

# CHOLINE CHLORIDE FROM CANADA

**Determination of the Commission in  
Investigation No. 731-TA-155  
(Final) Under the Tariff Act of  
1930, Together With the  
Information Obtained in the  
Investigation**



**USITC PUBLICATION 1595**

**OCTOBER 1984**

**UNITED STATES INTERNATIONAL TRADE COMMISSION**

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# C O N T E N T S

	<u>Page</u>
Determination-----	1
Views of the Commission-----	3
Information obtained in the investigation:	
Introduction-----	A-1
The product:	
Description and uses-----	A-2
Manufacturing process-----	A-3
U.S. tariff treatment-----	A-4
Channels of distribution-----	A-4
Nature and extent of sales at LTFV-----	A-5
The domestic industry-----	A-5
U.S. importers-----	A-6
Foreign producers-----	A-7
Demand factors-----	A-7
Apparent consumption-----	A-8
Consideration of alleged material injury-----	A-8
U.S. production, capacity, and capacity utilization-----	A-9
U.S. producers' shipments:	
Domestic shipments-----	A-10
Exports-----	A-12
U.S. producers' inventories-----	A-14
U.S. employment and wages-----	A-14
Financial experience of U.S. producers-----	A-15
Overall establishment operations-----	A-15
Liquid choline chloride operations-----	A-15
Dry choline chloride operations-----	A-18
Research and development expenditures-----	A-18
Capital expenditures-----	A-18
Asset valuation-----	A-19
Consideration of the threat of material injury-----	A-19
U.S. importer's inventories-----	A-21
Capacity of the foreign producer to generate exports-----	A-21
Consideration of the causal relationship between the LTFV imports and the alleged injury:	
U.S. imports and market penetration-----	A-22
Price structure-----	A-22
Price comparisons-----	A-25
CC70 prices to end-user customers-----	A-25
CC60 prices to end-user customers-----	A-26
CC60 prices to premixer customers-----	A-26
Purchasers' prices-----	A-26
Exchange rates-----	A-28
Lost sales:	
Allegations of U.S. producers-----	A-28
Allegations of the importer-----	A-30
Lost revenues-----	A-30
Appendix A. U.S. Department of Commerce notices-----	A-33
Appendix B. U.S. International Trade Commission's notice-----	A-39
Appendix C. Calendar of the public hearing-----	A-43
Appendix D. Updated U.S. industry data-----	A-47

## CONTENTS

	<u>Page</u>
1. U.S. livestock and poultry production, 1981-84-----	A-8
2. Choline chloride: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, by types, 1981-83, January-April 1983, and January-April 1984-----	A-9
3. Choline chloride: U.S. capacity, production, and capacity utilization, by types, 1981-83, January-April 1983, and January-April 1984-----	A-11
4. Choline chloride: U.S. producers' domestic open-market shipments, by types, 1981-83, January-April 1983, and January-April 1984-----	A-12
5. Dry choline chloride: U.S. producers' intercompany and intracompany transfer shipments, by types, 1981-83, January-April 1983, and January-April 1984-----	A-13
6. Choline chloride: U.S. producers' exports, by types, 1981-83, January-April 1983, and January-April 1984-----	A-13
7. Choline chloride: U.S. producers' end-of-period inventories, by types, as of Dec. 31, of 1981-83, and as of Apr. 30, 1983, and Apr. 30, 1984-----	A-14
8. Average number of employees, total and production and related workers employed in establishments producing all products and liquid and dry choline chloride, hours worked, and wages and total compensation paid to, average hourly compensation earned by, and unit labor costs charged to, such workers, 1981-83, January-April 1983, and January-April 1984-----	A-16
9. Syntex's income-and-loss experience on the overall operations of establishments within which choline chloride is produced, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-17
10. Nutrius' income-and-loss experience on the overall operations of establishments within which choline chloride is produced, 1982, 1983, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-17
11. Syntex's income-and-loss experience on operations producing liquid choline chloride, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-17
12. Nutrius' income-and-loss experience on operations producing liquid choline chloride, 1982, 1983, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-18
13. Syntex's income-and-loss experience on operations producing dry choline chloride, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-18
14. Nutrius' income-and-loss experience on operations producing dry choline chloride, 1982, 1983, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-18

## CONTENTS

	<u>Page</u>
15. U.S. producers' choline chloride research and development expenditures, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-19
16. U.S. producers' capital expenditures, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-20
17. U.S. producers' assets valuation, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984-----	A-21
18. Choline salts: U.S. imports for consumption, by principal sources, 1981-83, January-July 1983, and January-July 1984-----	A-23
19. Choline chloride, U.S. imports from Canada and from all sources, by types, 1981-83, January-April 1983, and January-April 1984-----	A-24
20. Choline chloride, CC70: Domestic producers' and importer's net delivered selling prices to end-user customers, by quarters, January 1981-March 1984-----	A-25
21. Choline chloride, CC60: Domestic producers' and importer's net delivered selling prices to premixer customers, by quarters, January 1981-March 1984-----	A-27
22. Choline chloride, CC70 and CC60: Weighted-average net delivered prices paid by purchasers of domestically produced and imported products, by quarters, January 1981-March 1984-----	A-28
23. Indexes of nominal and real exchange rates between the U.S. dollar and the Canadian dollar, by quarters, January 1981-June 1984-----	A-29
C-1. Updated trade and employment data for Syntex, IMC, and Thompson-Hayward, January-June 1983 and January-June 1984-----	A-48

Note.--Information which would disclose confidential operations of individual concerns may not be published and therefore has been deleted from this report. Deletions are indicated by asterisks.



UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, D.C.

Investigation No. 731-TA-155 (Final)

CHOLINE CHLORIDE FROM CANADA

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, pursuant to section 735(b)(1) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)(1)), that an industry in the United States is materially injured or threatened with material injury by reason of imports from Canada of choline chloride, 2/ provided for in item 439.50 of the Tariff Schedules of the United States, which have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV).

Background

The Commission instituted this investigation effective April 30, 1984, following a preliminary determination by the Department of Commerce that imports of choline chloride from Canada were being sold in the United States at LTFV.

Notice of the institution of the Commission's investigation and of a hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, D.C., and by publishing the notice in the Federal Register on May 23, 1984 (49 F.R. 21810). The hearing was held in Washington, DC on July 24, 1984, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

2/ Commissioners Lodwick and Rohr determined that an industry producing liquid choline chloride in the United States was materially injured and that an industry producing dry choline chloride was being threatened with material injury.



## VIEWS OF THE COMMISSION

On the basis of the record developed in this investigation, we determine that an industry in the United States is materially injured or threatened with material injury by reason of imports of choline chloride from Canada which are being sold at less than fair value (LTFV). The record demonstrates that increased LTFV imports of choline chloride from Canada are a cause of declining prices, declining financial performance, and lost sales experienced by the domestic industry.

Domestic industry

The choline chloride which is the subject of this investigation is a synthetic product which is used as a nutritive supplement in animal feeds (primarily in poultry feeds) in order to promote growth. 1/ It is sold in both a liquid and a dry form. The liquid form is a 70 percent solution in water, whereas the dry form is either a 50 or 60 percent dilution on a carrier material, typically ground corn cob or a cereal base. The dry form is produced by spraying the liquid solution on the carrier material.

Of the five domestic producers, the three largest (Syntex Agribusiness, Inc. (Syntex), Nutrius, Inc. (Nutrius), and International Mineral and Chemicals Corp. (IMC)) produce both liquid and dry choline chloride. 2/ The

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1/ There is also a medicinal-grade choline chloride, suitable for human consumption, but that is not part of this investigation. Report of the Commission ("Report") at A-2.

2/ Report at A-9.

two smaller companies (Thompson-Hayward Chemical Co. and Cholineco, Inc.) produce only liquid choline chloride. 3/

As a general proposition, feed mills and large-scale poultry and livestock producers purchase choline chloride in the liquid form and then manufacture their own animal feed. Premixers, companies which sell vitamin, mineral, and micronutrient premixes to small or local feed mills and to small-scale poultry and livestock growers, generally purchase choline chloride in the dry form.

Despite these distinct distribution channels, ultimately all choline chloride is dedicated to the same end use--animal feed. There is also some evidence in the record suggesting that if the price of one form were to drop, at least some end users would consider switching between the liquid and dry products. 4/ Further, the processing necessary to produce dry choline chloride from liquid choline chloride is fairly simple. 5/ Thus, the only real difference between the two forms is the value added by the addition of the carrier material to the liquid to make the dry product. We conclude,

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3/ Id. Thompson-Hayward, however, has now begun having dry choline chloride "toll produced" for it, i.e., another company is producing the dry form from Thompson-Hayward's liquid solution.

4/ There are some limitations on this, however. In order for a customer to use liquid choline chloride, it would have to own a tank in which to store the product. These tanks are fairly expensive and are therefore typically owned only by larger operations. Transcript of the hearing ("Tr.") at 68. Further, most premix operations could not use the liquid choline chloride because they sell their premixes in 50 lb. paper bags. Tr. at 102.

5/ Report at A-4.

therefore, that liquid and dry choline chloride constitute one like product. 6/ 7/

#### Condition of the domestic industry

The primary indicators of the condition of the domestic industry showed declines over the period of investigation. 8/ U.S. capacity to produce liquid and dry choline chloride remained stable in 1982, 1983, and the first half of 1984. However, production of liquid choline chloride declined from 60.1 million pounds in 1982 to 49.3 million pounds in 1983, and from 26 million pounds in January-June 1983 to 23.8 million pounds in January-June 1984. 9/ Similarly, production of dry choline chloride declined from 33.6

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6/ We note, however, that even if we were to have found two like products, our result here would not have changed.

7/ Commissioners Lodwick and Rohr determine that liquid and dry choline chloride are separate products. Therefore there are two domestic industries each producing a "like product" corresponding to each of the two imported products subject to this investigation. This investigation, like that of Sorbitol from France: Determination of the Commission in Investigation No. 731-TA-44 (Final-Court Remand) . . . ., USITC Publication 1441 (October 1983), involves a product produced in two distinct forms, a liquid form and a dry form. In Sorbitol from France, the Commission determined that the two forms of sorbitol were separate products due to the lack of competition between the two forms. For example, there are different additional production processes used to produce the dry or crystalline form, different prices, and different end uses. In this case, there are distinct characteristics and uses of the dry and liquid forms of choline chloride which, with the additional fact that changes in the price of one form are not related to changes in the price of the other, require us to find two separate products and industries. Dry choline chloride is a more advanced product requiring additional production processes. Given sufficiently large relative price changes between the liquid and dry forms, substitution may be advantageous for a few purchasers. However, substitution requires much larger price changes than have historically existed or seem likely to exist in the foreseeable future. Further, as noted above, there are different marketing and distribution patterns for the two products.

8/ Much of our discussion of the condition of the domestic industry is limited to 1982, 1983, and the first half of 1984. Although data were collected for 1981 as well, it does not include complete data for Nutrius, Inc., which is a relatively large producer. Report at A-15.

9/ Id. at A-11, table 3, and A-48, table D-1. We note that much liquid choline chloride produced is captively consumed to produce dry choline chloride.

million pounds in 1982 to 30.6 million pounds in 1983 and from 16 million pounds in January-June 1983 to 14.4 million pounds in January-June 1984. 10/ As a result, capacity utilization rates also declined. 11/

U.S. producers' domestic open-market shipments of choline chloride also declined, from 47.4 million pounds in 1982 to 37.9 million pounds in 1983 and from 20.1 million pounds in January-June 1983 to 17.1 million pounds in January-June 1984. 12/

Employment turned downward as well. The average number of production and related workers producing choline chloride fell from 51 in 1982 to 47 in 1983 and from 47 in January-April 1983 to 45 in January-April 1984. 13/ The average hours worked by these employees and total compensation paid to them also declined over the period of 1982-83, and January-April 1983 compared with that in January-April 1984. 14/

Reliable profit-and-loss data were available for only two companies, Syntex and Nutrius, but together they account for a substantial portion of U.S. production. 15/ Net sales from choline chloride operations declined for both companies from 1982 to 1983 and in the interim period ended April 30, 1984, from those in the corresponding 1983 period. 16/ At the same time,

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10/ Id.

11/ Id.

12/ Id. at A-12, table 4, and A-48, table D-1.

13/ Id. at A-16, table 8.

14/ Id.

15/ Profit-and-loss data were obtained from three of the five domestic producers. However, the data reported by one of the companies were determined to be based upon unreliable allocations and therefore were not used. Id. at A-15. Of the two companies from which reliable data were obtained, only Syntex was present in the market throughout the period of investigation. Nutrius, Inc., began operations in 1981, when it purchased Diamond Shamrock Corp.'s choline chloride operations and therefore was able to provide only fourth quarter data for 1981. Id. at A-6, A-11.

16/ Id. at A-17-A-18.

increased product costs resulted in declining operating margins for both companies throughout the period investigated. 17/ The lower operating margins indicate that neither company was able to raise its prices sufficiently to offset these increased product costs. 18/ 19/

Material injury or threat of material injury by reason of LTFV imports

LTFV imports of choline chloride from Canada increased steadily throughout the period of investigation, 20/ capturing an increasing portion of domestic consumption. 21/ By the first half of 1984, liquid choline chloride from Canada increased its share of domestic consumption by almost one-half. 22/ Although dry choline chloride was not exported by the sole Canadian producer, Chinook Chemicals Co., until 1983, it succeeded in capturing a small portion of the domestic market during that year and increased its share of the market in the beginning of 1984. 23/

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17/ Id.

18/ Id.

19/ Commissioners Lodwick and Rohr concur with their colleagues that the factors noted above describe an industry experiencing material injury. However, in light of our finding of two domestic industries, we considered the condition of each industry separately to come to our conclusion that the liquid choline chloride industry is now materially injured and that the dry choline chloride industry is currently in a weak and vulnerable position. This is because the facts described above are heavily weighted by the liquid form because its production is nearly twice that of the dry form, thereby masking the true performance of the dry choline chloride industry.

For the dry choline chloride industry, capacity utilization is 15 to 20 percentage points higher, and domestic shipments fell by one-half as much as liquid chlorine over the period of investigation. Also, although production for the liquid form fell sharply in 1983, dry production fell at one-half the rate. Meanwhile, exports of the dry form, although below 1983 levels, continued larger than the level in 1981, even in the interim period of January-April 1984. As for the financial performance, operating income over sales, although slowly declining, was generally higher and more stable for dry choline chloride than liquid. Additionally, gross margins as a percentage of net sales were substantially above those for the liquid industry.

