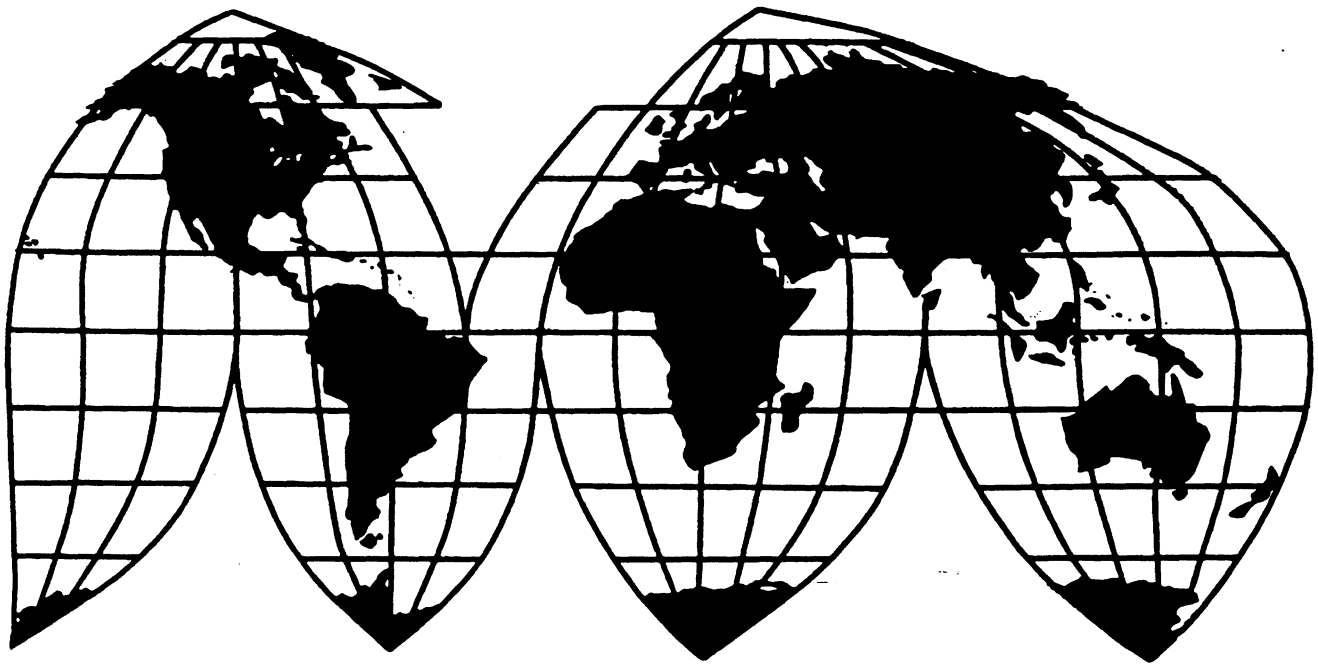
Citric Acid and Sodium Citrate From China

Investigation No. 731-TA-863 (Preliminary)

Publication 3277 **February 2000**

U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-863 (Preliminary)

CITRIC ACID AND SODIUM CITRATE FROM CHINA

DETERMINATION

On the basis of the record[1] developed in the subject investigation, the United States International Trade Commission determines,[2] pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury, or that the establishment of an industry in the United States is materially retarded, by reason of imports from China of citric acid and sodium citrate, provided for in subheadings 2918.1400 and 2918.1510 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

BACKGROUND

On December 15, 1999, a petition was filed with the Commission and the Department of Commerce by Archer Daniels Midland Co., Decatur, IL; Cargill, Inc., Naperville, IL; and Tate & Lyle Citric Acid, Inc., Decatur, IL, alleging that an industry in the United States is threatened with material injury by reason of LTFV imports of citric acid and sodium citrate from China. Accordingly, effective December 15, 1999, the Commission instituted antidumping duty investigation No. 731-TA-863 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of December 22, 1999 (64 FR 71831). The conference was held in Washington, DC, on January 5, 2000, 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(f) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(f)).

[2] Commissioners Jennifer A. Hillman and Stephen Koplan dissenting; Chairman Lynn M. Bragg not participating.

VIEWS OF THE COMMISSION

Based on the record in this investigation, we find that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports from China of citric acid and sodium citrate that are allegedly sold in the United States at less than fair value ("LTFV").[1] [2]

I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

The legal standard for preliminary antidumping duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determination, whether there is a reasonable indication that a domestic industry is materially injured, threatened with material injury, or whether the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[3] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[4]

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. In General

To determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[5] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Act"), defines the relevant domestic industry as the "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."[6] In turn, the Act defines

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[1] Commissioners Hillman and Koplan find that there is a reasonable indication that an industry in the United States is threatened with material injury by reason of imports of citric acid and sodium citrate from China that are allegedly sold in the United States at LTFV. See Dissenting Views of Commissioners Jennifer A. Hillman and Stephen Koplan. They join in Parts I, II, and III.A of this opinion.

[2] Chairman Lynn M. Bragg did not participate in this investigation. Chairman Bragg recused herself from this investigation to avoid an appearance of a conflict of interest based upon information which came to her attention following the Commission's public meeting held January 31, 2000.

[3] 19 U.S.C. § 1673b(a); *see also* American Lamb Co. v. United States, 785 F.2d 994, 1001-1004 (Fed. Cir. 1986); Aristech Chemical Corp. v. United States, 20 CIT 353, 354 (1996).

[4] American Lamb, 785 F.2d at 1001 (Fed. Cir. 1986); *see also* Texas Crushed Stone Co. v. United States, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[5] 19 U.S.C. § 1677(4)(A).

[6] 19 U.S.C. § 1677(4)(A).

"domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation . . . ."[7]

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[8] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[9] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[10] Although the Commission must accept the determination of the Department of Commerce ("Commerce") as to the scope of the imported merchandise allegedly subsidized or sold at LTFV, the Commission determines what domestic product is like the imported articles Commerce has identified.[11]

B. Product Description

In its notice of initiation, Commerce defined the imported merchandise within the scope of this investigation as follows:

> The scope of the investigation includes all grades and granulation sizes of citric acid and sodium citrate in any type of packaging and in either dry form or in any solution, including, but not limited to, solutions of water, alcohol and ether. The scope of the investigation includes the hydrous and anhydrous forms of citric acid and the dihydrate and anhydrous forms of sodium citrate, otherwise known as citric acid sodium salt. Sodium citrate includes both trisodium citrate and monosodium citrate which are also known as citric acid trisodium salt and citric acid monosodium salt, respectively. Citric acid and sodium citrate are classifiable under 2918.14.0000 and 2918.15.1000 of the Harmonized Tariff Schedule of the United States (HTSUS),

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[7] 19 U.S.C. § 1677(10).

[8] *See, e.g.*, NEC Corp. v. Dep't of Commerce, 36 F. Supp. 2d 380, 383 (Ct Int'l Trade 1998); Nippon Steel Corp. v. United States, 19 CIT 450, 455 (1995); Torrington Co. v. United States, 747 F. Supp. 744, 749, n.3 (Ct Int'l Trade 1990) *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes and production employees; and, where appropriate, (6) price. *See* Nippon, 19 CIT at 455, n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct Int'l Trade 1996).

[9] *See, e.g.*, S. Rep. No. 96-249, at 90-91 (1979).

[10] Nippon Steel, 19 CIT at 455; Torrington, 747 F. Supp. at 748-49. *See also* S. Rep. No. 96-249, at 90-91 (1979) (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[11] Hosiden Corp. v. Advanced Display Mfrs., 85 F.3d 1561, 1568 (Fed. Cir. 1996) (Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); Torrington, 747 F. Supp. at 748-752 (affirming Commission determination of six like products in investigations where Commerce found five classes or kinds).

respectively. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.[12]

Citric acid and sodium citrate are produced through the fermentation of a starch or sugar base using molds or yeasts.[13] Citric acid is one of the most widely used acids in the food and beverage industry.[14] It serves as an acidulant, preservative, and/or flavor enhancer in products including carbonated and non-carbonated drinks, dry powdered beverages, wines and wine coolers, jams, jellies, preserves, gelatin desserts, candies, frozen foods, and canned fruits and vegetables.[15] Citric acid is also used in household laundry detergents, pharmaceuticals, metal cleaners, durable-press textile finishing treatments, cosmetics and other industrial applications. Sodium citrate has similar uses to citric acid products such as laundry detergent and as an additive to carbonated beverages, dry beverage mixes, fruit drinks, jams, jellies, preserves, gelatin desserts, and candies. Sodium citrate is also used as an emulsifier and preservative in cheese and dairy products, as a buffering agent in household cleaner products, and as a diuretic and expectorant in pharmaceuticals.[16]

C. Domestic Like Product Issues

Petitioners contend that the Commission should find a single like product consisting of both citric acid and sodium citrate.[17] Several producers and importers of the Chinese product argue that the Commission should find that citric acid and sodium citrate are separate like products.[18] We determine that there is one domestic like product consisting of citric acid and sodium citrate, coextensive with the scope of this investigation.

