separate their purchases of tablets made in subject countries from tablets produced in the United States made from imported granular product. Therefore, there is some ambiguity in how purchasers determined the country of origin of their tableted purchases.

Purchase price data reported by purchasers are shown in tables F-1 through F-8 and figures F-1 though F-8. Tables F-9 summarizes instances of underselling/overselling from the purchase price data. However, because of the varying levels of trade, price comparisons should be used with caution.^{1 2}

Table F-1

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 1¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Table F-2

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 2¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

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¹ Approximately *** percent of purchase data is reported by U.S. producers and tableters, *** percent by distributors, *** percent by retailers, and *** percent by importer ***. In these shares, *** is classified as a retailer.

² Mass-market retailers *** submitted purchase pricing data that were significantly higher than other purchasers' pricing data. This may be a reflection of the petitioners' claim that purchase prices are dependent on where in the distribution chain, or from whom, the product is being purchased.

Table F-3

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 3¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Table F-4

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 4¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Table F-5

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 5¹ and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Table F-6

Chlorinated isos Weighted-average delivered purchase prices as reported by U.S. purchasers of product 6¹, and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Table F-7

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 7¹, and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Table F-8

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers of product 8¹, and margins of underselling/(overselling), by quarters, January 2011-June 2014

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Figure F-1

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

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Figure F-2

Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

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Figure F-3
Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

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Figure F-4
Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

* * * * *

Figure F-5
Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

* * * * *

Figure F-6
Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

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Figure F-7
Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

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Figure F-8
Chlorinated isos: Weighted-average delivered purchase prices as reported by U.S. purchasers, by quarters, January 2011-June 2014

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Table F-9
Chlorinated isos: Instances of underselling/overselling, by product and by country, January 2011-June 2014

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APPENDIX G

**QUESTIONNAIRE RESPONSES CONCERNING CAPITAL INVESTMENT REQUIRED TO
BEGIN TABLETING OPERATIONS**

Responses of U.S. producers to the following question:

Question III-13. "For tableters, discuss the main capital investments required to begin tableting operations (e.g., the cost of a tablet press). Do not include any data related to your firm's repackaging operations."

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