20/ Id. at A-23, table 18.

21/ Id. at A-22-A-24.

22/ Id.

23/ Id.

Prices of choline chloride declined irregularly over the period of investigation. Thus, prices of domestically produced liquid choline chloride were 45 cents per pound in January-March 1981 and declined by 25.1 percent to 33.7 cents per pound in January-March 1984; prices of domestically produced dry choline chloride fell by 13.5 percent during the same period, from 47.5 cents per pound to 41.1 cents per pound. 24/ A comparison of import prices shows that there were margins of underselling by imports of liquid choline chloride in 8 of the 11 quarters studied 25/ and by imports of dry choline chloride in 3 of the 5 quarters for which such data were available. 26/ 27/

The data on prices and underselling margins are in part explained by the "meet or release" clauses contained in most choline chloride sales contracts. As a result of these clauses, most contracts are merely supply contracts, with prices negotiated at the time of each shipment. 28/ If a purchaser is able to obtain the product from another source at a price lower than that which the producer holding a contract is willing to meet, a producer will lose the sale of that shipment.

Although both domestic producers and the importer allege that they have been forced to reduce prices and have lost sales to one another under the terms of the "meet or release" clauses, the participation of the importer in

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24/ Id. at A-25-A-26, tables 20 and 21. The price data collected from purchasers of liquid choline chloride showed similar declining trends. Id. at A-28, table 22.

25/ Id. at A-25-A-26, tables 20 and 21. Price data obtained from purchasers of liquid choline chloride show underselling in all but one of the quarters studied. Id. at A-28, table 22.

26/ Id. at A-25-A-26, tables 20 and 21.

27/ Chairwoman Stern notes that the LTFV margins found by Commerce account in large part for the ability of the imported product to undersell the domestic product.

28/ Id. at A-23.

this practice with such a relatively large volume of significantly undersold, dumped imports of choline chloride from Canada has contributed to an overall decline in prices and has caused material injury to the domestic industry.

Meanwhile, the importer has recently increased its capacity to produce choline chloride by more than one-half. 29/ Given the limited size of the Canadian market for choline chloride 30/ and the limited number of export markets for Canadian choline chloride, 31/ we determine that the domestic industry producing choline chloride is also threatened with material injury by reason of imports from Canada. 32/

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29/ Id. at A-21.

30/ The total Canadian market for choline chloride is 6 million pounds annually. Transcript of the Preliminary conference at 11 and 129.

31/ According to respondent, it recently began exporting choline chloride to Japan, Tr. at 99, but before then, the United States was its only export market.

32/ Commissioners Lodwick and Rohr concur that the liquid choline chloride industry is currently experiencing material injury due to imports from Canada as evidenced by the large and rapidly increasing penetration ratio of imports to consumption and the significant margin of underselling in the vast majority of the quarters compared.

We determine that the domestic dry choline chloride industry is threatened with material injury by imports even though there is a relatively small amount of imported dry choline chloride in the market and the instances of underselling are few and by small margins. We believe that the Canadian producer is able and intends to export larger quantities of the dry form to the United States in the near future. Although the increase in foreign capacity was for liquid choline chloride, the Canadian producer has entered into a relationship with a firm that has the capacity to process the additional liquid into dry choline chloride. Further, the recent entry of Canadian dry choline chloride into the U.S. market and the fact that the importer has acquired substantial warehousing capacity in the United States demonstrates its intent to participate in the U.S. market.



## INFORMATION OBTAINED IN THE INVESTIGATION

## Introduction

On November 14, 1983, a petition was filed with the United States International Trade Commission and the Department of Commerce by counsel on behalf of Syntex Agribusiness, Inc. (Syntex), alleging that imports of choline chloride from Canada are being, or are likely to be, sold in the United States at less than fair value (LTFV) and that an industry in the United States is being materially injured, or is threatened with material injury, by reason of such imports. 1/ Accordingly, effective November 14, 1983, the Commission instituted antidumping investigation No. 731-TA-155 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673d(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Canada of choline chloride, provided for in item 439.50 of the Tariff Schedules of the United States (TSUS), which are allegedly being sold at LTFV.

On December 30, 1983, the Commission determined that there was a reasonable indication that an industry in the United States is materially injured by reason of alleged LTFV imports of choline chloride from Canada. Commerce, therefore, continued its investigation into the question of alleged LTFV imports and published its preliminary determination in the Federal Register of April 30, 1984 (49 F.R. 18344). Commerce preliminarily determined that choline chloride from Canada is being, or is likely to be, sold in the United States at LTFV. 2/ On the basis of Commerce's affirmative preliminary determination, the Commission instituted a final antidumping investigation on April 30, 1984.

Following the receipt of a request from Chinook Chemicals Co. Ltd., the sole exporter of choline chloride from Canada, Commerce extended the date of its final determination by 60 days and published a notice of postponement in the Federal Register of July 13, 1984 (49 F.R. 28590). On September 12, 1984, Commerce determined that choline chloride from Canada is being sold in the United States at less than fair value. Margins were found on 73 percent of the choline chloride sold during June-November 1983, with the weighted-average margin on all sales being 9.73 percent. 3/

Notice of the institution of the Commission's investigation and of the public hearing held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of May 23, 1984 (49 F.R. 21810). 4/ The public hearing was held on July 24, 1984, at which all interested parties were afforded an opportunity to present information for consideration by the Commission. 5/ The briefing and vote on this investigation occurred on October 18, 1984.

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1/ Concurrently, counsel for Syntex filed a dumping petition on choline chloride from the United Kingdom.

2/ On this same date, Commerce preliminarily determined that choline chloride imported from the United Kingdom is not being sold in the United States at LTFV.

3/ Copies of the Department of Commerce's notice of postponement of final determination and notice of final determination are presented in app. A.

4/ A copy of the Commission's notice of institution of the investigation is presented in app. B.

5/ A copy of the calendar of the public hearing is presented in app. C.

## The Product

### Description and uses

Pure choline chloride is a chemical with the formula  $C_5H_{14}ClNO$  and a molecular weight of 139.6. The chemical name for choline chloride is (2-hydroxyethyl)trimethylammonium chloride. 1/ The pure chemical occurs as white powder or crystals that are soluble in both water and alcohol. Choline chloride is the chloride salt of choline, a chemical that occurs widely, but in low concentration, in many natural products. Choline is a strong organic base which readily reacts with organic and inorganic acids to form various choline salts. Choline chloride, for example, is an organic salt obtained from the reaction of choline and hydrochloric acid. The petitioner explicitly states that choline salts other than choline chloride are not the subject of its complaint.

Choline chloride is marketed in two grades and in several forms. The two grades are medicinal (pharmaceutical) grade and animal feed grade. The medicinal grade is virtually pure choline chloride and must meet Food and Drug Administration standards for use by humans, which require that choline chloride meet the specifications published in the Food Chemicals Codex. 2/ Specifications are less stringent for the animal-feed grade. Medicinal-grade choline chloride recently had a list price of about \$2.30 per pound versus less than 50 cents per pound for 70-percent choline chloride in the animal feed grade. 3/ Thus, there are two markets for choline chloride, a very small market for medicinal grade and the larger animal feed market, which accounts for virtually all U.S. consumption of choline chloride. 4/ Imports of medicinal-grade choline chloride are not alleged by the petitioner to be a cause of injury to the domestic industry.

According to industry sources, there are three standard dilutions of choline chloride marketed for use in animal feeds: (1) a 70-percent solution in water (CC70), (2) a 60-percent dry form absorbed on an inert carrier material, such as ground corncobs or a cereal base carrier (CC60), and (3) a 50-percent dry form absorbed on an inert carrier such as silicate or cereal (CC50). CC50 which uses a silica carrier is not produced in the United States and does not compete with CC60 which uses a cereal carrier. 5/ Also, this product is priced considerably higher than CC60 and is sold to the dairy industry as a milk replacement for weaning calves and piglets and not as a feed additive. All the animal feed grade is marketed for the same end uses, although different customers purchase different dilutions.

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1/ USAN and the USP Dictionary of Drug Names, 20th ed., The United States Pharmacopeial Convention, Inc., 1982, p. 123.

2/ National Academy of Sciences, Food Chemicals Codex, 3d ed., 1981, pp. 84 and 85.

3/ Chemical Marketing Reporter, Schnell Publishing Co., Apr. 23, 1984.

4/ Syntex is the only domestic producer which is currently producing medicinal-grade choline chloride. \*\*\*.

5/ The United Kingdom is believed to be the only known source of this product. Canada neither produces nor exports choline chloride of a 50-percent standard dilution.

Medicinal-grade choline chloride has been used in the treatment of certain diseases and medical conditions, including Huntington's disease and drug-induced tardive dyskinesia. 1/ It is also sometimes used to increase the choline content of infant formulas and as a nutritional supplement for acutely ill patients. 2/

Choline chloride has been clearly demonstrated to be effective in the nutrition of poultry and swine and is routinely added to the feed rations for these animals. Most commonly used poultry feeds, especially the cereal grains, do not have the optimum amount of natural choline for maximum animal growth, so choline chloride is added to bring the choline content up to the desired level. According to one reference source, young chickens require about 0.15 percent choline in their diet, and young turkeys require 0.20 percent. 3/ Thus, about 3 to 5 pounds of choline chloride are required per ton of feed. The natural choline content of feed can vary widely; therefore, the amount of choline chloride added may also vary. Industry sources have stated that 1 to 1.5 pounds added per ton of feed is a crude approximation.

The choline ion in the choline chloride molecule is the physiologically active part of the molecule. It is necessary in fat metabolism and is also believed to be involved in the metabolism of the essential amino acid methionine, which is also routinely added to poultry and swine feed. Other salts of choline exist, such as choline bitartrate and choline dihydrogen citrate, but they are more expensive to produce than choline chloride and are not price competitive in the animal feed market. Choline is necessary for animal growth and must be present in the diet in the required amounts. No other chemical is known to be a physiological substitute for the choline ion in animal metabolisms. Humans normally obtain the required amounts in their diets; but poultry, swine, and other livestock need additional amounts added to their feed rations in order to maximize their growth potential.

#### Manufacturing process

A published procedure for the production of choline chloride involves a process in which 300 parts of a 20-percent solution of trimethylamine is neutralized with 100 parts of concentrated hydrochloric acid. The solution is treated for 3 hours with 50 parts of ethylene oxide under pressure and at a temperature of 60 degrees Celsius. This procedure results in a practically quantitative yield of choline chloride. 4/ All domestic and foreign producers of choline chloride are believed to use a variation of this synthesis in their manufacturing process.

The synthesis yields a solution of about 75 percent choline chloride in water. The concentration of the solution varies according to the concentration of the hydrochloric acid used in the manufacturing process. The product is either concentrated by evaporation or diluted to a standard concentration of

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1/ American Medical Association, AMA Drug Evaluations, 4th ed., 1980, p. 262.

2/ Remington's Pharmaceutical Sciences, 16th ed., 1980, pp. 957 and 969.

3/ Kirk-Othmer Encyclopedia of Chemical Technology, 3d ed., vol. 6, 1979, p. 24.

4/ Kirk-Othmer Encyclopedia of Chemical Technology, vol. 5, John Wiley & Sons, Inc., 1964, p. 407.

70 percent choline chloride in water, and most is marketed as such. To produce dry choline chloride for the animal-feed market, the aqueous choline chloride solution is mixed with an inert material and dried so that the dry material has a guaranteed minimum analysis of 50 or 60 percent choline chloride.

A modification of the synthesis can be used to react trimethylamine and ethylene oxide in the presence of water and carbon dioxide to form cholinecarbonate, which can easily be converted into the desired salt by reaction with a particular acid. For example, citric acid could be used to produce choline dihydrogen citrate, or tartaric acid could be used to obtain choline bitartrate.

Of the various synthesis processes, the one yielding choline chloride is the most economical, because it uses low-cost, commodity-type organic and inorganic chemicals. In September 1984, the published prices of the chemicals used to produce animal-feed-grade choline chloride were about 46 cents per pound for trimethylamine, about 29 cents per pound for ethylene oxide, and about 4 cents per pound for hydrochloric acid. On the other hand, the price of citric acid was about 85 cents per pound, and that for tartaric acid about 80 cents per pound. Thus, the cost of these acids would more than double the cost of producing choline dihydrogen citrate or choline bitartrate compared with the cost of producing choline chloride. As stated earlier, since the choline part of the molecule is the physiologically active portion, salts other than choline chloride are not price competitive in the large animal-feed market. However, choline dihydrogen citrate and choline bitartrate may offer some advantages not related to price in the small pharmaceutical market for choline salts.

#### U.S. tariff treatment

Choline chloride is classified under item 439.50 of the TSUS. The column 1 rate of duty is 3.7 percent ad valorem and has been in effect since January 1, 1980. <sup>1/</sup> The current column 1 rate reflects the full U.S. Multilateral Trade Negotiations (MTN) concession rate implemented without staging for articles classifiable under TSUS item 439.50.

#### Channels of distribution

Domestic producers of animal-feed-grade choline chloride market their product directly, or through subsidiary operations, to two major types of customers: (1) feed mills and (2) premixers, which sell vitamin, mineral, and micronutrient premixes to feed mills. Ralston-Purina Co. is an example of a large feed company that would purchase significant quantities of choline chloride. Ralston-Purina has about \*\*\* feed mills which purchase the general ingredients--including vitamins and micronutrients--to manufacture its wide range of animal feeds, which are then sold through its own distributors and outlets. Most large-scale poultry and swine producers are also likely to have their own feed mills; they usually purchase CC70 directly from domestic producers, importers, or distributors.

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<sup>1/</sup> The rates of duty in col. 1 are most-favored-nation (MFN) rates and are applicable to imported products from all countries except those Communist A-4 countries and areas enumerated in general headnote 3(f) of the TSUSA.

There are certain geographical concentrations of chicken, turkey, and swine producers (the principal end-use markets for choline chloride), and it is industry practice to assign sales representatives to serve these geographical areas. Principal chicken-producing States are Arkansas, Georgia, Alabama, North Carolina, and Maryland. Key turkey-producing States include Minnesota, North Carolina, California, Missouri, and Pennsylvania. U.S. swine production is concentrated mainly in Iowa, Illinois, Ohio, and Georgia. Sales representatives routinely contact customers, and potential customers, in these market areas to solicit sales.