Citric acid and sodium citrate have similar, but not identical, chemical and physical characteristics. In the dry state, both take the form of a white granular or crystalline powder.[19] Both are odorless, while the taste of citric acid is described as a "strongly acidic taste" and that of sodium citrate as a "pleasant acid taste" or a "cool salty taste."[20] Both may be sold or used either in a dry state or as an

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[12] 65 Fed. Reg. 1588 (Jan. 11, 2000).

[13] Confidential Report, Memorandum INV-W-017 (Jan. 24, 2000), as amended by Memorandum INV-X-024 (Jan. 31, 2000) ("CR") at I-4-6, Public Report ("PR") at I-3-4; Petition at 7.

[14] Winter, Ruth, *A Consumer's Dictionary of Food Additives*, Three Rivers Press, New York, 1994, pp. 126-27, 360-61, *quoted in* Questionnaire Response of ***. *See also* Petition at Exhibit 2 (SRI Consulting, CEH Marketing Research Report: Citric Acid (8/6/99) ("SRI Report")), p. 17.

[15] Petition at 5-6; CR at I-3, PR at I-2.

[16] Petition at 6. Petitioners state that pharmaceutical applications account for a small ("single digit") and declining portion of the market for citric acid and sodium citrate. Transcript of Conference, January 5, 2000 (Tr.") at 67 (Testimony of Mr. Gruber of Cargill, Inc. ("Cargill")).

[17] Petition at 9-11; Petitioners' Postconference Brief at 2-6; Tr. at 22-24, 140.

[18] Postconference Brief of China BBCA Biochemical Group Corp. and BBCA (USA) (collectively "BBCA") at 8-10; Postconference Brief of Ningxiner Biological Engineering Co., Laiwu Sisha Biochemistry Co. and Mineral Corp Co., and Wego Chemical and Mineral Corp. (collectively "Wego") at 3.

[19] CR at I-3, PR at I-2; Petition at 10; Tr. at 22-23 (Testimony of Mr. Gruber of Cargill).

[20] CR at I-3, PR at I-2; Petition at Exhibit 4 (*Food Chemicals Codex*, Fourth Edition, National Academy Press,
(continued...)

aqueous solution.[21] Sodium citrate is produced either by modifying the fermentation process used to produce citric acid or by reacting citric acid with caustic soda.[22] Thus, both products have similar essential chemical characteristics, notwithstanding their slight chemical differences.[23]

The end uses of the two products overlap to a large degree. Both citric acid and sodium citrate serve as acidulants and preservatives in foods and beverages, and both are used as buffers, acidulants, and chelators in the production and formulation of a wide variety of chemical and household products.[24] The primary common use of citric acid and sodium citrate is in laundry detergents.[25] There are some end uses that are not common for both products, such as the use of citric acid in wine, fruit and vegetable products, and the use of sodium citrate as an emulsifier in cheese.[26]

Given that they are used for many of the same purposes, citric acid and sodium citrate are technically interchangeable for most uses, although the different formulation of products in which they are used limits the degree of their actual interchangeability.[27] However, citric acid can be neutralized with a sodium alkali to form sodium citrate suitable for use in some formulas that call for the latter.[28]

Citric acid and sodium citrate are sold through the same channels of distribution.[29] Domestically produced citric acid and sodium citrate are predominantly sold directly to end users, with the remaining approximately *** percent of sales made to distributors.[30]

Tate & Lyle currently produces only citric acid, but its predecessor, Haarmann and Reimer, produced both products.[31] The other two domestic producers, ADM and Cargill, produce both citric acid and sodium citrate.[32] The producers produce citric acid and sodium citrate at the same facilities using the

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[20] (...continued)
July 1996); and *A Consumer's Dictionary of Food Additives, quoted in* ***.

[21] CR at I-6, PR at I-4; Petition at 9; Tr. at 23 (Testimony of Mr. Gruber of Cargill).

[22] CR at I-3, PR at I-2; Petition at 8.

[23] Tr. at 22-23 (Testimony of Mr. Gruber of Cargill); Tr. at 123 (Testimony of Mr. Wang of BBCA (USA)) and *** Questionnaire Response. The chemical formula for citric acid is $C_6H_8O_7$, whereas the chemical formula for sodium citrate, $C_6H_5Na_3O_7$, reflects the addition of the sodium hydroxide. Petitioners' Postconference Brief at 3, n. 2.

[24] CR at I-3-4, PR at I-2-3. ***, a *** purchaser of both citric acid and sodium citrate, stated in its Questionnaire Response that ***.

[25] Petition at 6.

[26] Petition at 6. *See* Questionnaire Responses of *** and ***.

[27] Tr. at 23 (Testimony of Mr. Gruber of Cargill); Tr. at 116 (Testimony of Mr. Echaghpour of Wego); Tr. at 123 (Testimony of Mr. Wang of BBCA).

[28] CR at I-6-7, PR at I-4; Tr. at 23 (Testimony of Mr. Gruber of Cargill). *See* Questionnaire Responses of ***.

[29] CR and PR at Table I-1; Tr. at 23 (Testimony of Mr. Gruber of Cargill); BBCA's Postconference Brief at 9.

[30] CR and PR at Table I-1.

[31] CR and PR at III-1 & n.2; Tr. at 68 (Testimony of Mr. Boynton of Tate & Lyle).

[32] CR and PR at III-1.

same workers.[33] The two products also share the same equipment and processes up until the point that some citric acid is reacted with caustic soda to produce sodium citrate.[34]

Domestic producers view citric acid and sodium citrate as similar and as part of a single product line.[35] Although many purchasers do not view citric acid and sodium citrate as interchangeable once a formula is developed, purchasers often view the two as able to serve the same end use.[36]

The domestic producers indicated that the prices for citric acid and sodium citrate are about the same and that the two products are sold to many customers through the same type of fixed price and fixed term contracts.[37] The similarity in prices for the domestic products is borne out by the pricing data obtained in the investigation. In 1998 and 1999, prices for domestic fine granular citric acid in 50 pound bags (product 1) ranged from *** per pound, as compared to *** per pound for the same sized bags of fine granular sodium citrate (product 5).[38] In 1998 and 1999, prices for domestic granular citric acid in 50 pound bags (product 2) ranged from *** per pound, as compared to *** per pound for the same sized bags of granular sodium citrate (product 6).[39]

In sum, although specific end product formulations limit the actual interchangeability of citric acid and sodium citrate, the record indicates that they are physically and chemically similar, are sold through the same channels of distribution at similar prices and share the same manufacturing processes, as well as common production facilities and employees. Further, even though there are a few end uses unique to each of them, citric acid and sodium citrate can be used for similar purposes in a wide variety of food, beverage and industrial products. Based on these considerations, we conclude that citric acid and sodium citrate constitute one like product.

D. Domestic Industry

The domestic industry is defined as "the producers as a [w]hole of a domestic like product."[40] In defining the domestic industry, the Commission's general practice has been to include in the industry all of the domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.[41] Based on our finding that the domestic like product consists of citric acid and sodium citrate, we conclude that the domestic industry consists of all domestic producers of those products.

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[33] CR at I-5 & n.15, III-2, n.4, PR at I-3 & n.15, III-1, n.4; Petition at 10; Petitioners' Postconference Brief at 5; Tr. at 22 (Testimony of Mr. Gruber of Cargill).

[34] CR at I-4-5, III-2, nn.4 & 5, PR at I-3, III-1-2, nn. 4 & 5; Petition at 10; Petitioners' Postconference Brief at 5; Tr. at 22-23 and 41 (Testimony of Mr. Gruber of Cargill).