Premixers purchase (or produce) vitamins, minerals, and micronutrients, which they dilute and mix together in concentrations suitable for local feed mills or regional markets. Most producers of choline chloride had premix operations at one time, but the premix market is highly price competitive, with low profit margins. Some choline producers, including Syntex, have divested themselves of their premix operations. However, Nutrius, Inc., another large producer of choline chloride, continues to operate premix facilities throughout the United States. There are reportedly a few firms that could be considered national premixers. Most local and regional premixers are entrepreneurial entities which purchase all the ingredients for their premixes. According to the petition, these premixers constitute the principal market for dry choline chloride in 50- and 60-percent concentrations. The premixers sell to feed mills that are not equipped to use concentrated forms of vitamins, minerals, and micronutrients in their milling operations. The finished feed must be a homogeneous mixture of all the ingredients, including all the additives added in low concentrations, so that each fed animal receives all its required nutrients, minerals, and vitamins.

#### Nature and Extent of Sales at LTFV

Commerce's investigation of LTFV sales covered the period June 1, 1983- November 30, 1983, and compared U.S. purchase prices with foreign-market values based on home-market selling prices, allowing for certain deductions and adjustments. Commerce found that the foreign-market value of choline chloride from Canada exceeded the U.S. price on 73 percent of the sales compared. The LTFV margins ranged from 0.1 to 39.7 percent. The weighted-average margin on all LTFV sales compared was 9.7 percent.

#### The Domestic Industry

There are five domestic producers of choline chloride as follows:

Cholineco, Inc.  
Hampton, SC;

International Minerals and Chemical Corp.  
North Brook, IL;

Nutrius, Inc.  
Cleveland, OH;

Syntex Agribusiness, Inc.  
Springfield, MO; and

Thompson-Hayward Chemical Co.  
Kansas City, KS.

Prior to April 5, 1984, Cholineco, Inc., was a privately held corporation that was owned and managed by one individual. Under a purchase agreement executed on April 5, 1984, Southern Micro Blenders, a major wholesaler/distributor of animal feed additives, acquired the physical plant assets of Cholineco and retained the latter's corporate name. 1/ Choline chloride is the only known product which Cholineco produces.

International Minerals & Chemical Corp. (IMC) is a multinational corporation producing principally fertilizers, industrial products, ferroalloys, industrial minerals and chemicals, animal products, and oil and gas. Most of its plants are located in the United States or Canada.

Nutrius, Inc., is a jointly owned subsidiary of Mitsui & Co. (U.S.A.), Inc. (\*\*\*) percent), and Mitsui & Co., Ltd. (\*\*\*) percent). Mitsui & Co., Ltd., is one of Japan's largest trading companies; it deals in iron and steel, nonferrous metals, fuels, chemicals, textiles, and other products. Mitsui & Co. (U.S.A.) Inc., purchased Diamond Shamrock Corp.'s choline chloride operations in 1981 and continued these operations under Nutrius, Inc.

Syntex Agribusiness Inc., the petitioner, 2/ is a wholly owned subsidiary of Syntex (U.S.A.) Inc., a multinational corporation producing principally pharmaceutical products. Syntex is incorporated in Panama and has plants and offices in the United States, Puerto Rico, and nine foreign countries.

Thompson-Hayward Chemical Co. is a wholly owned subsidiary of Harrisons Crosfield (America) Inc., which, in turn, is a subsidiary of Harrisons Crosfield Ltd. of Canada. Thompson-Hayward's principal activities include the manufacture and distribution of chemical products to a wide range of industries. From June 1981 to March 1984, liquid choline chloride produced at Thompson-Hayward's Kansas City, KS, facility was marketed and distributed exclusively by the nutritional health division of Thompson-Hayward. This marketing arrangement, however, was terminated on February 29, 1984, following the acquisition of the nutritional health division by Salsbury Laboratories, Inc. 3/

#### U.S. Importers

All import transactions involving Canadian-produced choline chloride are handled directly by the sole Canadian manufacturer, Chinook Chemicals Co. Ltd., through its sales office in Toronto, Canada. Choline chloride exported by Chinook enters the United States by truck at one of two entry points, Buffalo, NY or Port Huron, MI. Choline chloride, the only choline salt which is exported to the United States by Chinook, is one of several chemical products exported by that firm.

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1/ Southern Micro Blenders' parent firm (Con Agra) uses substantial amounts of choline chloride in its U.S. poultry operations.

2/ In the preliminary investigation, Syntex was the only petitioner. However, in the final investigation, all current members of the domestic industry have actively participated as petitioners.

3/ Salsbury Laboratories, Inc., subsequently changed the name of the nutritional and health division to Duphar Nutrition, Inc.

### Foreign Producers

Limited information is available concerning foreign producers of choline chloride in countries other than Canada and the United Kingdom. The petition alleged that Chinook Chemicals Co. Ltd., is the source of the choline chloride from Canada that is the subject of the complaint. The official import statistics of the U.S. Department of Commerce indicate that about 83 percent of all choline salts imported into the United States in 1983 and January-July 1984 originated in Canada. An additional 13 percent of such imports came from the United Kingdom in 1983, but only 6 percent of imports were from that country in January-July 1984. Other sources of choline salts, but not necessarily choline chloride, include Belgium, Yugoslavia, France, the Federal Republic of Germany, Switzerland, Spain, and Italy.

### Demand Factors

Choline chloride is considered an essential ingredient in the diet of poultry, swine, and other animals. Nearly 70 percent of domestic consumption is used in feed for poultry, 1/ especially broilers 2/ or young chickens, whose dependency on choline decreases with age. The remaining 30 percent of consumption is used in feed for swine and other livestock animals. Since feed for young chickens is the primary market for choline chloride, its demand is heavily dependent on U.S. poultry production and, perhaps to a greater extent, U.S. feed consumption (i.e., pounds of feed required per pound of poultry produced). Recent statistics published by the U.S. Department of Agriculture indicate that, from 1970 to 1980, the amount of feed required to produce 100 pounds of broilers has decreased by 4 percent, from 217 pounds in 1970 to 208 pounds in 1980. 3/ Also during this period, the average market weight per broiler produced increased from 3.6 pounds in 1970 to 4.0 pounds in 1980. Improvements in these production efficiencies influence U.S. choline chloride demand.

Notwithstanding the production efficiencies mentioned above, U.S. choline chloride consumption is heavily influenced by the numbers of chickens and other livestock animals in production in a given period of time. As shown in table 1, the overall production index for U.S. poultry and livestock declined by nearly a full percentage point in 1982, increased by about 4 percentage points in 1983, and is expected to decrease by about 1 percentage point in 1984. The index for U.S. poultry production showed an 11-percent increase in 1983 over that in 1981 compared with an increase of less than 1 percent in the index for U.S. livestock production.

Since no alternate uses for choline chloride are anticipated over the next several years, demand for this product will most likely be influenced by changes in U.S. poultry production.

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1/ See petition at p. 5.

2/ According to the U.S. Department of Agriculture, broilers are defined to include young chickens, fryers, roasters, capons, and cornish hens generally weighing from 2.5 to 4.8 pounds.

3/ See: The U.S. Poultry Industry, Changing Economics and Structure, July 1983, pp. 14 and 15.

Table 1.--U.S. livestock and poultry production, 1981-84

Period	Production			Index (1981=100.0)		
	Livestock	Poultry	Total	Livestock	Poultry	Total
	-----Millions of pounds-----					
1981-----	38,675	14,415	53,090	100.0	100.0	100.0
1982-----	37,266	15,425	52,691	96.4	107.0	99.3
1983-----	38,972	16,047	55,019	100.8	111.3	103.6
1984-----	<u>1/</u> 39,199	<u>1/</u> 16,312	<u>1/</u> 54,511	<u>2/</u> 101.4	<u>2/</u> 113.2	<u>2/</u> 102.7

1/ U.S. Department of Agriculture estimate.

2/ Estimated on the basis of January-May data.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

#### Apparent Consumption

Apparent consumption of liquid choline chloride increased irregularly from \*\*\* pounds (dry weight) in 1981 to \*\*\* pounds (dry weight) in 1983 (table 2). Consumption rose from \*\*\* pounds in January-April 1983 to \*\*\* pounds in January-April 1984, or by less than \*\*\* percent. The 1981-83 consumption trend for dry choline chloride was similar to that for the liquid product. However, unlike the slight increase in consumption of liquid choline chloride in January-April 1984 over consumption in January-April 1983, apparent consumption of dry choline chloride declined by \*\*\* percent in January-April 1984 from that in January-April 1983. The ratio of imports of liquid and dry choline chloride to apparent consumption of the liquid and dry products increased from \*\*\* and \*\*\* percent of consumption in 1981, respectively, to \*\*\* and \*\*\* percent of consumption in 1983, respectively. U.S. imports of liquid choline chloride as a share of liquid choline chloride consumption increased from nearly \*\*\* percent of consumption in January-April 1983 to nearly \*\*\* percent of consumption in January-April 1984. Although consumption of dry choline chloride declined in absolute terms, the ratio of imports to consumption remained unchanged in January-April 1984 from that in the corresponding 1983 period.

#### Consideration of Alleged Material Injury

Since 1981, two firms have withdrawn from the domestic choline chloride industry only to be replaced by two new entrants. In June 1981, TH Agriculture and Nutrition Co. sold its liquid choline chloride plant to Thompson-Hayward Chemical Co. TH Agriculture and Nutrition Co. then entered into an arrangement with Thompson-Hayward whereby the former became the exclusive customer of choline chloride produced by the latter. 1/ The second firm to withdraw from the industry was Cholineco, Inc. The plant assets and company name of Cholineco were sold to Southern Micro Blenders on April 5,

1/ On Mar. 1, 1984, TH Agriculture & Nutrition Co. was acquired by Duphar Nutrition, Inc.

Table 2.--Choline chloride: U.S. producers' shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, by types, 1981-83, January-April 1983, and January-April 1984

Item	U.S. producers' shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	1,000 pounds, dry weight				Percent
Liquid:					
1981-----	16,841	***	***	***	***
1982-----	24,036	***	***	***	***
1983-----	18,089	***	***	***	***
January-April--					
1983-----	5,597	***	***	***	***
1984-----	4,195	***	***	***	***
Dry:					
1981-----	16,489	***	***	***	***
1982-----	29,218	***	***	***	***
1983-----	25,106	***	***	***	***
January-April--					
1983-----	8,734	***	***	***	***
1984-----	7,809	***	***	***	***

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

1984. Notwithstanding these changes, the domestic industry continues to consist of five producers, all of which were sent Commission questionnaires in connection with this investigation. The discussion that follows is based on data submitted in response to these questionnaires. 1/

#### U.S. production, capacity, and capacity utilization

Syntex, Nutrius, and IMC each produce liquid and dry choline chloride, and Thompson-Hayward and Cholineco produce only the liquid product. 2/ Since liquid choline chloride is further processed to produce dry choline chloride, a significant amount of U.S. production of liquid choline chloride is captively consumed. As shown in the following tabulation, U.S. producers'

1/ Four U.S. producers submitted data in response to Commission questionnaires. However, Cholineco, Inc., which accounted for an estimated 5 percent of U.S. production in 1983, did not provide the requested data. Also, 1981 data for Nutrius, Inc., are for September-December only.

Because of the lapse of time between Commerce's preliminary and final determinations, U.S. producers were requested at the hearing to update their questionnaire responses with more recent data in order that the Commission might have the most recent data available in making its determination. Updated data pertaining to U.S. producers' production, shipments, and employment were supplied by Syntex, Nutrius, IMC, and Thompson-Hayward and are presented in app. D.

2/ In September 1984, Thompson-Hayward signed an agreement with Westway Trading Co. (Rudd, IA) which calls for Westway to toll-produce dry choline chloride for Thompson-Hayward. Chinook has a similar arrangement with Westway.

captive consumption of liquid choline chloride increased from 52 percent of production in 1981 to about 64 percent of production in 1983 and in January-April 1984:

Liquid choline chloride

<u>Period</u>	<u>Production</u>	<u>Captive consumption</u>	<u>Ratio (percent) of captive consumption to production</u>
<u>-1,000 pounds, dry weight-</u>			
1981-----	35,838	18,579	51.8
1982-----	60,052	35,533	59.2
1983-----	49,308	31,712	64.3
January-April--			
1983-----	17,277	10,674	61.8
1984-----	16,251	10,471	64.4

Data on U.S. production of liquid and dry choline chloride as well as U.S. producers' capacity to produce both the liquid and dry forms are shown in table 3. U.S. production of liquid choline chloride increased irregularly from 35.8 million pounds (dry weight) in 1981 to 49.3 million pounds (dry weight) in 1983. U.S. production of dry choline chloride also increased irregularly over the same period, from \*\*\* pounds in 1981 to 30.6 million pounds in 1983. U.S. production of the liquid and dry products was lower by 3 percent and 9 percent, respectively, in January-April 1984 than in January-April 1983. In terms of liquid versus dry choline chloride capacity utilization, U.S. producers achieved a significantly higher level of capacity utilization producing the dry product than they achieved producing the liquid product. The average annual capacity utilization rate for dry choline chloride during 1981-83 was 72 percent. This rate compares with an average annual capacity utilization rate of 54 percent for liquid choline chloride. In January-April 1984, U.S. producers' capacity utilization for the dry product was 70 percent compared with a utilization rate of 53 percent for the liquid product. During 1981-83, U.S. producers operated their liquid choline chloride facilities an average of 148 hours per week for 51 weeks a year. Dry choline chloride production facilities were in operation 143 hours a week for an average of 51 weeks a year during the same period. See table C-1 in appendix C for updated data on U.S. production, capacity and capacity utilization.

U.S. producers' shipments

Domestic shipments.--U.S. producers' domestic open-market shipments (excluding intercompany and intracompany transfers) of liquid and dry choline chloride increased irregularly from 1981 to 1983. U.S. producers' total domestic shipments of both types declined by 7 and 13 percent, respectively, in January-April 1984 from such shipments in January-April 1983. U.S. producers' shipments of liquid choline chloride increased from 16.8 million pounds (dry weight), valued at \$8.1 million, in 1981 to 24.0 million pounds (dry weight), valued at \$12.4 million, in 1982 (table 4). In 1983, producers' shipments declined to 18.1 million pounds valued at \$8.8 million. U.S.