[35] Petition at 10-11 and Exhibit 3 (product literature for ADM, Cargill, and Tate & Lyle).

[36] *See, e.g.* Purchaser Questionnaire Responses of *** at 5,7.

[37] Petition at 11; Tr. at 23-24 (Testimony of Mr. Gruber of Cargill). Purchasers of the domestic products *** *See* ***.

[38] CR and PR at Tables V-1 and V-5.

[39] CR and PR at Tables V-2 and V-6.

[40] 19 U.S.C. § 1677(4)(A).

[41] *See* United States Steel Group v. United States, 873 F. Supp. 673, 681-84 (Ct Int'l Trade 1994), *aff'd*, 96 F.3d 1352 (Fed. Cir. 1996).

In defining the domestic industry in this investigation, we have considered whether firms that purchase citric acid and convert it into sodium citrate solution engage in sufficient production-related activity to be included in the domestic industry.[42] Only one converter, FBC Industries, Inc. ("FBC") supplied data on such sodium citrate operations.[43]

FBC employed *** workers for *** hours in the conversion of citric acid to sodium citrate in 1998, and *** workers for *** during January-September 1999.[44] FBC did not provide information about the source and extent of its capital investment, but petitioners indicated that capital requirements and conversion costs are minimal, requiring only a warehouse worker and "a big old tank."[45] Petitioners also indicated that the conversion process is a batch process that does not require much technical expertise, but rather is analogous to dropping an Alka-Seltzer into water.[46] According to the data provided by FBC, it adds *** percent value to the citric acid during conversion in the United States.[47] Excluding the costs of other materials that are added to the citric acid, FBC's domestic processing adds *** percent in domestic value.[48]

In sum, the information in the record suggests that the converters are not engaged in sufficient production-related activity for the Commission to find that they are part of the domestic industry. Capital investment and employment levels appear ***. In addition, the sophistication of the technology employed in converting citric acid into sodium citrate, the amount of technical expertise involved, and the necessary amount of research and development all appear to be minimal.[49]

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[42] Petitioners argue that these "converters" should be excluded from the domestic industry. Petitioners' Postconference Brief at 7. Respondents do not address the question.

In deciding whether a firm qualifies as a domestic producer, the Commission generally considers six factors: (1) source and extent of the firm's capital investment; (2) technical expertise involved in U.S. production activities; (3) value added to the product in the United States; (4) employment levels; (5) quantity and type of parts sourced in the United States; and (6) any other costs and activities in the United States directly leading to production of the like product. *See e.g.*, Dynamic Random Access Memories of One Megabit and Above from Taiwan, ("DRAMs"), Inv. No. 731-TA-811 (Final), USITC Pub. 3256 (Dec. 1999) at 7-12; Static Random Access Memory Semiconductors from the Republic of Korea and Taiwan ("SRAMs"), Inv. Nos. 731-TA-761-762 (Final), USITC Pub. 3098 (Apr. 1998) at 9, n.59; Large Newspaper Printing Presses, USITC Pub. 2988 at 7-9. No single factor is determinative and the Commission may consider any other factors it deems relevant in light of the specific facts of any investigation. *See* Oil Country Tubular Goods from Argentina, Austria, Italy, Japan, Korea, Mexico, and Spain ("OCTG"), Inv. Nos. 701-TA-363 and 364 and 731-TA-711-717 (Final), USITC Pub. 2911 (Aug. 1995) at I-11 n.37; Silicon Carbide from China, Inv. No. 731-TA-651 (Final), USITC Pub. 2779 (June 1994) at I-11 n.49.

[43] *See* CR at III-1, n.1 and VI-6.

[44] FBC's Questionnaire Response at 5.

[45] Tr. at 41-44 (Testimony of Mr. Gruber of Cargill) (conversion costs would be only "a couple of cents").

[46] Tr. at 42 (Testimony of Mr. Gruber of Cargill).

[47] CR and PR at Table VI-6.

[48] *Id.* Commission practice has not clearly established a specific level of U.S. value added, or product finished value, required to qualify as a domestic producer. *See* Aramid Fiber Formed of Poly Para-Phenylene Terephthalamide from the Netherlands, Inv. No. 731-TA-652 (Final), USITC Pub. 2783 (June 1994) at I-8-I-9 & n.34 ("no single factor -- including value added -- is determinative and . . . value added information becomes more meaningful when other production activity indicia are taken into account").

[49] Under similar circumstances, the Commission found that companies that purchase indigo powder and convert it into indigo paste were not engaged in sufficient production-related activity to be considered part of the domestic

(continued...)

III. NO REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGEDLY LTFV IMPORTS

In the preliminary phase of antidumping duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured by reason of the imports under investigation.[50] In making this determination, the Commission must consider the volume of imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[51] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[52] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[53] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[54]

For the reasons discussed below, we determine that there is no reasonable indication that the domestic industry producing citric acid and sodium citrate is materially injured by reason of subject imports from China that are allegedly sold in the United States at less than fair value.

A. Conditions of Competition

Several conditions of competition are pertinent to our analysis in this investigation. First, the demand for citric acid and sodium citrate is derived from the demand for the final consumer goods containing citric acid or sodium citrate.[55] Food and beverage manufacturers account for as much as two-thirds of the total demand for citric acid and sodium citrate in the United States.[56] Apparent domestic consumption of citric acid and sodium citrate increased 12.9 percent overall between 1996 and 1998.[57] Apparent consumption was 2.5 percent higher in interim 1999 than it was during the same period of 1998.[58] The domestic producers reported that, among the most common uses for citric acid and sodium citrate, the rate of increase in demand was highest for beverage usage, followed by food and

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[49] (...continued)
synthetic indigo industry. Synthetic Indigo from China, Inv. No. 731-TA-851 (Preliminary), USITC Pub. 3222 (Aug. 1999) at 10-11.

[50] 19 U.S.C. § 1673b(a).

[51] 19 U.S.C. § 1677(7)(B)(i). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each [such] factor . . . [a]nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B). *See also* Angus Chemical Co. v. United States, 140 F.3d 1478 (Fed. Cir. 1998).

[52] 19 U.S.C. § 1677(7)(A).

[53] 19 U.S.C. § 1677(7)(C)(iii).

[54] 19 U.S.C. § 1677(7)(C)(iii).

[55] CR at II-4, PR at II-3.

[56] CR at II-4, PR at II-3, *citing* P & G's Postconference Brief at 13. *See also* Petition at Exhibit 2 (SRI Report) at p. 17 (in 1998, food and beverage sector accounted for *** percent of U.S. consumption of citric acid) and Petitioners' Postconference Brief at Appendix 1.

[57] CR and PR at Tables IV-2 and C-1.

[58] CR and PR at Tables IV-2 and C-1.

pharmaceutical uses, and slowest for detergents.[59] U.S. producers indicated that between *** percent of their domestic shipments went to end users and the remainder went to distributors.[60] Conversely, data for importers indicate that between 10 and 35 percent of importers' shipments went to end users, while the remainder went to distributors.[61]

While price is an important factor in the sale of citric acid and sodium citrate, other factors, such as quality are equally, if not more, important for at least some applications.[62] In particular, the evidence in the record indicates that quality is paramount for food and beverage applications.[63] A number of food and beverage producers reported that Chinese citric acid did not meet their quality standards and that it is only suitable for industrial grade applications.[64] Likewise, quality is a prime concern for pharmaceutical users of citric acid and sodium citrate.[65]

During the second half of the period of investigation, the composition of the domestic industry changed, with Tate & Lyle's acquisition of Haarmann & Reimer's operations.[66] On July 1, 1998, Tate & Lyle acquired Haarmann & Reimer's worldwide citric acid business, including Haarmann & Reimer's citric acid production facilities in Ohio. Haarmann & Reimer retained ownership of its Indiana facility, and produced citric acid and sodium citrate for Tate & Lyle until December 31, 1998, at which time the Indiana plant was shut down. Although Tate & Lyle subsequently doubled the capacity at the Ohio facility, the net effect of its purchase of Haarmann & Reimer's citric operations was a *** of domestic capacity to produce citric acid as well as a loss of *** percent of domestic capacity to produce sodium citrate.[67]

Domestic capacity utilization for citric acid production rose from 87.4 percent in 1996 to 92.9 percent in 1997, and then to 96.1 percent in 1998.[68] Domestic capacity utilization for sodium citrate, which accounted for approximately 11 percent of U.S. citrate production, rose from 72.2 percent in 1996

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[59] CR at II-4-5, PR at II-3.