Table 3.--Choline chloride: U.S. capacity, production, and capacity utilization, by types, 1981-83, January-April 1983, and January-April 1984

Type and period	Capacity	Production	Capacity utilization
	----1,000 pounds	1/----	Percent
Liquid:			
1981-----	75,963	2/ 35,838	47.2
1982-----	91,963	2/ 60,052	65.3
1983-----	91,963	2/ 49,308	53.6
January-April--			
1983-----	30,654	2/ 17,277	56.4
1984-----	30,654	2/ 16,251	53.0
Dry:			
1981-----	***	***	***
1982-----	41,200	33,594	81.5
1983-----	41,200	30,607	74.3
January-April--			
1983-----	13,765	10,628	74.6
1984-----	13,765	9,644	70.1

1/ Dry-weight basis.

2/ Amount shown includes production which is captively consumed.

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

Note.--The table excludes January-September 1981 data for Diamond Shamrock and data for Cholineco covering all periods. Estimated capacity and production data for these 2 firms are as follows: Diamond Shamrock's choline chloride capacity was about \*\*\* pounds during January-September 1981; during this period, the firm produced approximately \*\*\* pounds. Cholineco's choline chloride production approximated \*\*\* pounds in 1981, \*\*\* pounds in 1982, \*\*\* pounds in 1983, and \*\*\* pounds in January-February 1984. Cholineco's capacity has remained at about \*\*\* pounds annually since 1981.

producers' shipments declined to 4.2 million pounds (dry weight), valued at \$2.2 million, in January-April 1984, down from shipments of 5.6 million pounds (dry weight), valued at \$3.1 million, in January-April 1983. U.S. producers' domestic open-market shipments of dry choline chloride (CC60 and CC50) increased from \*\*\* pounds, valued at \*\*\*, in 1981 to 23.4 million pounds, valued at \$15.5 million, in 1982. Producers' shipments declined in 1983 to 19.8 million pounds, valued at \$13.6 million. The average unit value of U.S. producers' shipments of liquid choline chloride peaked in January-April 1983 at 55 cents per pound. The average unit value of dry choline chloride shipments declined from \*\*\* cents per pound in 1981 to 66 cents per pound in 1982 but then increased to 69 cents per pound in 1983.

In terms of the types of product shipped, U.S. producers' domestic shipments of choline chloride consisted of nearly equal amounts of the liquid and dry product during 1982 and 1983 and during the two interim periods. With regard to the two dry forms, CC60 averaged about 54 percent of total shipments of dry choline chloride during 1981-83 and accounted for 68 percent of such shipments in January-April 1984. See table D-1 in appendix D for updated data on producers' shipments.

Syntex and Nutrius each reported intercompany and intracompany transfer shipments of CC60 and/or CC50. Syntex indicated that its intercompany transfers are shipped to a Canadian sister firm; Nutrius ships dry choline chloride to a total of four company-owned premix plants located in California, Arkansas, Iowa, and Kentucky. Transfer values assigned to merchandise shipped to related parties are generally lower than prices received on sales to unrelated or unaffiliated buyers. U.S. producers' intercompany and intracompany transfers of dry choline chloride are shown in table 5.

Table 4.--Choline chloride: U.S. producers' domestic open-market shipments, by types, 1981-83, January-April 1983, and January-April 1984

Period	: 70 percent:	Dry			Total
		liquid	CC60	CC50	
Quantity (1,000 pounds, dry weight)					
1981-----	16,841	***	***	***	***
1982-----	24,036	13,803	9,607	23,410	47,446
1983-----	18,089	12,630	7,205	19,835	37,924
January-April--					
1983-----	5,597	4,818	2,240	7,058	12,655
1984-----	4,195	4,166	1,967	6,133	10,328
Value (1,000 dollars)					
1981-----	8,141	***	***	***	***
1982-----	12,391	9,329	6,143	15,472	27,863
1983-----	8,825	8,914	4,709	13,623	22,448
January-April--					
1983-----	3,062	2,788	1,512	4,300	7,362
1984-----	2,187	2,787	1,307	4,094	6,281
Unit value (cents per pound)					
1981-----	48	***	***	***	-
1982-----	52	68	64	66	-
1983-----	49	71	65	69	-
January-April--					
1983-----	55	58	68	61	-
1984-----	52	67	66	67	-

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

Exports.--U.S. exports of choline chloride increased from \*\*\* pounds, valued at \*\*\*, in 1981 to \*\*\* pounds, valued at \*\*\*, in 1983 (table 6).  
Exports declined from \*\*\* pounds, valued at \*\*\*, in January-April 1983 to \*\*\*

Table 5.--Dry choline chloride: U.S. producers' intercompany and intracompany transfer shipments, by types, 1981-83, January-April 1983, and January-April 1984

Item	1981	1982	1983	January-April--	
				1983	1984
Dry choline chloride:					
CC60:					
Quantity-----1,000 pounds--	***	***	***	***	***
Value-----1,000 dollars--	***	***	***	***	***
Unit value----cents per pound--	***	***	***	***	***
CC50:					
Quantity-----1,000 pounds--	***	***	***	***	***
Value-----1,000 dollars--	***	***	***	***	***
Unit value----cents per pound--	***	***	***	***	***
Total:					
Quantity-----1,000 pounds--	***	***	***	***	***
Value-----1,000 dollars--	***	***	***	***	***
Unit value----cents per pound--	***	***	***	***	***

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

Table 6.--Choline chloride: U.S. producers' exports, by types, 1981-83, January-April 1983, and January-April 1984

Type	1981	1982	1983	January-April--	
				1983	1984
Quantity (1,000 pounds, dry weight)					
Liquid-----	***	***	***	***	***
Dry-----	***	***	***	***	***
Total-----	***	***	***	***	***
Value (1,000 dollars)					
Liquid-----	***	***	***	***	***
Dry-----	***	***	***	***	***
Total-----	***	***	***	***	***
Unit value (cents per pound)					
Liquid-----	***	***	***	***	***
Dry-----	***	***	***	***	***
Total-----	***	***	***	***	***

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

pounds, valued at \*\*\*, in January-April 1984. U.S. producers export principally to Canada, Argentina, Colombia, Costa Rica, Venezuela, and Taiwan. See table D-1 in appendix D for updated data on U.S. exports.

### U.S. producers' inventories

End-of-period inventories of domestically produced liquid choline chloride decreased from 1.6 million pounds (dry weight) as of December 31, 1981, to 648,000 pounds (dry weight) as of December 31, 1983 (table 7). Inventories held on April 30, 1984, were about 3 percent lower those held on April 30, 1983. U.S. producers' inventories of dry choline chloride decreased from \*\*\* pounds at yearend 1981 to 856,000 pounds at yearend 1983 and remained almost unchanged in January-April 1984 compared with those in January-April 1983. As a share of U.S. producers' total shipments, combined inventories of liquid and dry choline chloride declined from 5 percent of total shipments in 1981 to 2 percent of total shipments in 1983 and were higher by 0.5 percentage point in January-April 1984 than in January-April 1983. See table D-1 in appendix D for updated data on producers' inventories.

Table 7.--Choline chloride: U.S. producers' end-of-period inventories, by types, as of Dec. 31 of 1981-83, and as of Apr. 30, 1983, and Apr. 30, 1984

Type	As of Dec. 31--			As of Apr. 30--	
	1981	1982	1983	1983	1984
	Quantity (1,000 pounds, dry weight)				
Liquid-----	1,572	1,631	648	1,998	1,944
Dry-----	***	1,228	856	1,275	1,249
Total-----	***	2,859	1,504	3,273	3,243
	Ratio of inventories to total shipments				
Liquid-----	4.4	2.7	1.3	<u>1/</u> 4.1	<u>1/</u> 4.4
Dry-----	***	4.2	3.4	<u>1/</u> 4.9	<u>1/</u> 5.3
Average-----	***	3.2	2.0	<u>1/</u> 4.4	<u>1/</u> 4.8

1/ Based on annualized January-April data.

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

### U.S. employment and wages

Data concerning the number of workers employed, hours worked by production and related workers employed, wages, and total compensation paid to such workers are presented in table 8. The average number of all persons employed in U.S. establishments in which choline chloride is produced declined from 795 in 1981 to 748 in 1983. Of the 748 persons employed in such establishments in 1983, 47 persons, or 6 percent of the total, were employed

as production and related workers producing liquid and dry choline chloride. The number of production and related workers employed in 1983 represented a decrease of about 15 percent from the number of such workers employed in U.S. establishments in 1981.

Total wages paid to production and related workers producing choline chloride and the number of hours worked by such workers rose irregularly from 1981 to 1983. Total wages paid to such workers increased from \$816,000 in 1981, on the basis of total of 104,000 hours worked, to 1.1 million in 1983, on the basis of 125,000 hours worked. Total wages paid to, and the number of hours worked by, such workers in January-April 1984 remained virtually unchanged from those in January-April 1983. Total compensation (i.e., wages plus fringe benefits) paid to choline chloride production and related workers rose from \$1.1 million in 1981 to \$1.4 in 1982 and declined by 3.9 percent in 1983 to just under \$1.4 million. Total compensation paid to such workers in January-April 1984 (\$478,000) was about the same as that paid to such workers in January-April 1983. The weighted-average hourly compensation paid to such workers rose steadily from 1981 to 1983, from \$10.16 per hour worked in 1981 to \$11.14 per hour worked in 1983. The rise in hourly compensation paid to production and related workers continued in 1984, to \$14.06 per hour worked in January-April compared with \$13.22 paid to such workers in January-April 1983. See table D-1 in appendix D for updated data on U.S. employment and wages.

None of the four firms that responded to the Commission's questionnaire indicated in their responses that they suffered an interruption in production due to prolonged shutdowns or employee strikes. Only production and related workers employed by \*\*\* and \*\*\* are not represented by a union.

#### Financial experience of U.S. producers

Income-and-loss data were reported by Syntex, Nutrius, and IMC. However, the data reported by IMC was not used because of unresolved discrepancies in that firm's allocation of certain expense items to its choline chloride operations. Thompson-Hayward did not report income-and-loss data on any of its operations, because it did not consider that such data were required since it did not enter the market as a direct seller until February 1984. Consequently, only Syntex and Nutrius are included in the discussion concerning U.S. producers' profitability. <sup>1/</sup> The discussion of other areas of U.S. producers' financial experience include all four firms, except where indicated otherwise.

Overall establishment operations.--As shown in table 9, Syntex's establishment sales \*\*\*.

Nutrius began operations in 1982; consequently, financial data for 1981 are not available. Although 1982 and 1983 were \*\*\* for Nutrius in terms of its overall establishment operations, \*\*\* in 1983 from 1982. Nutrius \*\*\* in 1982 \*\*\* (table 10). \*\*\*.

Liquid choline chloride operations.--Syntex \*\*\* on its liquid choline chloride operations in 1981 (table 11). \*\*\*.

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<sup>1/</sup> Syntex and Nutrius together accounted for \*\*\* percent of the domestic industry's capacity and for about \*\*\* percent of the industry's production in 1983.

Table 8.--Average number of employees, total and production and related workers employed in establishments producing all products and liquid and dry choline chloride, hours worked, and wages and total compensation paid to, average hourly compensation earned by, and unit labor costs charged to, such workers, 1981-83, January-April 1983, and January-April 1984

Item	1981	1982	1983	January-April--	
				1983	1984
Average number of all persons employed-----	795	780	748	746	735
Average number of production and related workers producing--					
All products-----	475	473	472	471	481
Choline chloride:					
Liquid-----	27	25	23	23	23
Dry-----	28	26	24	24	22
Total-----	55	51	47	47	45
Hours worked by production and related workers producing--					
All products-----1,000 hours--	954	990	975	304	312
Choline chloride:					
Liquid-----1,000 hours--	58	73	71	18	18
Dry-----	46	59	54	18	16
Total-----1,000 hours--	104	132	125	36	34
Wages paid to production and related workers producing--					
All products-----1,000 dollars--	6,509	7,619	7,876	1,322	1,394
Choline chloride:					
Liquid-----1,000 hours--	431	588	535	179	189
Dry-----do-----	385	526	528	180	172
Total-----do-----	816	1,114	1,063	359	361
Total compensation paid to production and related workers producing:					
All products-----1,000 dollars--	8,640	10,219	10,564	1,875	1,991
Choline chloride:					
Liquid-----1,000 dollars--	557	757	745	254	266
Dry-----do-----	500	692	648	222	212
Total-----do-----	1,057	1,449	1,393	476	478

Table 8.--Average number of employees, total and production and related workers employed in establishments producing all products, liquid and dry choline chloride, hours worked, and wages and total compensation paid to, average hourly compensation earned by, and unit labor costs charged to, such workers, 1981-83, January-April 1983, and January-April 1984--Continued

Item	1981	1982	1983	January-April--	
				1983	1984
Average hourly compensation paid to production and related workers producing choline chloride:					
Liquid-----per hour--	9.60	10.37	10.49	14.11	14.78
Dry-----do-----	10.87	11.73	12.00	12.33	13.25
Weighted average-----do-----	10.16	10.98	11.14	13.22	14.06
Unit labor costs for production and related workers producing choline chloride:					
Liquid-----cents per pound--	2	1	2	1	2
Dry-----do-----	3	2	2	2	2

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

Table 9.--Syntex's income-and-loss experience on the overall operations of establishments within which choline chloride is produced, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984

\* \* \* \* \*

Table 10.--Nutrius' income-and-loss experience on the overall operations of establishments within which choline chloride is produced, 1982-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984

\* \* \* \* \*

Table 11.--Syntex's income-and-loss experience on operations producing liquid choline chloride, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984

\* \* \* \* \*

Syntex's asset utilization, as measured by the ratio of sales to fixed assets, \*\*\*.

As shown in table 12, Nutrius' liquid choline chloride sales \*\*\*.

Dry choline chloride operations.--Syntex's sales of dry choline chloride were \*\*\* (table 13).

Table 12.--Nutrius' income-and-loss experience on operations producing liquid choline chloride, 1982, 1983, interim period ended Apr. 30, 1983, and interim period ended April 30, 1984

\* \* \* \* \*

13.--Syntex's income-and-loss experience on operations producing dry choline chloride, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984

\* \* \* \* \*

Nutrius' asset utilization showed \*\*\*.

Nutrius' income-and-loss experience on its dry choline chloride operations \*\*\*. Specific financial data on Nutrius' dry choline chloride operations are shown in table 14.

Research and development expenditures.--Syntex and IMC were the only domestic producers that reported research and development expenditure data. Research and development expenditures as reported by these two firms are shown in table 15. \*\*\*.

Table 14.--Nutrius' income-and-loss experience on operations producing dry choline chloride, 1982, 1983, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984

\* \* \* \* \*

Capital expenditures.--There has been no discernible pattern or trend in U.S. producers' capital expenditures other than the fact that such expenditures have been almost entirely on machinery and equipment. U.S. producers' aggregated capital expenditures for choline chloride producing assets totaled \$1.2 million in 1981, \$308,000 in 1982, and \$583,000 in 1983 (table 16). U.S. producers reported capital expenditures of \$288,000 in the period ended April 30, 1984, compared with expenditures of \$129,000 in the corresponding 1983 period. Expenditures for liquid choline chloride assets accounted for the major share of total choline chloride capital expenditures, except for the January-April 1984 period.

Table 15.--U.S. producers' choline chloride research and development expenditures, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984 <sup>1/</sup>

Item	1981	1982	1983	Interim period ended Apr. 30--	
				1983	1984
Choline chloride:					
Liquid-----1,000 dollars--:	***	***	***	***	***
Dry-----do-----:	***	***	***	***	***
Total-----do-----:	***	***	***	***	***
As a share of sales:					
Liquid-----percent--:	***	***	***	***	***
Dry-----do-----:	***	***	***	***	***

<sup>1/</sup> Data are for Syntex and IMC.

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

Asset valuation.--Choline chloride production and marketing assets accounted for about 16 percent of total assets employed in U.S. establishments in which choline chloride was produced in 1983. From year to year, these assets constituted a shrinking percentage of the establishments' asset base. However, such assets remain a sizable business investment for domestic producers.

Table 17 shows aggregated data on U.S. producers' assets. Since all of the reporting companies use straight-line depreciation, there are no distortions in the information which would be caused by tabulating assets with varying depreciation methods.

#### Consideration of the Threat of Material Injury

In its consideration of the question of threat of material injury to an industry in the United States, the Commission may take into consideration such factors as the rate of increase of the LTFV imports, the rate of increase of U.S. market penetration of such imports, the volume of imports held in inventory in the United States, and the capacity of producers in the country which is the subject of the investigation to generate exports, including the availability of export markets other than the United States. The rate of increase of U.S. imports from Canada and the market penetration of such imports are discussed elsewhere in this report. Other factors which may lead to a determination of threat of material injury are discussed below.

Table 16.--U.S. producers' capital expenditures, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984 1/

Capital expenditures	1981	1982	1983	Interim period ended Apr. 30--	
				1983	1984
All products of establishment:					
Land and improvements					
1,000 dollars--	936	53	19	3	-
Building and improvements					
1,000 dollars--	917	163	183	7	26
Machinery and equipment					
1,000 dollars--	4,696	1,991	1,389	564	2,291
Total establishment					
1,000 dollars--	6,549	2,207	1,591	574	2,317
Choline chloride:					
Liquid:					
Land and improvements					
1,000 dollars--	249	-	2	-	-
Building and improvements					
1,000 dollars--	5	-	13	7	-
Machinery and equipment					
1,000 dollars--	762	156	364	67	46
Total liquid					
1,000 dollars--	1,016	156	379	74	46
Dry:					
Land and improvements					
1,000 dollars--	-	-	-	-	-
Building and improvements					
1,000 dollars--	-	-	-	-	-
Machinery and equipment					
1,000 dollars--	136	152	204	55	242
Total dry					
1,000 dollars--	136	152	204	55	242
Total choline chloride capital expenditures					
1,000 dollars--	1,152	308	583	129	288
Choline chloride as a share of total capital expenditures:					
Total liquid--percent--	15.5	7.1	23.8	12.9	2.0
Total dry-----do-----	2.1	6.9	12.8	9.6	10.4

1/ Includes data for Syntex, Nutrius, and Thompson-Hayward.

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

Table 17.--U.S. producers' assets valuation, 1981-83, interim period ended Apr. 30, 1983, and interim period ended Apr. 30, 1984 <sup>1/</sup>

(In thousands of dollars)						
Item	1981	1982	1983	Interim period		
				ended Apr. 30-- 1983	1984	
All products within establishment:						
Original cost-----1,000 dollars--	46,402	48,977	51,964	51,138	54,142	
Book value-----do-----	23,114	23,553	23,663	24,290	24,412	
Choline chloride:						
Liquid:						
Original cost-----do-----	4,134	4,239	4,591	4,562	4,612	
Book value-----do-----	3,167	3,110	3,145	3,300	2,989	
Dry:						
Original cost-----do-----	3,413	3,520	3,754	3,703	3,774	
Book value-----do-----	2,570	2,474	2,428	2,558	2,377	
Choline chloride as a share						
of all products within						
establishment:						
Liquid:						
Book value-----percent--	13.7	13.2	13.3	13.6	12.2	
Dry:						
Book value-----do-----	11.1	10.5	10.3	10.5	9.7	

<sup>1/</sup> Includes data for Nutrius, IMC, Syntex, and Thompson-Hayward.

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

#### U.S. importer's inventories

Chinook Chemical Co., the importer of record of choline chloride imported from Canada, maintains warehouses in Kalamazoo, MI., Gainesville, GA, Mapleton, ND, Rudd, IA, and Toledo, OH, which it uses for storing choline chloride produced in its Canadian facility. Chinook \*\*\*. <sup>1/</sup>

#### Capacity of the foreign producer to generate exports

Chinook Chemical Co. is the sole Canadian producer of liquid choline chloride and the only known Canadian exporter of liquid and dry choline chloride. <sup>2/</sup> The bulk of Chinook's dry choline chloride remains in the Canadian market. Until very recently, the United States was Chinook's only export market for choline chloride. According to information provided at the Commission's hearing, Chinook now is beginning to export choline chloride to Japan. <sup>3/</sup>

With the addition of a new reactor, which was installed in late 1982, Chinook's practical rated capacity increased by about \*\*\* percent to

<sup>1/</sup> \*\*\*.

<sup>2/</sup> Dry choline chloride is produced for Chinook by Westway Trading Co.,<sup>A-21</sup> a Canadian molasses-producing firm. The two firms are unrelated.

<sup>3/</sup> Transcript of hearing, p. 99.

approximately \*\*\* pounds (solution basis) in 1983. During 1981-83, Chinook operated at a level of about \*\*\* percent of capacity annually. During January-April 1984, the capacity utilization rate increased to \*\*\* percent. An estimated \*\*\* percent of Chinook's 1981 output of liquid choline chloride was exported to the United States. This figure increased to \*\*\* percent in 1982 but then decreased to \*\*\* percent in 1983. The ratio declined further in January-April 1984 to \*\*\* percent. 1/

### Consideration of the Causal Relationship Between the LTFV Imports and the Alleged Injury

#### U.S. imports and market penetration

Choline chloride is not separately provided for in the official import statistics maintained by the U.S. Department of Commerce. Instead, U.S. imports of choline chloride are classified for tariff purposes under the general classification of choline salts. Data on U.S. imports of choline salts are shown in table 18. Between 1981 and 1983, Canada accounted for the bulk of U.S. imports of choline salts. Imports from Canada more than doubled during this period, from 7.1 million pounds, valued at \$2.3 million, in 1981 to 15.2 million pounds, valued at \$4.3 million, in 1983. The volume of imports from Canada increased from 8.9 million pounds in January-July 1983 to 12.4 million pounds in January-July 1984, or by nearly 40 percent. U.S. imports of choline salts from the United Kingdom, the second largest source of U.S. imports after Canada, increased from 335,000 pounds, valued at \$413,000, in 1981 to 2.3 million pounds, valued at \$609,000, in 1983. Combined imports from Canada and the United Kingdom accounted for 96 percent of the total quantity of U.S. imports of choline chloride in 1983 and 89 percent of the total in January-July 1984.

As shown in table 19, the market penetration ratio of liquid choline chloride imported from Canada decreased from nearly \*\*\* percent of consumption in 1981 to \*\*\* percent of consumption in 1982 but then increased to \*\*\* percent of consumption in 1983. Canada did not begin to export dry choline chloride to the United States until 1983. In that year, dry choline chloride imported from Canada accounted for \*\*\* percent of U.S. dry choline chloride consumption. As a share of consumption, liquid choline chloride imported from Canada increased from \*\*\* percent of consumption in January-April 1983 to \*\*\* percent of consumption in January-April 1984. Dry choline chloride imported from Canada as a share of consumption was slightly above its 1983 level of about \*\*\* percent in January-April 1984.

#### Price structure

Choline chloride prices are usually quoted on a delivered basis. Quoted delivered prices cover freight costs to any point in the United States east of the Rockies. Prices are higher on the west coast because of the higher cost of freight. Sales of choline chloride are made on either a spot or a contract basis, with at least 60 percent of sales made under contract.

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1/ Data on production, capacity, and exports are provided by Chinook Chemical Co.

Table 18.--Choline salts: U.S. imports for consumption, by principal sources, 1981-83, January-July 1983, and January-July 1984

(Quantity in thousands of pounds; Value in thousands of dollars;  
unit value in cents per pound)

Period	Canada	United Kingdom	Other	Total	Canada as a percentage of the total--
Quantity <sup>1/</sup>					
1981-----	7,067	335	451	7,853	90.0
1982-----	8,299	2,369	628	11,296	73.5
1983-----	15,169	2,347	796	18,312	82.8
January-July--					
1983-----	8,900	2,312	470	11,682	76.2
1984-----	12,372	901	1,690	14,963	82.7
Value					
1981-----	2,280	413	696	3,389	67.3
1982-----	2,503	630	1,121	4,253	58.9
1983-----	4,253	609	1,405	6,267	67.9
January-July--					
1983-----	2,697	598	800	4,095	65.9
1984-----	3,154	236	1,047	4,437	71.1
Unit value					
1981-----	32	123	154	43	-
1982-----	30	27	179	38	-
1983-----	28	26	177	34	-
January-July--					
1983-----	30	26	170	35	-
1984-----	25	26	62	30	-

<sup>1/</sup> On a solution basis.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Contracts between buyers and sellers are typically supply contracts, which do no more than guarantee the buyer a certain supply of material over the life of the contract. Under such contracts, prices are not fixed or guaranteed. Instead, selling prices are negotiated at the time of each shipment. Supply contracts generally last from 1 to 12 months. Contracts by domestic producers and importers generally include a "meet or release" clause. This clause provides that during the term of the contract, if the buyer is able to purchase the product from another source at a lower delivered price, the seller must either meet the lower price or release the buyer from the contract until the seller does meet the lower price, at which time the contract is reactivated.

Table 19.--Choline chloride, U.S. imports from Canada and from all sources, by types, 1981-83, January-April 1983, and January-April 1984.

Item and period	Imports 1/--		Ratio of imports to consumption--	
	From Canada	From all sources	From Canada	From all sources
	1,000 pounds, dry weight		----Percent----	
Liquid:				
1981-----	***	***	***	***
1982-----	***	***	***	***
1983-----	***	***	***	***
January-April--				
1983-----	***	***	***	***
1984-----	***	***	***	***
Dry:				
1981-----	***	***	***	***
1982-----	***	***	***	***
1983-----	***	***	***	***
January-April--				
1983-----	***	***	***	***
1984-----	***	***	***	***

1/ Data may or may not be comparable with official import statistics.

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

Freight equalization is generally not practiced in the industry, because prices are quoted on a delivered basis. Four of the five producers contacted by the Commission staff stated that they should have a slight advantage over imports regarding freight costs and that import competition is a result of price undercutting rather than locational advantage. Domestic producers use commercial trucks to transport their products to customers. In contrast, the Canadian importer stated that it generally ships \*\*\* percent liquid choline chloride directly by its own trucks to U.S. buyers.

The Commission staff calculated the average freight cost per pound of choline chloride and other freight cost information from price data submitted in response to the Commission's questionnaires and from telephone conversations with producers and the importer. Freight costs of CC70 ranged from 2 to 3 cents per pound for domestic producers and from \*\*\* to \*\*\* cents per pound for the importer. The ratio of freight cost to the total value of sales ranged from 7 to 10 percent for domestic producers and from \*\*\* to \*\*\* percent for the importer. Freight costs for CC60 are not discussed in this section, because there were few imports of this type of choline chloride during the period of investigation. It appears, however, that freight costs are approximately the same for both types of choline chloride.

Price comparisons

Five domestic producers and the importer were requested to provide the Commission with delivered and f.o.b. prices on their sales to their largest end-user and pre-mixer customers of CC70 and CC60, by quarters, for the period from January 1981 through March 1984. <sup>1/</sup> Three of the five domestic producers and the importer provided usable data on delivered prices only. Therefore, only delivered prices are discussed in this section. Table 20 shows net delivered weighted-average selling prices to end-user customers and margins of underselling for CC70. Average selling prices of CC60 to end users are discussed in the text and are not shown in a tabulation, because data on imports covered three quarters only. Table 21 shows average selling prices and margins of underselling of CC60 to pre-mixer customers.

CC70 prices to end-user customers.--Prices of CC70 were generally lower than those of CC60 by 2 to 11 cents per pound. As shown in table 20, prices of domestically produced CC70 decreased irregularly during the entire period of the investigation. Prices declined from 45 cents per pound in January-March 1981 to 33.7 cents per pound in January-March 1984, or by 25.1 percent. Prices of imports from Canada increased during 1981, from \*\*\* cents per pound in

Table 20.--Choline chloride, CC70: Domestic producers' and importer's net delivered selling prices to end-user customers, by quarters, January 1981-March 1984

Period	Domestic product	Imported product	Margin of underselling or (overselling)	
	-----Cents per pound-----		Cents	Percent
1981:				
January-March-----:	45.0 :	*** :	*** :	***
April-June-----:	45.0 :	*** :	*** :	***
July-September-----:	38.0 :	*** :	*** :	***
October-December-----:	40.0 :	*** :	*** :	***
1982:				
January-March-----:	39.3 :	*** :	*** :	***
April-June-----:	37.0 :	*** :	*** :	***
July-September-----:	35.5 :	*** :	*** :	***
October-December-----:	39.7 :	*** :	*** :	***
1983:				
January-March-----:	39.5 :	*** :	*** :	***
April-June-----:	35.7 :	*** :	*** :	***
July-September-----:	32.6 :	*** :	*** :	***
October-December-----:	29.7 :	*** :	*** :	***
1984 (January-March)---	33.7 :	*** :	*** :	***

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

<sup>1/</sup> U.S. producers and the importer were also requested to update quarterly price data through June 1984. Only Chinook submitted additional price data. Chinook's delivered price to its largest customer of CC70 during April-June 1984 was \*\*\* cents per pound.