[60] CR and PR at Table I-1.

[61] CR and PR at Table I-1.

[62] *See* CR at II-7 and Table II-1, PR at II-4 and Table II-1.

[63] *See, e.g.*, letter from Universal Flavors (manufacturer of beverages and food flavors for Kroger, Winn Dixie, Publix and others), dated Jan. 3, 2000; letter from First Food Co., Inc. ("First Food"), (manufacturer of gelatin, pudding and drink mixes), received by Commission on Jan. 5, 2000; letter from Northwestern Foods, Inc. ("Northwestern Foods") (manufacturer of powdered flavorings for Sno-Cone products and Hot Cocoa mixes), dated Jan. 3, 2000; letter from Drafft Root Beer, Inc. ("Drafft Root Beer"), dated January 3, 2000; notes of Jan. 6, 2000, staff phone conversation with ***.

[64] CR at II-10, *citing* letter from Drafft Root Beer (stating that Chinese citric acid is unusable because of clumping, difficulty in dissolving, and solubility problems); Tr. at 75-76 (Testimony of Mr. Zint of Procter & Gamble) (stating that P&G does not use any citric acid from China in any ingestible P&G products). *See also* letters from Universal Flavors, First Food, Northwestern Foods.

[65] *See* CR and PR at II-1 (*** only buys pharmaceutical grade citric acid from approved suppliers whose facilities it can audit).

[66] CR and PR at III-1, n.2.

[67] CR and PR at III-2 and Table III-2.

[68] CR and PR at Tables III-2 and C-2.

to 74.8 percent in 1997, and then to 81.7 percent in 1998.[69] Although capacity utilization for both citric acid and sodium citrate was lower in interim 1999 than it was in interim 1998, the respective 11.6 percent and *** percent decreases were *** the respective *** percent and *** percent decreases in capacity.[70]

Finally, fairly traded imports account for the majority of imports of citric acid and sodium citrate into the United States.[71] The evidence in the record indicates that imports from Israel and Austria compete with the U.S. product for sales in the food and beverage industry, and that purchasers perceive these fairly traded imports to be of equal quality to domestic citric acid and sodium citrate.[72] The market share held by these fairly traded imports increased slightly each year from 1996 to 1998, and then increased most notably during the first nine months of 1999 as compared to the same period for 1998.[73]

B. Volume

Section 771(C)(I) of the Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[74] The volume of subject imports increased from 25.5 million pounds in 1996, to 36.5 million pounds in 1997, and then to 44.2 million pounds in 1998, of which 32.4 million pounds were imported during the first nine months as compared to 66.0 million pounds during the same period of 1999.[75] The value of subject imports also increased, from $14.9 million in 1996 to $20.0 million in 1997 and then to $22.6 million in 1998, with interim period values of $16.7 million in 1998 and $32.7 million in 1999.[76]

Subject imports increased their market share from 5.7 percent in 1996 to 7.6 percent in 1997 and then to 8.7 percent in 1998.[77] During the interim periods, subject imports held 8.1 percent of the market in 1998 and 16.2 percent in 1999.[78] In terms of value, subject imports' share of the market also increased, albeit at a slower rate than the volume increase. By value subject imports represented 5.0

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[69] CR and PR at Tables III-2 and C-3.

[70] *See* CR and PR at Tables C-2 and C-3. The percentage point declines for capacity utilization were 11.1 percentage points for citric acid and *** percentage points for sodium citrate. *Id.*

[71] CR and PR at Table IV-1.

[72] CR at II-10, PR at II-7; Tr. at 16, 92, 102, 109; letters from Drafft Root Beer and First Food, referencing Israeli citric acid; letter from Universal Flavors, referencing Austrian citric acid; Questionnaire Response of ***, referencing Israeli product.

[73] CR and PR at Table IV-2.

[74] 19 U.S.C. § 1677(7)(C)(I).

[75] CR and PR at Table IV-1. We have counted imports from Hong Kong as subject imports, in light of evidence reflecting that there is no citric acid production in Hong Kong and that Hong Kong brokers admitted handling Chinese material that is shipped to the United States. CR and PR at IV-1, n.2.

[76] CR & PR at Table IV-1.

[77] CR and PR at Tables IV-2 and IV-3.

[78] CR and PR at Tables IV-2 and IV-3.

percent of apparent consumption in 1996, 6.5 percent in 1997, and 7.2 percent in 1998; for the interim periods, subject imports' market share was 6.7 percent in 1998 and 13.5 percent in 1999.[79]

By volume and value, U.S. producers' market share declined between 1996 and 1998, from 78.0 percent of volume and 78.1 percent of value in 1996 to 74.7 percent of volume and 75.2 percent of value in 1998.[80] For interim 1999, as compared to interim 1998, U.S. producers' market share was 9.9 percentage points lower by quantity and 8.9 percentage points lower by value.[81]

Nonsubject imports followed the same trends as the subject imports.[82] By quantity and value, the market share held by nonsubject imports increased from 1996 to 1998 and in interim 1999 as compared to interim 1998.[83] These increases were slight from 1996 to 1998, rising from 16.3 percent of quantity and 17.0 percent of value in 1996 to 16.6 percent of quantity and 17.6 percent of value in 1998.[84] The market share held by nonsubject imports then increased to a greater extent between 1998 and 1999, based upon a comparison of the data for the interim periods. From interim 1998 to interim 1999, the quantity-based market share of nonsubject imports increased by 11.0 percent (1.8 percentage points) while their value-based market share increased by 11.7 percent (2.1 percentage points).[85]

The increase in the volume of subject imports during the period of investigation, when viewed in isolation, could be considered significant. However, the record of this investigation establishes that the Chinese imports have not made significant inroads into sales made by the domestic industry to U.S. food and beverage manufacturers. Rather, the large majority of subject imports compete with the domestic product only in the industrial use market, where the subject imports have already increased their market share without a significant adverse impact on the industry. For this reason, we do not find that the volume of subject imports is significant. We note that this finding is consistent with our determinations that subject imports did not have any significant negative price effects or impact on the domestic industry, as discussed below.

C. Price Effects of the Subject Imports

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

> (I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and
>
> (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[86]

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[79] CR and PR at Tables IV-2 and IV-3.

[80] CR and PR at Table IV-3.

[81] CR and PR at Table C-1.

[82] *See* PR and CR at Tables IV-2 and IV-3.

[83] CR and PR at Table IV-3.

[84] CR and PR at Tables IV-3 and C-1.

[85] CR and PR at Tables IV-3 and C-1.

[86] 19 U.S.C. § 1677(7)(C)(ii).

Substitutability between the domestic like product and subject imports is limited by quality considerations. While the products appear to be good substitutes for industrial uses, the evidence in the record indicates that the inferior quality of the Chinese product has made it a poor substitute for domestic product sold for food and beverage uses, which account for the great majority of sales.[87]

We find that there is not significant underselling by the subject imports.[88] First, as noted, the evidence indicates that the Chinese product has not been sold to a significant extent for food and beverage uses. There is not a reasonable indication of evidence that the large food and beverage industry users, whom petitioners identified as their most important customers, have purchased or are willing to purchase Chinese product for use in ingestible products sold in the United States. Indeed, five name brand food and beverage manufacturers, ***, Drafft Root Beer, and Procter & Gamble, stated that they do not and will not use Chinese citric acid at all or use it only in non-ingestible products.[89] One name brand producer, *** uses it in *** its soft drinks, but *** is not a large purchaser of citric acid and sodium citrate in comparison to other name brand food and beverage purchasers.[90]

Among other (non name-brand) food and beverage purchasers, the record also indicates a reluctance or refusal to purchase Chinese product.[91] Even those that were willing to purchase Chinese product purchased minimal amounts, mainly for use in ***.[92]

Further, the evidence concerning underselling is mixed. For the domestic producers' largest selling item, fine granular citric acid in 50 pound bags (product 1), the Chinese product consistently oversold the domestic like product since the second quarter of 1996.[93] For the largest selling Chinese product, granular citric acid sold in 50 pound bags (product 2), the Chinese product undersold the

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[87] CR at II-1, II-4-5, II-9-10, PR at II-1, II-3, II-6-7. Petitioners and respondents emphasized the significance of the recent use of electronic bidding by at least one large U.S. purchaser of citric acid, *i.e.*, Quaker Oats. The use of electronic auctions is likely to increase the transparency of prices. However, as demonstrated by the Quaker Oats procurement, the use of these types of procedures has not resulted in increased acceptance of Chinese product for food and beverage use. Indeed, in the Quaker Oats auction, the purchaser ultimately ***. *See* CR at V-14.