January-March to \*\*\* cents per pound in October-December. During the rest of the period of investigation, import prices fell sharply, from \*\*\* cents per pound in October-December 1983 to \*\*\* cents per pound in January-March 1984, or by \*\*\* percent. Imports undersold the domestic product in 10 of the 13 calendar quarters. Margins of underselling ranged widely from \*\*\* percent in April-June 1982 to \*\*\* percent in January-March 1984. In July-December 1981, import prices were higher than domestic prices by \*\*\* to \*\*\* percent.

CC60 prices to end-user customers.--Price data provided by domestic producers on CC60 covered every quarter of the period of investigation, but price data provided by the importer covered three quarters only. Domestic prices declined irregularly from 47.5 cents per pound in January-March 1981 to 41.1 cents per pound in January-March 1984, or by 13.5 percent. Import prices for 1983 were available only for January-March, July-September, and October-December. In January-March 1983, the import price of \*\*\* cents per pound was \*\*\* percent lower than the domestic price of 45.9 cents per pound, in July-September the import price of \*\*\* cents was \*\*\* percent higher than the domestic price of 43.3 cents, and in October-December, the import price of \*\*\* cents was lower than the domestic level of 40.2 cents per pound by about \*\*\* percent.

CC60 prices to premixer customers.--As shown in table 21, price data provided by domestic producers of CC60 covered every quarter of the period of investigation, but price data provided by the importer covered only the five calendar quarters from January 1983 through March 1984. Throughout the period of investigation, domestic prices decreased irregularly from 42.5 cents per pound in January-March 1981 to 40.1 cents per pound in January-March 1984, or by of 5.7 percent. Import prices declined from \*\*\* cents per pound in January-March 1983 to \*\*\* cents per pound in January-March 1984, or by \*\*\* percent. In two of the five quarters for which import price data are available (July-September and October-December 1983), the average import price was higher than the average domestic price by approximately \*\*\* to \*\*\* cents per pound (\*\*\* to \*\*\* percent). In the three remaining quarters (January-March and April-June 1983, and January-March 1984), import prices were lower than domestic prices by \*\*\* to \*\*\* cents per pound (\*\*\* to \*\*\* percent).

Purchasers' prices.--The Commission requested 23 purchasers (end users and premixer customers) to provide net delivered prices per quarter of their purchases of domestically produced and imported choline chloride. The Commission received usable price data from 20 purchasers, most of which were end users. Table 22 shows purchasers' weighted-average net delivered prices of domestically produced and imported CC70 and CC60 and margins of underselling.

Purchasers' average prices of domestic CC70 increased from 39.9 cents per pound in January-March 1981 to 40.6 cents per pound in April-June 1981 and then declined irregularly throughout the next 3 years, reaching 34.3 cents per pound in January-March 1984. The highest average net delivered price (40.6 cents per pound) was recorded in April-June 1981; the lowest (30.1 cents per pound), in October-December 1983. Purchasers' prices of the imported product increased from \*\*\* cents per pound in January-March 1981 to \*\*\* cents per pound in April-June 1981 and then declined steadily throughout the remainder of the period of investigation, reaching \*\*\* cents per pound in January-March 1984. The highest average price (\*\*\* cents per pound) was recorded in

April-June 1981; the lowest (\*\*\*) cents per pound), in October-December 1983. Import prices were lower than domestic prices in 12 of the 13 quarters. Margins of underselling ranged from \*\*\* percent in October-December 1981 to \*\*\* percent in January-March 1984.

Purchasers' prices for domestically produced CC60 remained fairly stable during the 3-year period. They increased irregularly from 42.5 cents per pound in January-March 1981 to 45 cents in January-March 1983 and then declined irregularly during the next year to 41.3 cents per pound in January-March 1984. Data on purchasers' prices of imports from Canada covered only 5 of 13 quarters, October-December 1982 through October-December 1983. Import prices increased from \*\*\* cents per pound in October-December 1982 to \*\*\* cents per pound in October-December 1983, or by \*\*\* cents per pound (\*\*\*) percent). Import prices were lower than domestic prices by \*\*\* percent in October-December 1982 and by \*\*\* percent in January-March 1983. During the remaining three calendar quarters (April-June, July-September, and October-December 1983), import prices were higher than domestic prices by \*\*\* percent, \*\*\* percent, and \*\*\* percent, respectively.

Table 21.--Choline chloride, CC60: Domestic producers' and importer's net delivered selling prices to premixer customers, by quarters, January 1981-March 1984

Period	Domestic product	Imported product	Margin of underselling or (overselling)	
			Cents	Percent
-----Cents per pound-----			Cents	Percent
1981:				
January-March-----	42.5	1/	1/	1/
April-June-----	43.9	1/	1/	1/
July-September-----	43.9	1/	1/	1/
October-December-----	42.9	1/	1/	1/
1982:				
January-March-----	41.4	1/	1/	1/
April-June-----	41.9	1/	1/	1/
July-September-----	42.1	1/	1/	1/
October-December-----	42.3	1/	1/	1/
1983:				
January-March-----	42.5	***	***	***
April-June-----	42.2	***	***	***
July-September-----	39.5	***	***	***
October-December-----	39.5	***	***	***
1984 (January-March)---	40.1	***	***	***

1/ Not available.

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

Table 22.--Choline chloride, CC70 and CC60: Weighted average net delivered prices paid by purchasers of domestically produced and imported products, by quarters, January 1981-March 1984

Period	CC70			CC60		
	Domestic product	Imported product	Margins of underselling or (overselling)	Domestic product	Imported product	Margins of underselling or (overselling)
	Cents per pound		Percent	Cents per pound		Percent
1981:						
Jan.-Mar----	39.9	***	***	42.5	1/	1/
Apr.-June---	40.6	***	***	44.0	1/	1/
July-Sept--	37.6	***	***	44.6	1/	1/
Oct.-Dec---	38.3	***	***	44.1	1/	1/
1982:						
Jan.-Mar----	39.0	***	***	44.3	1/	1/
Apr.-June---	36.5	***	***	43.3	1/	1/
July-Sept--	36.3	***	***	43.3	1/	1/
Oct.-Dec---	37.1	***	***	43.4	***	***
1983:						
Jan.-Mar----	39.5	***	***	45.0	***	***
Apr.-June---	38.9	***	***	44.8	***	***
July-Sept--	31.7	***	***	44.1	***	***
Oct.-Dec---	30.1	***	***	43.2	***	***
1984:						
Jan.-Mar----	34.3	***	***	41.3	1/	1/

1/ Not available.

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

#### Exchange rates

Appreciation of the U.S. dollar in terms of the Canadian dollar may have increased the relative price competitiveness of imports from Canada. Table 23 shows indexes of nominal and real exchange rates of the U.S. dollar relative to the Canadian dollar for the period from January-March 1981 through April-June 1984. The table shows that during the period of investigation (January-March 1981-January-March 1984) the U.S. dollar appreciated in nominal terms relative to the Canadian dollar by 4.9 percent, and in real terms, the U.S. dollar depreciated relative to the Canadian dollar by 2.3 percent. In April-June 1984, the U.S. dollar appreciated in nominal terms relative to the Canadian dollar by an additional 2.8 percent, and in real terms the U.S. dollar appreciated by 2.5 percent.

#### Lost sales

Allegations of U.S. producers.--U.S. producers presented allegations of lost sales of choline chloride totaling \*\*\* pounds, valued at \*\*\*. Three<sup>A-28</sup> producers (Syntex, Nutrius, and IMC) cited \*\*\* instances of sales allegedly lost to 36 firms. The Commission's staff contacted 12 firms, which together

accounted for about \*\*\* percent of the total value of lost sales. 1/ Four of the 12 firms contacted indicated that they purchase choline chloride only on a noncontract basis and therefore do not solicit competitive bids. The other eight firms purchase nearly all of their choline chloride through competitive bids.

Table 23.--Indexes of nominal and real exchange rates between the U.S. dollar and the Canadian dollar, by quarters, January 1981-June 1984

(January-March 1981=100)		
Period	Nominal exchange rates	Real exchange rates <u>1/</u>
1981:		
January-March-----	100.0	100.0
April-June-----	99.6	99.4
July-September-----	98.5	99.6
October-December-----	100.2	102.6
1982:		
January-March-----	98.7	101.7
April-June-----	95.9	100.5
July-September-----	95.5	100.3
October-December-----	96.9	102.2
1983:		
January-March-----	97.3	103.1
April-June-----	97.0	104.0
July-September-----	96.8	103.7
October-December-----	96.4	103.2
1984:		
January-March-----	95.1	102.3
April-June-----	92.3	99.8

1/ The real-exchange-rate index was obtained by deflating the nominal index by relative producers' prices.

Source: International Financial Statistics, June 1984.

The four firms that purchase all of their choline chloride on the spot market accounted for lost sales totaling \*\*\*. Two of the four firms (\*\*\*) indicated that they did not purchase any material from Chinook during the period of the alleged lost sales by U.S. producers. One of the two firms, \*\*\*, also indicated that it has never purchased choline chloride from Chinook, although Chinook has quoted on its orders. \*\*\* indicated that all of his firm's purchases of choline chloride during 1983, the period of the alleged lost sale, were from domestic suppliers. \*\*\* and \*\*\*, the remaining two customers, both indicated that they purchased Chinook's product instead of the product offered by the U.S. producer. Price and quality were the primary factors given as their reasons for buying from Chinook.

1/ These 12 firms accounted for all of the multiple instances of alleged lost sales. The 24 firms that were not contacted each accounted for a single instance of lost sales involving one truckload (44,000 pounds) of choline chloride.

Of the eight remaining firms contacted by the Commission's staff, one firm (\*\*\*) was reluctant to provide information concerning the U.S. producer's allegation. However, \*\*\*, an official with the firm did state that although Chinook's prices are competitive with domestic producers' prices, his firm prefers to buy domestic product. A second firm (\*\*\*) that generally contracts for material 3 months at a time indicated that \*\*\* lost a bid to supply material in 1983 because the firm contracted for Belgian-produced material instead. \*\*\*, indicated that product quality and price are the two most important factors it uses as a basis for selecting a particular supplier. The value of sales allegedly lost to \*\*\* was \*\*\*.

\*\*\* accounted for lost contract sales totaling \*\*\* of product during 1982 and 1983. Both firms award annual contracts on the basis of competitive bids. Chinook was awarded a contract with both firms for 1982 and 1983 delivery. A purchasing agent with \*\*\* indicated that all U.S. producers were invited to bid on the 1983 contract. However, the agent indicated that because U.S. producers were slow to respond, his firm accepted Chinook's bid. Both firms indicated that, since 1981, domestic choline chloride prices have generally been higher than prices of Canadian produced choline chloride.

Two U.S. producers alleged lost contract sales to four firms (\*\*\*) involving \*\*\* pounds of choline chloride valued at \*\*\*. These four firms generally award contracts to suppliers lasting a minimum of 6 months. In addition to relying on supply contracts, at least two of the four firms also buy choline chloride on the spot market. In one instance of an alleged lost sale by IMC, \*\*\* confirmed that \*\*\* lost a bid to Chinook to supply material during January-June 1983. However, \*\*\* also indicated that \*\*\* received a contract to supply material in July-December 1983. When contacted by the Commission's staff, these purchasers indicated that price, quality, dependability, and service were key elements in the buying decision. \*\*\* was the only firm that indicated that it increased its proportional purchases from Chinook during 1981-83.

Allegations of the importer.<sup>1/</sup>--The domestic choline chloride market has been described as being highly competitive, causing many buyers to alternate from seller to seller primarily on the basis of price. Just as U.S. producers have alleged sales lost to the Canadian importer, so has Chinook alleged sales lost to domestic buyers because of competition from U.S. producers. In some instances, both parties alleged lost sales to the same customers or buyers. The responses of buyers contacted by the Commission's staff in connection with allegations of both U.S. producers and Chinook suggest that there were instances during the period covered by the investigation when each party lost sales to the other. Customer responses also indicated that in a few of the instances cited by U.S. producers and the importer, the sale was lost not because of competition between the two, but because of the presence of imported choline chloride from other foreign sources.

#### Lost revenues

Four U.S. producers cited \*\*\* instances in which they allegedly lost revenues on sales of choline chloride to U.S. customers because of the

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<sup>1/</sup> In response to a request from Commissioner Rohr at the hearing, the respondent submitted allegations of instances in which it was forced to lower its price or instances where it lost sales to U.S. producers. A-30

competing Canadian product. These alleged instances of lost revenues occurred between January 1981 and April 1984 and involved 44 firms. The total amount of revenues allegedly lost by the four producers was approximately \*\*\* on sales of about \*\*\* pounds of product, both liquid and dry. The allegations of lost revenues included both contract and non-contract (spot) sales. The Commission's staff contacted 17 of the customers involved. These customers accounted for \*\*\* percent of the quantity involved and for about \*\*\* percent of the \*\*\* in lost revenues.

Choline chloride is treated much like a commodity, in that the price of the product is set by the market. Because of the sometimes informal way in which noncontract prices are quoted, some of the customers contacted by the Commission's staff were not able to confirm specific instances of lost revenues that were alleged by U.S. producers. Nevertheless, the three customers did indicate that it was possible that the U.S. producer making the allegation was forced to lower its initial price because of the lower priced Canadian product. Two of those firms (\*\*\*) indicated that it was possible that Chinook submitted bids for their business. Neither firm, however, accepted Chinook's bid. Both firms indicated that they were under a supply contract with a U.S. producer at the time lost revenues were alleged. Each firm indicated that under the "meet or release" contract clause, the U.S. producer was forced to meet the lower price quote of a competitor or lose that firm's business. The third firm (\*\*\*) indicated that it believed that the U.S. producer was forced to lower its price because of competition either from Chinook or from other U.S. producers. These three firms together accounted for \*\*\* of alleged lost revenues on sales of \*\*\* pounds of material.

Six additional U.S. customers contacted, which accounted for lost revenues totaling \*\*\* involving sales of \*\*\* pounds of choline chloride, indicated that the four U.S. producers involved were forced to lower their prices in each of the nine instances alleged as a result of competition from Chinook. These six customers were \*\*\*. Three of the six (\*\*\*) indicated that the U.S. producer involved countered the lower price quoted by Chinook under the "meet or release" contract clause. Additionally, \*\*\* indicated that they each had a supply contract with at least two suppliers at the time the U.S. producer incurred the alleged lost revenues. \*\*\* indicated that, at the time the U.S. producer alleged lost revenues, it awarded supply contracts to three suppliers, including Chinook, on the basis of competitive bids.