[88] Respondents argued that the market is still feeling the lingering effects of the admitted 1993-95 price-fixing conspiracy in the citric acid industry. Ashland's Postconference Brief at 16-21. We have given the price-fixing little weight in our determination, as it may have affected prices only for the early part of the investigation. The fact of the early-to-mid 1990's price-fixing did not affect our analysis of the present condition of the market or price effects.

[89] *See* Questionnaire Responses of ***; Jan. 3, 2000, letter from Drafft Root Beer; Tr. at 75 (Testimony of Mr. Zint of Procter & Gamble).

[90] *See* Purchasers' Questionnaire Responses at p. 3; Drafft Root Beer letter. From January through September, 1999, *** purchased *** pounds of citric acid and sodium citrate, *** of which were Chinese product. In comparison, in 1999, *** purchased *** pounds, *** of which were from China; Quaker Oats purchased *** million pounds, *** of which were from China; *** purchased an estimated *** pounds, *** of which were from China. Although petitioners ***. Drafft Root Beer purchases approximately 75,000 to 1.0 million pounds of citric acid per year, none of which are from China.

[91] *See* letter from Universal Flavors, which purchases approximately 650,000 pounds of citric acid per year, none of which are from China; letter from First Food, which purchases approximately 500,000 pounds of citric acid per year, none of which are from China; letter from Northwestern Foods, which purchases approximately 12,000 pounds of citric acid and sodium citrate per year, none of which are from China.

[92] For example, in 1999 ***, purchased *** pounds of citric acid, *** of which were from China and *** pounds of sodium citrate, *** of which were from China. ***. *See also* ***.

[93] CR and PR at Table V-1.

domestic product in most quarters, but by small margins.[94] An examination of prices for products 1 and 2 based upon channels of distribution shows that the Chinese product oversold domestic products 1 and 2 in sales to end users in 26 of 30 price comparisons, whereas the Chinese product consistently undersold the domestic products in sales to distributors.[95] Significantly, end users constitute between *** and *** percent of U.S. producers' domestic shipments,[96] indicating that the Chinese product actually oversells the domestic product in sales in the latter's more predominant channel of distribution.

Although prices for both domestic and subject imports fluctuated downward from 1996 through the third quarter of 1999,[97] we do not find significant price suppression or depression by the subject imports. While the domestic producers alleged numerous lost sales and revenues, the purchasers' accounts of the cited transactions were mixed, and those allegations that were confirmed do not contradict our finding that the subject imports have not made significant inroads into the food and beverage segment of the market.[98] [99] Accordingly, we find that the subject imports did not adversely affect prices for the domestic like product to a significant degree. This finding is consistent with petitioners' own arguments, which appear to concede that there is no present injury by reason of the subject imports.

D. Impact

In examining the impact of the subject imports on the domestic industry, we consider all relevant economic factors that bear on the state of the industry in the United States.[100] These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, profits, cash flow, return on investment, ability to raise capital, and research and development. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[101] [102]

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[94] CR and PR at Table V-2.

[95] *See* supplemental tables prepared by staff economist.

[96] CR and PR at Table I-1.

[97] CR and PR at Tables V-1-6.

[98] We note that the petitioners failed to provide their lost sales/revenues allegations in a timely manner. Although Commission Rule 207.11(b)(2) requires petitioners to include in their petition any reasonably available lost sales or lost revenues that they intend to allege, in this case such allegations were submitted after the petition was filed. In this investigation, we considered both the untimely and timely allegations in light of the fact that staff was able to contact many of the purchasers named in the allegations and the unique circumstances that several of the allegations involved transactions that were also introduced into the record by other parties. Notwithstanding the unique circumstances of this investigation, we reiterate the importance of complying with the Commission rule.

[99] Vice Chairman Miller considered only the lost sales/revenues allegations that involved transactions occurring after or immediately before the filing of the petition, and specific allegations that were also raised by other parties.

[100] 19 U.S.C. § 1677(7)(C)(iii). *See also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." *Id.* at 885).

[101] 19 U.S.C. § 1677(7)(C)(iii). *See also* SAA at 851 and 885 and Live Cattle from Canada and Mexico, Inv.

(continued...)

We do not find that the subject imports had a material adverse impact on the domestic industry. Although the volume and market share of subject imports increased during the period of investigation, the domestic industry registered *** particularly with respect to financial indicators.[103]

The financial data indicate that the industry's performance *** from a *** start in 1996. From 1996 to 1998, gross profits *** percent, *** in 1996 to *** in 1998, and were *** in interim 1999 than in interim 1998.[104] The industry's operating income margin *** from *** percent to *** percent in 1998.[105] Likewise, the operating income margin was *** in interim 1999 as compared to *** percent in interim 1998.[106] Domestic producers' capital expenditures *** between 1996 and 1997, and despite ***, were ***.[107]

The number of production related workers, hours worked, and wages paid *** from 1996 to 1998, as did productivity. Although the number of workers, hours worked and productivity *** in interim 1999 as compared to interim 1998, wages *** between the interim periods.[108]

Domestic producers' production, capacity utilization and U.S. shipments increased each year from 1996 through 1998. In interim 1999 as compared to interim 1998, production was 25.2 percent lower, U.S. shipments were 11.0 percent lower and capacity utilization was down 11.1 percentage points for citric acid and *** percentage points for sodium citrate. These interim declines in trade data appear to mirror the increase in the volumes of subject and nonsubject imports. Notwithstanding these production and shipment declines in interim 1999, the industry's financial performance *** and remained ***. Accordingly, we find that the subject imports are not having a material adverse impact on the domestic industry.

For the reasons stated above, we find that there is no reasonable indication that the domestic industry is materially injured by reason of subject imports from China.

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[101] (...continued)
Nos. 701-TA-386 and 731-TA-812-813 (Preliminary), USITC Pub. 3155 (Feb. 1999) at 25, n.148.

[102] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii) (V). In its notice of initiation, Commerce identified estimated dumping margins based on export price to normal value comparisons ranging from 211.58 to 307.79 percent. 65 Fed. Reg. at 1590.

[103] We reach this conclusion both with or without the inclusion of the limited financial data that Tate & Lyle was able to provide. *See* CR and PR at Table VI-2. Tate & Lyle reported that it was unable to supply all requested data because of its limited access to records maintained by Haarmann & Reimer. CR and PR at VI-1 and n.2. If Tate & Lyle's data for January-September 1999 were included in the interim 1999 total industry data, the average operating income margin for the industry would be *** percent of net sales for that interim period. CR at VI-6, PR at VI-2. We note that a comparison of this figure to the interim figure for 1998 is not useful because the interim 1998 industry figure does not include Tate & Lyle's data.

[104] CR and PR at Table VI-1. For interim 1998, the industry reported *** for interim 1999.

[105] CR and PR at Table VI-1.

[106] CR and PR at Table VI-1.

[107] CR and PR at Table VI-7. ADM and Cargill collectively reported capital expenditures of *** in interim 1998 and *** in interim 1999. *Id.* In addition, Tate & Lyle reported *** in capital expenditures during interim 1999. *See* Tate & Lyle's Questionnaire Response at p.12.

[108] CR and PR at Table III-5.

IV. NO REASONABLE INDICATION OF THREAT OF MATERIAL INJURY BY REASON OF ALLEGEDLY LTFV IMPORTS

Section 771(7)(F) of the Act directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[109] The Commission may not make such a determination "on the basis of mere conjecture or supposition,"[110] and considers the threat factors "as a whole." In making our determination, we have considered all factors that are relevant to this investigation.[111] Based on an evaluation of the relevant statutory factors, we find that there is no reasonable indication that an industry in the United States is threatened with material injury by reason of imports of citric acid and sodium citrate from China that are allegedly sold in the United States at less than fair value.