Five firms, accounting for 14 instances of lost revenues totaling \*\*\*, indicated that some U.S. producers were often forced to lower their prices because of intense competition from competing U.S. producers and because of lower priced imports from European producers. Three of the five firms contacted together accounted for nearly \*\*\* percent of the alleged \*\*\* of lost revenues. These three firms \*\*\* indicated that in those instances where the U.S. producer lowered its initial price quote and retained the business, the lower quote was pressured by strong competition from not only Chinook, but also from other domestic producers as well. Only \*\*\* indicated that Chinook's prices have generally been lower than U.S. producers' prices since 1981.

The three remaining firms contacted by the Commission's staff also were not able to confirm the specific allegations of U.S. producers. However, two of the three indicated that, since 1981, prices of Canadian-produced choline chloride have generally been lower than those of U.S.-produced material.



APPENDIX A

U.S. DEPARTMENT OF COMMERCE'S NOTICES

36532

# Notices

Federal Register

Vol. 49, No. 182

Tuesday, September 18, 1984

## DEPARTMENT OF COMMERCE

### International Trade Administration

(A-122-016)

#### Choline Chloride From Canada; Final Determination of Sales at Less Than Fair Value

**AGENCY:** International Trade Administration, Import Administration, Commerce.

**ACTION:** Notice.

**SUMMARY:** We have determined that choline chloride from Canada is being, or is likely to be, sold in the United States at less than fair value. We have notified the U.S. International Trade Commission (ITC) of our determination. The ITC will determine, within 45 days

of publication of this notice, whether a U.S. industry is materially injured, or threatened with material injury, by reason of imports of this merchandise. We have directed the U.S. Customs Service to continue to suspend the liquidation of all entries of the subject merchandise which is entered, or withdrawn from warehouse, for consumption, on or after the date of publication of this notice and to require a cash deposit or bond for each such entry in an amount equal to the estimated dumping margin as described in the "Suspension of Liquidation" section of this notice.

**EFFECTIVE DATE:** September 18, 1984.

**FOR FURTHER INFORMATION CONTACT:** David D. Johnston, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, D.C. 20230; telephone: (202) 377-2239.

#### Final Determination

We have determined that choline chloride from Canada is being sold, or is likely to be sold, in the United States at less than fair value, as provided in section 735 of the Tariff Act of 1930, as amended (19 U.S.C. 1673) (the Act).

We found that the foreign market value of choline chloride from Canada exceeded the United States price on 73 percent of sales. These margins ranged from 0.1 percent to 39.7 percent. The overall weighted-average margin on all sales compared is 9.73 percent.

#### Case History

On November 15, 1983, we received a petition filed by Syntex Agribusiness, Inc., Nutrition and Chemical Division (Syntex), on behalf of the domestic manufacturers in the United States of choline chloride. In accordance with the filing requirements of 353.36 of the Commerce Regulations (19 CFR 353.36), the petitioner alleged that imports of choline chloride from Canada are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Act and that these imports are materially injuring, or threaten to materially injure, a United States industry.

After reviewing the petition, we determined that it contained sufficient grounds on which to initiate an antidumping investigation. We notified

the ITC of our action and initiated the investigation on December 5, 1983 (48 FR 56251). On March 17, 1984, we were informed by the ITC that there is a reasonable indication that imports of choline chloride from Canada are materially injuring a United States industry.

An antidumping questionnaire was presented to Chinook Chemicals Company (Chinook) the only known Canadian producer/exporter, on December 8, 1983. We received the response on January 27, 1984. Subsequently, we received additional data and explanations directed to portions of the response that were incomplete, inaccurate or unclear. On February 9, 1984, petitioner also alleged that "critical circumstances" exist, as defined in section 733(e) of the Act.

On April 23, 1984, we preliminarily determined that there was reason to believe or suspect that choline chloride from Canada was being sold in the United States at less than fair value (49 FR 18 344). At the request of the respondent, we held a hearing on May 23, 1984, to allow the parties an opportunity to address the issues arising in this investigation. On July 6, 1984, we postponed the final determination to September 12, 1984.

#### Scope of Investigation

The merchandise covered by this investigation is choline chloride, which is currently classified under item number 439.5055 of the *Tariff Schedules of the United States Annotated* (1983) (TSUSA). Pure choline chloride is a chemical with chemical formula of  $C_4H_{11}ClNO$  and a molecular weight of 139.6. The chemical name is (2-hydroxyethyl) trimethylammonium chloride. Choline chloride is marketed in several forms including, but not limited to, a solution of 70 percent choline chloride in water (aqueous choline chloride) or in potencies of 50 to 60 percent dried on a cereal carrier.

This investigation covers the period June 1 through November 30, 1983.

#### United States Price

As provided in section 772(b) of the Act, we used the purchase price of the aqueous choline chloride and certain sales of choline chloride on a cereal carrier to represent the United States price for the sales by Chinook when the merchandise was sold to unrelated

purchasers prior to its importation into the United States. We calculated the purchase price based on the duty paid, delivered, packed or unpacked price, or duty paid, f.o.b. plant, packed or unpacked price, as appropriate. We made deductions for freight, import duties and brokerage, and quantity rebates where appropriate. We also included in our purchase price calculation a shipment of aqueous choline chloride given to one customer with no charge, pursuant to a long-term contract.

We allocated the poundage of this shipment over the three-year life of the contract by (1) calculating the total amount of choline chloride, in pounds, to be shipped pursuant to the contract; (2) taking the ratio of the number of pounds of the free shipment to the total number of pounds to be shipped pursuant to the contract; (3) for each shipment made during the period of our investigation, multiplying this fraction by the number of pounds shipped; and (4) adding this increment to each shipment made during the period of our investigation. These adjustments had the effect of decreasing United States price. We allocated the duty, brokerage and freight attributable to the free shipment in equal increments over all shipments made during the investigatory period. We determined the amount of the increment by dividing the total duty, brokerage and freight expenses attributable to the free shipment by the estimated number of shipments Chinook expected to make under the contract. See our responses to Petitioner's Comment One.

As provided in section 772(c) of the Act, we used the exporter's sales price of certain sales of choline chloride on a cereal carrier to represent the United States price for sales by Chinook when the merchandise was sold to unrelated purchasers after importation into the United States. We calculated the exporter's sales price based on the duty paid, delivered, packed or unpacked price, or duty paid, f.o.b. warehouse, packed or unpacked price, as appropriate. We made deductions for freight, commissions to an unrelated U.S. agent, import duties and brokerage. We also made a deduction for Chinook's indirect selling expenses incurred on U.S. sales.

#### Foreign Market Value

In accordance with § 353.3 of the Commerce Regulations (19 CFR 353.3), we used home market sales for the determination of foreign market value for Chinook. We calculated the home market prices on the basis of delivered or f.o.b. plant, packed prices to unrelated purchasers in Canada. From

these prices we made deductions for freight where incurred.

In accordance with § 353.23(a) of the Commerce Regulations, we did not make a circumstance of sale adjustment for differences in credit expenses since the adjustment was insignificant.

We made a deduction for quantity discounts in the home market. Where exporter's sales prices were used as United States price, we also made deductions for indirect selling expenses incurred in the home market up to the amount of U.S. sales commissions and indirect selling expenses in accordance with § 353.15 of the Commerce Regulations. We made an adjustment to foreign market value for home market indirect selling expenses on purchase price sales where commissions were paid to unrelated U.S. commission agents. We made no adjustments for packing costs of choline chloride on a cereal carrier because they were the same in both markets. There were no packing costs for aqueous choline chloride; therefore, no adjustment was made. We excluded certain sales of off-specification choline chloride on a cereal carrier because they were determined not to be sales of choline chloride in the ordinary course of trade.

#### Negative Determination of Critical Circumstances

Counsel for petitioner alleged that imports of choline chloride from Canada present "critical circumstances." Under section 735(a)(3) of the Act, critical circumstances exist when the Department determines that: (A)(i) There is a history of dumping in the United States or elsewhere of the merchandise under investigation, or (ii) the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the merchandise under investigation at less than its fair value; and (B) there have been massive imports of the merchandise under investigation over a relatively short period.

In determining massive imports over a short period we looked at recent trends in import penetration levels; whether recent imports are significantly above the average calculated over the last two years; and whether the pattern of imports over the last three year period may be explained by seasonal swing. After examination imports of choline chloride from Canada with respect to these considerations, we find that there have not been massive imports over a relatively short period. Therefore, because there have not been massive imports over a short period we determine that critical circumstances do

not exist for choline chloride from Canada.

#### Petitioner's Comments

*Comment 1*—Chinook entered into a three-year contract with one of its customers. The terms of the contract called for Chinook to supply the customer's requirements of aqueous choline chloride at any and all of the customer's U.S. feed mills at a certain price. Chinook also agreed to supply the first shipment free of charge provided the customer converted a particular plant so as to process aqueous, rather than solid, choline chloride. Petitioner argues that this shipment of aqueous choline chloride (hereafter the "free shipment") should be included in the fair market value calculation as a sale at zero price.

*DOC Position*—We disagree. In determining if the free shipment was a sale at zero price, we looked to whether the shipment constituted a gift or non-commercial disposal. By the terms of the contract, this transaction was clearly not a gift. Chinook promised to provide the first shipment free if the customer converted its mill to aqueous choline chloride use. Chinook received value in exchange for the free shipment in that the customer agreed to change its operations to accommodate aqueous choline chloride. The contractual terms reflect Chinook's business judgment of the value of securing the customer's business. Nor was the shipment a non-commercial disposal. Rather, the agreement to ship the free choline chloride in exchange for conversion of the customer's mill was part and parcel of a written requirements contract.

Because the free shipment was integral to the contract as a whole, we have allocated the volume of the shipment over the full three-year life of the contract. We determine this to be the most reasonable treatment of the shipment, since Chinook clearly contemplated three years of sales at the time it agreed to provide the first shipment of aqueous choline chloride at no charge.

To allocate the shipment over the full life of the contract, we first divided the poundage of the free shipment by the estimated total amount of choline chloride Chinook expects to ship to the customer pursuant to the contract. We calculated this estimated total by multiplying the average number of pounds in shipments already made during the first year by the number of shipments Chinook plans to make in the three years of the contract. We then multiplied the resulting percentage by the volume of each shipment (excluding

the free shipment) made during the period of our investigation, which coincides roughly with the first year of the contract. The result was an amount of choline chloride, in pounds, representing the increment to be added to each shipment made during the investigation. We added this increment to each shipment made during the period of our investigation. The net effect of these adjustments is to reduce United States price by increasing the number of pounds of choline chloride shipped in the investigatory period, thus reducing the price per pound.

We also allocated the duty, freight and brokerage attributable to the free shipment over all the shipments expected during the life of the contract. We calculated the amount of the increment by dividing the total of these expenses by the estimated number of shipments Chinook expected to make pursuant to the contract.

This resulted in equal increments, which we deducted from United States price of each shipment made during the period of our investigation.

We will continue to make these adjustments during our administrative reviews over the next two years of the contract.

*Comment 2*—No circumstance of sale adjustment for credit should be made because the term of sale in both markets are identical and the actual customer payment date is irrelevant. Moreover, the adjustment claimed is insignificant and should be disregarded.

*DOC Position*—The claimed adjustment amounts to .003 percent of the total sales value, which is insignificant in relation to the value of the affected transactions. Therefore, we have disregarded it in our calculations, as provided by § 353.23(a) of the Commerce Regulations.

*Comment 3*—Chinook has failed to provide any information concerning costs incurred in maintaining inventory during the investigatory period. Costs of inventory include those actual costs and implicit credit costs incurred in holding inventory in warehouse.

*DOC Position*—The Department included in its determination all actual expenses incurred in maintaining the inventory. The Department views credit expense as that expense between the company and an unrelated purchaser. Since credit expense has a direct effect on the sales price to the purchaser, the Department would consider the full amount of the credit adjustment. Maintaining inventory does not involve credit expense. The Department continues the policy of including only those costs actually incurred by a

company for all other adjustments except the credit adjustment.

*Comment 4*—Chinook revised its indirect selling expenses at verification. The revised indirect selling expense should not be allowed because the information was not properly verified and because the figures were taken from profit and loss statements with respect to Chinook's entire business; thus inflating the actual expense attributable to choline chloride. Further, since the indirect selling expenses are incurred for both markets, we should allocate these expenses to each market and allow only that portion attributable to home market sales as the indirect selling expense amount.

*DOC Position*—In its response, Chinook originally listed a few indirect selling expenses on the assumption that they would only be allowed up to the amount of U.S. commissions paid. At verification we discovered that some sales were in fact exporter's sales price transactions, at which point Chinook made an accounting of all indirect selling expenses attributable to choline chloride. We verified these expenses. The allocation made for indirect selling expenses was related to each market as a percentage of total sales. We believe it is appropriate to apportion the percentage basis indirect selling expenses to each market on the basis of sales volume.

*Comment 5*—Sales of off-specification cereal choline chloride are not in the ordinary course of trade, and are not sales of such or similar merchandise and should be disregarded for purposes of the foreign market value determination.

*DOC Position*—We agree. We have disregarded these off-specification sales of cereal choline chloride in calculating foreign market value as they are not in the ordinary course of trade.

#### *Respondent's Comments*

*Comment 1*—The free shipment of aqueous choline chloride cannot be categorized as an individually negotiated sale. Had the contract been breached Chinook would have been entitled to a proportionate amount of the value of the shipment. Rather, respondents argue that this shipment is a sample for testing purposes.

*DOC Position*—We agree that this shipment cannot be categorized as an individually negotiated sale. However, we cannot classify this shipment as a sample given strictly for testing purposes. There is no documentation in the contract stating the specific purpose of the free shipment, nor has respondent supplied other documentation to support this argument as we requested. We also note that respondent has not refuted

arguments that the volume needed for testing is far less than the quantity of the shipment, and that the shipment was not destroyed but was incorporated into useable feed products. With respect to the question of compensation were there a breach of contract, Chinook provided us with no documentation to support this argument. We have treated this shipment as indicated in the response to Petitioner's Comment One.

*Comment 2*—Alternatively, the Department should prorate the amount of the shipment over the amount of choline chloride shipped pursuant to the contract.