As an initial matter, we reiterate our observation that the domestic industry is currently prospering in many respects. In fact, the industry's financial performance *** over the period of investigation and does not indicate that material injury would occur absent an antidumping duty order.

As discussed in our consideration of present injury, the volumes of citric acid and sodium citrate exported from China to the United States have increased during recent years. Nonetheless, Chinese producers of citric acid and sodium citrate are currently operating at a high capacity utilization level.[112] While there is evidence of likely substantial increases in their capacity,[113] not all of this increase will result in additional products that will be directed at the U.S. market. Chinese home market and third country market shipments have risen each year since 1996.[114] In particular, shipments to other markets have consistently accounted for the bulk of Chinese producers' shipments, and have continued to rise substantially, far exceeding Chinese exports to the United States.[115] This has been so notwithstanding an antidumping duty order on Chinese imports into Mexico since 1994 and a 1999 Indian order.[116] We find it

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[109] 19 U.S.C. §§ 1673b(a) and 1677(7)(F)(ii).

[110] 19 U.S.C. §1677(7)(F)(ii). An affirmative threat determination must be based upon "positive evidence tending to show an intention to increase the levels of importation." Metallverken Nederland B.V. v. United States, 744 F. Supp. 281, 287 (Ct. Int'l Trade 1990), *citing* American Spring Wire Corp. v. United States, 590 F. Supp. 1273, 1280 (Ct. Int'l Trade 1984). *See also* Calabrian Corp. v. United States, 794 F. Supp. 377, 387-88 (Ct. Int'l Trade 1992), *citing* H.R. Rep. No. 1156, 98th Cong., 2d Sess. 174 (1984).

[111] 19 U.S.C. § 1677(7)(F)(i). Factors I and VII are inapplicable since this investigation does not involve a countervailable subsidy or the importation of agricultural products.

[112] CR and PR at Table VII-1.

[113] *See* Petition at 41; Petitioners' Postconference Brief at 1-2, 20 and Exhibits 6, 8 and 17.

[114] This is so even accounting for the inclusion in home market shipments of one Chinese producers' merchandise that is sold in China and subsequently exported by a third firm. *See* CR and PR at Table VII-1, note 2.

[115] CR and PR at Table VII-1.

[116] CR at VII-4, PR at VII-3. Even if we assume Chinese exports of citric acid to India ceased since imposition of the antidumping duty order, the evidence indicates that Chinese exports to third country markets are substantial and increasing. *See* CR and PR at Table VII-1, and The World Trade Atlas data on China exports of citric acid (India accounted for 3.0 percent (2.7 percent by value) of 1998 exports of Chinese citric acid, down from the 5.7 percent (5.4 percent by value) exported to India in 1997).

likely that the Chinese producers will continue directing most of their production to third country markets and will not divert significant shipments from those markets to the United States.[117]

Further, as noted in our discussion of present injury, there is no evidence that the Chinese imports have made significant inroads in sales to the U.S. food and beverage industry.[118] Rather, the large majority of all subject imports compete with domestic product only in the industrial use market, where they have already increased their penetration without adverse impact on the U.S. industry. Chinese factories produce mostly unrefined citric acid with poor packaging which is of inferior quality for U.S. pharmaceutical and food and beverage end-use markets.[119] While petitioners alleged that improvements in the quality and product certification of subject imports threaten the domestic industry's dominance in the high end of the market, the inferior quality and reputation of the Chinese products prevents the Chinese producers from matching the quality or acceptance of the domestic product for food and beverage and pharmaceutical uses. Record evidence indicates that although Chinese product has been available in the U.S. market for some time, it will be at least two to three years before the level of quality of Chinese citric acid becomes acceptable to the higher tier of the U.S. market.[120] Consequently, we find that any imminent increase in the volume of subject citric acid and sodium citrate is unlikely to displace the higher quality domestic products.

We also find no reasonable indication of likely product shifting in China. The record contains no indication that the equipment currently used to make citric acid or sodium citrate in China is being used to produce any other product. In fact, there is evidence that some Chinese companies which once produced citric acid have changed production lines to manufacture other products such as saccharine and cannot switch back to producing citric acid because necessary equipment was either not maintained or was sold to other Chinese factories.[121]

The ratio of Chinese producers' home inventories of citric acid and sodium citrate to both production and shipments declined from 1996 to 1998.[122] Although these ratios were slightly higher in interim 1999 than in interim 1998, the 1999 ratios were still small and well below those in 1996. We note that U.S. importers' inventories of Chinese citric acid and sodium citrate increased during the period

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[117] Petitioners argue that Chinese producers have a strong incentive to increase exports in light of a government-wide rebate of Chinese value-added tax and an alleged "special support" provided by the Chinese Government to respondent China BBCA. Petitioners' Postconference Brief at 39-41. Even if petitioners are correct that these measures provide added incentive for Chinese producers to export, the record does not indicate that Chinese producers are likely to increase significantly exports to the United States rather than to other markets.

[118] In support of their view that the industry is threatened in the food and beverage sector, petitioners listed a number of food and beverage accounts that they believe have received offers of Chinese citric acid or which have actually purchased it. Petitioners' Postconference Brief at 35. While petitioners also indicated that approximately 70 percent of all citric acid is sold to about 10 to 15 end users (Petition at 9), only *** of the firms listed as actual or potential users of Chinese product are among the top ten customers identified by any of the three domestic citric acid producers in their questionnaire responses. The Commission received purchasers' questionnaire responses from *** of those firms–***, and, as discussed, *supra*, we considered those responses in reaching our determination.

[119] CR and PR at VII-I.

[120] Tr. at 94 (Testimony of Mr. MacDonald of Ashland).

[121] Tr. at 114 and 117 (Testimony of Mr. Echaghpour of Wego).

[122] CR and PR at Table VII-1.

investigated, and particularly during interim 1999.[123] At the same time, however, the ratios of inventories to imports and to shipments of imports declined by approximately twenty percent (5 percentage points) between interim 1998 and interim 1999.[124] Moreover, the inventory-to-shipment ratios reported by importers of subject products is in the same range as those reported by the domestic producers and by importers of nonsubject imports.[125]

We do not find that imports of the subject merchandise are likely to enter the U.S. market at prices that are likely to depress or suppress domestic prices to a significant degree. As we explained in the above discussion of no material injury by reason of subject imports, the subject imports have not had significant effects on the prices of domestic merchandise. The record does not suggest a change in the imminent future in the ability of Chinese imports to compete to a significant degree for sales to food and beverage purchasers. Further, the record indicates that fairly traded imports are playing an increasingly important role in price competition for sales to the food and beverage market.[126] Accordingly, we find it unlikely that the imports will have significant price-depressing or price-suppressing effects on domestic prices in the imminent future.

Nor do we find that subject imports are likely to have an actual or potential negative effect on the domestic industry's existing development and production efforts. Indeed, we note that the industry has made *** capital expenditures and *** such expenditures between interim 1998 and 1999, notwithstanding increases in the volume and market penetration of subject imports.[127] For example, in July 1999, Tate & Lyle expanded its Ohio facility, using equipment purchased from Haarmann and Reimer's Indiana facility.[128] Tate & Lyle reported *** in capital expenditures during interim 1999.[129]

Finally, the record does not indicate any other demonstrable adverse trends that indicate a probability that the subject imports will likely materially injure the domestic industry.[130] On the contrary, recent trends in the industry's financial performance have been positive, and support our negative threat determination. Accordingly, we find that the domestic industry producing citric acid and sodium citrate is not threatened with material injury by reason of subject imports from China.

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[123] CR and PR at Table VII-2.

[124] CR and PR at Table VII-2.

[125] *See* CR and PR at Tables III-4 and VII-2. One importer (***) which reported large end-of-period inventories for interim 1999, indicated that the ***.

[126] For example, the fact that *** highlights the extent of price competition among domestic producers and nonsubject imports. *See* CR at V-14, PR at V-11 and *** Purchasers' Questionnaire Response at p.12. *See also* letter from First Food, indicating that it currently purchases Israeli product at a price that met Cargill's price offer; letter from Drafft Root Beer, indicating that it recently starting purchasing Israeli product "priced within a penny or two less than the domestic citric acid and a penny or two higher than the Chinese citric acid"; and letter from Universal Flavors, indicating that it purchases U.S. and Austrian product.