*DOC Position*—We agree that proper treatment of the shipment would be to allocate the amount of the shipment over the period of the contract. At verification we collected invoices of all shipments made to the contract customer. We requested and received documentation estimating the volume of choline chloride expected to be sold during the three-year life of the contract.

To allocate this shipment over the life of the contract, we calculated the average increment in pounds and added this amount to each shipment. We also allocated the freight expenses and duty charges for the free shipment over the estimated shipments in this contract. See our response to Petitioner's Comment One.

*Comment 3*—At verification Commerce requested and received information on certain expenses which it viewed as freight expenses. The respondent claims that expenses incident to Chinook's trailers are indirect selling expenses, and as such are not an allowable deduction to home market and United States price because the statute permits the deduction of indirect expenses only where they are directly related expenses. Chinook has already provided all directly related expenses of the shipments it made.

*DOC Position*—We disagree that these charges are indirect selling expenses. Chinook incurred certain expenses incident to the trailers it owns, which are devoted to the delivery and pick up of products. These expenses would not have occurred if it did not have a segment of its operation devoted to the delivery and pick up of products. On the contrary, Chinook would pay a common carrier for its trucking services. The common carrier would incur the same expenses as those we have included in our calculation. The fact that no cost savings are seen by Chinook when a common carrier is contracted does not prove that these expenses are purely administrative. We believe that the only manner way of assessing the

true value of a freight charge is to include all expenses incident to the operation of shipping.

To calculate this expense, we determined the total expenses of Chinook's freight operation and allocated that amount, on the basis of total pounds shipped, to the choline chloride business. This gave a standard factor of cents per pound to apply to the quantity of each shipment of choline chloride except shipments in which a common carrier was used.

*Comment 4*—If these indirect selling expenses are included in the price comparison, there is no limit to the range of indirect selling expenses that Commerce might apply to direct charges. Moreover, if this becomes the rule it should apply to home market adjustments as well as to adjustments to United States prices.

*DOC Position*—We disagree with respondents. We believe that there is a clear distinction between indirect selling expenses and the expenses incident to the operation of Chinook's shipping segment. If we are to identify freight expenses as a charge, we must ascertain all expenses related to that charge as provided for in section 772(d)(2)(A) of the Act. If we were to ignore the expenses incurred for Chinook's shipping operation we would be understanding the freight charge. To call these expenses indirect selling expenses does not take into account that these expenses are wholly attributable to freight. Therefore, we believe these are properly called freight expenses and should be deducted as an expense incident to bringing the merchandise from the place of shipment in Canada to the delivery point in the U.S. (see section 772(d)(2)(A) of the Act).

*Comment 5*—Even if indirect selling expenses were added to Chinook's freight cost, Commerce's proposed method of allocation would not produce fair results because of certain expenses incurred during the period of investigation which have a long-term benefit.

*DOC Position*—We assume that Chinook is an ongoing concern and, as such, regularly incurs expenses that will not be completely expensed within the period of our investigation. We did not make an exception for any of the freight expenses obtained because we did not view any of them as capital costs to be amortized over time beyond the current accounting period.

*Comment 6*—Cereal choline chloride sold by Chinook in the home market is such or similar to cereal choline chloride sold in the U.S. Certain off-specification cereal choline chloride has virtually the same physical characteristics as other

cereal choline chloride, and its end use is substantially the same as other cereal choline chloride. Off-specification cereal choline chloride is sold at comparatively lower prices than other cereal choline chloride; however, it is approximately equal in commercial value to other cereal choline chloride.

*DOC Position*—We disagree. We have disregarded these off-specification sales of cereal choline chloride in calculating foreign market value as they are not in the ordinary course of trade.

**Verification**

In accordance with section 776(a) of the Act, we verified all data used in reaching this determination by using standard verification procedures, including on-site inspection of the manufacturer's operations and examination of accounting records and selected documents containing relevant information.

**ITC Notification**

In accordance with section 735(d) of the Act, we will notify the ITC of our determination. In addition, we are making available to the ITC all nonprivileged and nonconfidential information relating to this investigation. We will allow the ITC access to all privileged and confidential information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under an administrative protective order, without the written consent of the Deputy Assistant Secretary for Import Administration.

**Suspension of Liquidation**

In accordance with section 733(d) of the Act, we directed the United States Customs Service to suspend liquidation of all entries of choline chloride from Canada.

This suspension of liquidation applies to all merchandise entered, or withdrawn from warehouse, for consumption, on or after the date of publication of the preliminary determination in the Federal Register. The Customs Service shall continue to require a cash deposit or the posting of a bond equal to the estimated weighted-average amount by which the foreign market value of the merchandise subject to this investigation exceeds the United States price. This suspension of liquidation will remain in effect until further notice. The weighted-average margin is as follows:

Manufacturer	Weighted average margin percentage
All Manufacturers/Producers/Exporters .....	9.73

This determination is being published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)).

William T. Archey,  
Acting Assistant Secretary for Trade Administration.

[FR Doc. 84-24645 Filed 9-17-84; 8:45 am]  
BILLING CODE 3510-25-M

**International Trade Administration**

[A-122-016]

**Antidumping Postponement of Final Determination: Choline Chloride From Canada**

**AGENCY:** International Trade Administration, Import Administration, Commerce.

**ACTION:** Notice.

**SUMMARY:** This notice informs the public that the Department of Commerce (the Department) has received a request from counsel for Chinook Chemicals Company, Ltd. (Chinook), respondents in this proceeding, that the final determination on choline chloride from Canada be postponed until not later than 135 days after the date of publication of the preliminary determination, as provided for in § 353.44(b) of the Department of Commerce Regulations (19 CFR 353.44(b)), to allow adequate time for a response to petitioner's comments, and that the Department will postpone its final determination as to whether sales of choline chloride from Canada have occurred at less than fair value, until not later than September 12, 1984.

**EFFECTIVE DATE:** July 13, 1984.

**FOR FURTHER INFORMATION CONTACT:** David Johnston, Office of Investigations, Import Administration, International Trade Administration, United States Department of Commerce, 14th Street and Constitution Avenue, N.W., Washington, D.C. 20230; telephone (202) 377-2239.

**SUPPLEMENTARY INFORMATION:** On December 5, 1983, the Department of Commerce published a notice in the Federal Register that it was initiating, under section 732(b) of the Tariff Act of 1930, as amended (19 U.S.C. 1673a(b)) (the Act), an antidumping investigation to determine whether choline chloride from Canada is being, or is likely to be, sold at less than fair value. On April 30, 1984, the Department published an affirmative preliminary determination (49 FR 18344). The notice stated that if this investigation proceeded normally we would make a final determination by July 9, 1984. Pursuant to Section 735(a)(2) of the Act, Chinook requested an extension of the final determination date. Chinook is qualified to make such a request under Section 735(a)(2)(A), because it accounts for all of the exports of the merchandise. If an exporter accounting for a significant proportion of the exports of the merchandise requests an extension after an affirmative preliminary determination,

we are required, absent compelling reasons to the contrary, to grant the request.

Accordingly, the Department will issue a final determination in this case not later than September 12, 1984.

This notice is published pursuant to section 735(d) of the Act.

Dated: July 9, 1984.

Alan F. Holmer,

*Deputy Assistant Secretary for Import Administration.*

[FR Doc. 84-18639 Filed 7-12-84; 8:45 am]

BILLING CODE 3510-DS-M

APPENDIX B

U.S. INTERNATIONAL TRADE COMMISSION'S NOTICE

[Investigation No. 731-TA-155 (Final)]

**Choline Chloride From Canada;  
Antidumping Investigation**

**AGENCY:** International Trade Commission.

**ACTION:** Institution of final antidumping investigation and scheduling of a public hearing to be held in connection with the investigation.

**EFFECTIVE DATE:** April 30, 1984.

**SUMMARY:** As a result of an affirmative preliminary determination by the U.S. Department of Commerce that there is a reasonable basis to believe or suspect that imports from Canada of choline chloride, provided for in item 439.50 of the Tariff Schedules of the United States, are being, or are likely to be, sold in the United States at less than fair value (LTFV) within the meaning of section 731 of the Tariff Act of 1930 (19 U.S.C. 1673), the United States International Trade Commission hereby gives notice of the institution of investigation No. 731-TA-155 (Final) under section 735(b) of the act (19 U.S.C. 1673d(b)) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is

materially retarded, by reason of imports of such merchandise. Unless the investigation is extended, the Commission will make its final injury determination by August 27, 1984 (19 CFR 207.25).

**FOR FURTHER INFORMATION CONTACT:** Mr. Woodley Timberlake (202-523-4618), Office of Investigations, U.S. International Trade Commission.

**SUPPLEMENTARY INFORMATION:**

**Background**

On December 22, 1983, the Commission determined, on the basis of the information developed during the course of its preliminary investigation, that there was a reasonable indication that an industry in the United States was materially injured or threatened with material injury by reason of imports of choline chloride from Canada which were alleged to be sold at LTFV. The preliminary investigation was instituted in response to a petition filed on November 15, 1983, on behalf of Syntex Agribusiness, Inc.

**Participation in the Investigation**

Persons wishing to participate in the investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's Rules of Practice and Procedure (19 CFR 201.11), not later than 21 days after the publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairman, who shall determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Upon the expiration of the period for filing entries of appearance, the Secretary shall prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to the investigation, pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)). Each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service (19 CFR 201.16(c)).

**Staff Report**

A public version of the staff report containing preliminary findings of fact in this investigation will be placed in the public record on July 9, 1984, pursuant to § 207.21 of the Commission's Rules (19 CFR 207.21).

**Hearing**

The Commission will hold a hearing in connection with the investigation beginning at 10:00 a.m. on July 24, 1984, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, D.C. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on July 10, 1984. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 10:00 a.m. on July 13, 1984, in room 117 of the U.S. International Trade Commission Building. The deadline for filing prehearing briefs is July 19, 1984.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonconfidential summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. All legal arguments, economic analyses, and factual materials relevant to the public hearing should be included in prehearing briefs in accordance with § 207.22 (19 CFR 207.22). Posthearing briefs must conform with the provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on July 31, 1984.

**Written Submissions**

As mentioned, parties to the investigation may file prehearing and posthearing briefs by the dates shown above. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before July 31, 1984. A signed original and fourteen (14) true copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's Rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired shall be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform

with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

For further information concerning the conduct of the investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, subparts A and C (19 CFR Part 207), and Part 201, subparts A through E (19 CFR Part 201).

This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

By order of the Commission.

Issued: May 15, 1984.

Kenneth R. Mason,  
Secretary.

[FR Doc. 84-13876 Filed 5-22-84; 8:45 am]  
BILLING CODE 7020-02-M



**APPENDIX C**

**CALENDAR OF THE PUBLIC HEARING**

**TENTATIVE CALENDAR OF PUBLIC HEARING**

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

**Subject : Choline Chloride from Canada**

**Inv. No. : 731-TA-155 (Final)**

**Date and time: July 24, 1984 - 10:00 a.m.**

Sessions were held in connection with the investigation in the Hearing Room of the United States International Trade Commission, 701 E Street, N.W., in Washington.

**In support of the imposition of antidumping duties:**

**Mandel and Grunfeld--Counsel  
New York, N.Y.  
on behalf of**

**Syntex Agribusiness, Inc.; IMC, Inc.; Nutrius Inc.;  
Thomas-Hayward Chemical Company; Choline Co.; and  
Duphar Nutrition, Inc.**

**Earl L. Barkley, Vice president & General Manager, Syntex  
Agribusiness Inc., Nutrition & Chemical Division**

**Dennis W. Jones, Marketing & Sales Director, Syntex  
Agribusiness Inc., Nutrition & Chemical Division**

**Richard B. Hunt, Director of Sales, IMC Inc., Animal  
Health & Nutrition Division**

**Russell C. Field, Vice President, Eastern Division,  
Nutrius Inc.**

**Robert V. Mann, Vice President & General Manager, Thompson-  
Hayward Chemical Company, Specialty Chemical Division**

**Hank Nielsen, Production Manager, Thompson-Hayward Chemical  
Company, Specialty Chemical Division**

**Bruce M. Mitchell--OF COUNSEL**

- more -

In opposition to the imposition of antidumping duties:

Dow, Lohnes & Albertson--Counsel  
Washington, D.C.  
on behalf of

Chinook Chemicals Company, Ltd. (Chinook)

W. P. Stayner, Vice President - Finance,  
Chinook Chemicals Co., Ltd.

Ms. Nancy Duranti, Salesperson, Chinook Chemicals  
Co., Ltd.

Frank J. Ross, Group Vice President, Tyson Foods, Inc.

Dick Chalmers, Grain and Ingredients Manager,  
Tasty Bird Foods

William Silverman            )  
Edward M. Lebow            )--OF COUNSEL  
Ms. Margaret B. Dardess)



APPENDIX D  
UPDATED U.S. INDUSTRY DATA

Table D-1.--Updated trade and employment data for Syntex, IMC, Nutrius, and Thompson-Hayward, January-June 1983 and January-June 1984

Item	January-June--				Percentage increase or (decrease), 1984 over 1983	
	1983		1984		Liquid	Dry
	Liquid	Dry	Liquid	Dry		
Trade data:						
Production						
1,000 pounds--	26,057	15,949	23,800	14,405	(8.7)	(9.7)
Capacity-----do-----	45,982	16,133	45,982	16,133	0.0	0.0
Capacity utilization						
percent--	56.7	98.9	51.8	89.3	(8.7)	(9.7)
Intracompany and inter-						
company transfer						
1,000 pounds--	16,680	2,636	15,391	3,138	(7.7)	19.0
Domestic open-market						
shipments--						
Quantity--1,000 pounds--	9,317	10,843	7,491	9,737	(19.6)	(10.2)
Value----1,000 dollars--	4,964	6,843	3,374	6,253	(32.0)	(8.6)
Exports--						
Quantity--1,000 pounds--	0	2,180	0	1,358	0.0	(37.7)
Value----1,000 dollars--	-	1,309	-	823	-	(37.1)
Inventories as of June 30						
1,000 pounds--	1,688	1,518	1,566	940	(7.2)	(38.1)
Production, and related						
workers' employment						
data:						
Average number of						
employees-----	19	15	19	13	0.0	(13.3)
Hours worked						
1,000 hours--	30	16	24	12	(20.0)	(25.0)
Wages earned						
1,000 dollars--	231	168	242	156	4.8	(7.1)
Total compensation						
earned-1,000 dollars--	331	202	345	186	4.2	(7.9)

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