[127] *See* CR and PR at Tables VI-7, IV-1 and IV-3.

[128] CR and PR at III-2; Tr. at 29 (Testimony of Mr. Boynton of Tate & Lyle).

[129] Tate & Lyle's Questionnaire Response at 12.

[130] 19 U.S.C. § 1677(7)(F)(I)(IX).

CONCLUSION

For the reasons stated above, we determine that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of citric acid and sodium citrate from China that are allegedly sold in the United States at less than fair value.

DISSENTING VIEWS OF COMMISSIONERS JENNIFER A. HILLMAN AND STEPHEN KOPLAN

On the basis of the record in this preliminary investigation, we determine that there is a reasonable indication that an industry in the United States producing citric acid and sodium citrate is threatened with material injury by reason of imports of citric acid and sodium citrate from China that are alleged to be sold in the United States at less-than-fair-value ("LTFV"). We concur with our colleagues' findings with respect to the domestic like product, domestic industry, and conditions of competition that are distinctive to the domestic industry. We dissent, however, from the Commission's determinations that (1) the record as a whole contains clear and convincing evidence that the citric acid and sodium citrate industry in the United States is not threatened with material injury by reason of the subject imports; and (2) no likelihood exists that contrary evidence will arise in a final investigation.[1]

Section 771(7)(F) of the Tariff Act of 1930, as amended, directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[2] The Commission may not make such a determination "on the basis of mere conjecture or supposition,"[3] and considers the threat factors "as a whole." In making our determination, we have considered all factors that are relevant to these investigations.[4] Based on an evaluation of the relevant statutory factors, for the reasons described below, we find a reasonable indication that the domestic industry is threatened with material injury by reason of subject imports from China.

Imports of subject merchandise into the United States increased rapidly and substantially during the period of investigation, both in absolute terms and as a percentage of apparent domestic consumption, particularly in interim 1999. From 1996 to 1998, subject imports from China increased from 25.2 million pounds to 44.0 million pounds, a 75 percent increase.[5] Subject imports' volume more than doubled in interim 1999 (January-September period) as compared to interim 1998, rising from 32.2 million pounds to 65.1 million pounds.[6]

This substantially increasing volume of subject imports captured market share from the domestic industry. Even as domestic apparent consumption increased by roughly 13 percent from 1996 to 1998, the domestic producers' market share declined from 78.0 percent to 74.7 percent as the subject Chinese import share increased from 5.6 percent to 8.7 percent.[7] More important for our threat analysis, the domestic producers' share of the market declined by roughly 10 percentage points in interim 1999 compared to interim 1998, while at the same time the subject imports' market share nearly doubled from 8.1 percent to

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[1] American Lamb Co. v. United States, 785 F.2d 994, 1001-1004 (Fed. Cir. 1986).

[2] 19 U.S.C. §§ 1673b(a) and 1677(7)(F)(ii).

[3] 19 U.S.C. §1677(7)(F)(ii). An affirmative threat determination must be based upon "positive evidence tending to show an intention to increase the levels of importation." Metallverken Nederland B.V. v. United States, 744 F. Supp. 281, 287 (Ct. Int'l Trade 1990), citing American Spring Wire Corp. v. United States, 590 F. Supp. 1273, 1280 (Ct. Int'l Trade 1984). See also Calabrian Corp. v. United States, 794 F. Supp. 377, 387-88 (Ct. Int'l Trade 1992), citing H.R. Rep. No. 1156, 98th Cong., 2d Sess. 174 (1984).

[4] 19 U.S.C. § 1677(7)(F)(i). Factors I and VII are inapplicable since these investigations do not involve a countervailable subsidy or the importation of agricultural products. See 19 U.S.C. § 1677(7)(F)(i)(I), (VII).

[5] CR and PR at IV-1.

[6] *Id.*

[7] CR and PR at App. C, Table C-1.

15.9 percent.[8] Thus, in a very short period of time, subject imports took significant market share from the domestic industry.[9]

In addition, while exports of subject product to the United States surged, subject foreign producers' home market shipments as a percentage of total shipments declined from 42.8 percent in 1996 to *** percent in 1998 and continued to decline in interim 1999 compared to interim 1998.[10] At the same time, Chinese exports to the United States as a percentage of total shipments increased at a greater rate than did their exports to other foreign countries.[11]

Chinese capacity to produce subject merchandise increased over the period of investigation by 166 percent from 100.6 million pounds in 1996 to 267.6 million pounds in 1998.[12] Projected 1999 Chinese capacity is 335.3 million pounds, more than three times their capacity at the beginning of the period of investigation.[13] Significantly, their capacity is scheduled to increase further in 2000 *** by the end of this year.[14] Thus, as Chinese producers have added substantial capacity over the period of investigation, the United States appears to have become a significant market for them, and this trend will likely continue given demand for citric acid and sodium citrate in the United States.

The export data for China may reflect, in part, the fact that antidumping duty orders on subject Chinese citric acid have been issued in Mexico and, more recently, in India.[15] The antidumping duty order with respect to India was issued in 1999, which is when Chinese exports to the United States increased the greatest. In sum, given the overall capacity for production of citric acid and sodium citrate, as well as the likely continued diversion by China of exports to the United States from other third country markets, we find that the increasing capacity and unused capacity in China are likely to result in a significant increase of subject imports into the United States.[16]

Inventories held by U.S. importers of subject products increased commensurate with the tremendous growth of Chinese imports. End-of-period inventories of subject merchandise in the United States increased from 1.7 million pounds in 1996, to 3.6 million pounds in 1997, and to 5 million pounds in 1998. This growth continued unabated as inventories further increased between interim periods by more than 100 percent, to 10.1 million pounds.[17]

In assessing the significance of the current and likely volume of subject imports, we have taken into account the apparent segmentation in the U.S. market for citric acid and sodium citrate. Food and beverage producers account for as much as two-thirds of U.S. demand for citric acid and sodium citrate.[18] The remaining one third or more of U.S. demand is accounted for primarily by industrial uses, with a small percentage consumed for pharmaceutical uses.

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[8] *Id.*

[9] 19 U.S.C. § 1677(7)(F)(i)(III).

[10] CR and PR at Table VII-1.

[11] *Id.*

[12] *Id.*

[13] *Id.*

[14] CR at VII-2, PR at VII-3. We also note that petitioner has argued that production capacity in China can further expand significantly with little or no capital investment. Petition at 41, Petitioners' Postconference Brief at 1-2. Petitioners also assert that the number and capacity of smaller Chinese producers is growing, and that the five largest Chinese producers will have doubled capacity by the end of this year, and will then possess enough capacity to supply most of the U.S. and Chinese markets. Petitioners' Postconference Brief at 20-21.

[15] CR at VII-4 and PR at VII-3.

[16] 19 U.S.C. § 1677(7)(F)(i)(II).

[17] CR and PR at Table VII-2. *See* 19 U.S.C. §1677(7)(F)(i)(V).

[18] CR at II-4, PR at II-3.

Respondents argue that, because of poor quality, the Chinese citric acid and sodium citrate is not used extensively by food and beverage manufacturers, particularly by large name-brand companies, for whom quality is especially important.[19] Respondents claim that a large portion of the food and beverage sector is therefore largely unavailable to Chinese product, which negates any threat of material injury.

We agree with respondents that, to date, the focus of sales of Chinese citric acid and sodium citrate has been on industrial uses, and that the record reveals relatively few sales to large name-brand food and beverage makers. However, on the current record, these facts are insufficient to compel the conclusion that there is no reasonable indication that the domestic industry is threatened with material injury, for the following reasons.

First, there is the opportunity for substantial additional sales of Chinese product into the industrial sector. Interim 1999 imports from China held a 15.9 percent share of the U.S. market for citric acid and sodium citrate; however, as noted above, industrial uses account for up to a third of the U.S. market.[20] Chinese imports are of sufficient quality to service industrial users.[21] Increased imports destined for industrial uses are likely to take sales primarily from domestic producers, which currently hold two thirds of the domestic market for citric acid and sodium citrate.

Second, the record contains evidence of growing inroads of Chinese product into the food and beverage sector, including by manufacturers of well-known brands. For example, one well-known national beverage manufacturer indicated that this year it intended to increase the percentage of its business awarded to Chinese producers from about *** percent in January-September 1999 to *** percent in 2000.[22] Thus, the quality of the Chinese product, and/or U.S. purchasers' assessment of that quality, have improved, providing access for likely further sales of Chinese imports into the food and beverage sector, the higher end of domestic applications.

Third, petitioners allege that other food and beverage producers have either begun to purchase Chinese product or are in the process of testing the product for future purchases. In the preliminary phase of this investigation, the Commission took the unusual step of sending questionnaires to purchasers. The data we received, while substantial, accounted for well under half of domestic purchases. Given that some food or beverage producers, even larger name-brand producers, are already purchasing Chinese material, we would seek more complete purchaser data in a final investigation to determine the full extent of current and likely future purchases of Chinese products.[23]

Despite the market segmentation (the extent of which we would examine further in a final phase of the investigation), based on the surge in imports, both in absolute terms and relative to the U.S. market, substantial unused capacity in China, recent barriers to third country markets, and the substantial increase in inventories, we find it likely that subject imports will continue to increase significantly in the imminent future.

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[19] *See, e.g.,* Ashland Postconference Brief at 4-13; Procter and Gamble Postconference Brief at 9-11.

[20] CR and PR at App. C, Table C-1.

[21] Indeed, in 1999, *** questionnaire at 3, 4, and 11.

[22] *** questionnaire at 3 and 13. In 1999, ***. Petitioners' Postconference brief at ex. 3. It appears likely that if the subject Chinese product can pass the rigorous quality assurance tests of these name brand food processors, it can become more widely accepted into the food segment of the market. In fact, several other food manufacturers have purchased Chinese product. CR at D-3 to D-7 and PR at D-3. ***.

[23] For example, for some large purchasers that have not purchased Chinese product for food or beverage uses to date, it was unclear whether such purchasers are testing Chinese product, and if so, how far along they are in this process. In this regard, the record suggests that the period for qualifying a citric acid or sodium citrate producer is in the range of several months. Tr. at 95 (MacDonald). This relatively short period does not appear to present an impediment for increased sales of Chinese product into the food and beverage sector within an imminent timeframe.

Prices for both the domestic like product and subject imports generally declined over the period of investigation, including in interim 1999.[24] Subject imports undersold domestic product for all but one of the products for which we gathered pricing data sufficient to permit price comparisons, including the product representing the largest volume of subject imports.[25]

These price declines have occurred despite substantial growth in apparent consumption.[26] We would not expect the industry to experience price declines in the face of growing demand.[27] In addition, the increased use of online auctions will only serve to intensify price-based competition in this market.[28] The role of subject imports in depressing or suppressing domestic prices will only increase as subject imports compete in this electronic bidding. Based on the foregoing, including the downward trend in prices for both Chinese and domestic product and the evidence of underselling, we conclude that the increasing volume of lower priced subject imports are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices.

In making our determination, we are mindful of the current state of the domestic industry.[29] However, our threat analysis does not end with an assessment of the current operating performance of the industry, but also examines whether subject imports have materially contributed to significant recent declines in that performance. While an industry might have been able to perform relatively well in the face of competition from allegedly LTFV imports, by examining recent trends we might find a reasonable indication that the industry is threatened with material injury by reason of the subject imports if the record indicates that there have been substantial declines in the industry's performance that will likely imminently worsen.

With respect to this investigation, the financial data reflect *** that requires further examination in the final phase of the investigation before we can definitively ascertain the impact of the subject imports on the industry as a whole. For example, it is of great significance to us that the data for the industry as a whole ***.[30] In particular, ***.[31] The ***.[32]

Thus, while we render our determination based on ***, additional examination of the factors affecting these data might provide evidence that such a ***. Indeed, it is noteworthy that the subject imports appear to currently be concentrated in the industrial grade segment of the market. *** [33] ***.[34]

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[24] CR and PR at Tables V-1-V-6. Average unit values for subject imports declined throughout the period of investigation. CR and PR at App. C, Table C-1. There is no suggestion in the record that the product mix of subject imports changed over this period.

[25] CR and PR at Tables V-1-V-6. A close examination of the reported prices for the only product for which the subject imports oversold the domestic product reveals underselling for all possible comparisons on sales to distributors, which represented roughly 28 percent of the volume of reported domestic sales of that product. *See* tables prepared by staff economist in response to Commissioners' request for additional information.

[26] CR at II-2-II-3 and PR at II-1-II-2. Respondents even suggest that there was a shortage in the market in 1999 due to the high capacity utilization of the domestic industry. CR and PR at II-2.

[27] Respondents assert that falling U.S. prices were the result of the "normalization" of the domestic market after termination of the price-fixing carried out by two domestic producers that lasted from 1991 to 1995. Ashland's Postconference Brief at 16-18.

[28] CR at V-2-V-3 and PR at V-1-V-2.

[29] Suramerica de Aleaciones Laminadas, C.A. v. United States, 44 F.3d 978 (Fed. Cir. 1994).

[30] CR and PR at Table VI-2.

[31] *Id.*

[32] CR at VI-5 and Tables VI-2 and VI-3 and PR at VI-2 and Tables VI-2 and VI-3.

[33] Petitioners' Postconference Brief at App. 1.

[34] Petitioners' Postconference Brief, App. 1, CR and PR at Table VI-2. We recognize that the data for ***.

Moreover, other performance indicators show mixed results, with some of the most important indicators declining. Production, shipments, and capacity utilization all declined in interim 1999[35], while inventories as a percent of production rose and employment was flat.[36]

Finally, with respect to other demonstrable adverse trends that indicate the probability of material injury,[37] petitioners alleged that, as of September 1999, the Chinese Government increased the amount of an internal value-added tax that is rebated to exporters of citric acid and sodium citrate from 9 percent to 15 percent of the sales price.[38] No respondent denied existence of this rebate increase. While we do not address whether such a rebate constitutes a subsidy for countervailing duty purposes, a rebate could increase the incentive or ability of Chinese producers or exporters to export their citric acid and sodium citrate. We would explore the nature of any rebate and its likely effects in a final investigation.[39]

Therefore, given the likely substantial increase in subject import volume and likely price suppression or depression resulting from subject imports, we find that material injury "would occur unless an order is issued or a suspension agreement is accepted." For the foregoing reasons, we determine that there is a reasonable indication that the domestic industry producing citric acid and sodium citrate is threatened with material injury by reason of the subject imports from China.

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[35] CR and PR at Tables III-2 and III-3.

[36] CR and PR at Tables III-4 and III-5.

[37] 19 U.S.C. § 1677(7)(F)(i)(IX).

[38] Petitioners' Postconference Brief at 39.

[39] With respect to actual or potential negative effects on development and product efforts, including efforts to develop a derivative or more advanced version of the domestic like product, we note that all three domestic producers have indicated that increased imports from China will hinder their ability to undertake future expansions. CR and PR at E-3. *See* 19 U.S.C. 1677(7)(F)(I)(VIII).

PART I: INTRODUCTION

BACKGROUND

This investigation results from a petition filed by Archer Daniels Midland Co. (ADM), Decatur, IL; Cargill, Inc. (Cargill), Naperville, IL; and Tate & Lyle Citric Acid, Inc. (Tate & Lyle), Decatur, IL, on December 15, 1999, alleging that an industry in the United States is threatened with material injury by reason of less-than-fair-value (LTFV) imports of citric acid and sodium citrate[1] from the People's Republic of China (China). Information relating to the background of the investigation is provided below.[2]

Date	*Action*
December 15, 1999 .	Petition filed with Commerce and the Commission; institution of Commission investigation (64 FR 71831, December 22, 1999)
January 5, 2000	Commission's conference[3]
January 11, 2000 ...	Commerce's notice of initiation (65 FR 1588)
January 31, 2000 ...	Commission's vote
January 31, 2000 ...	Commission's determination transmitted to Commerce
February 7, 2000 ...	Commission's views transmitted to Commerce

ALLEGATIONS OF LTFV SALES

Petitioners calculated (1) a normal, or "fair," value of the Chinese product on the basis of the cost of production in India and (2) its actual value, or export price, on the basis of brokers' offers for sale of solutions of Chinese-origin product, adjusted for distribution mark-up, solution expense, U.S. Customs, and various transportation and processing expenses. The petitioners' estimated dumping margins based on comparison of normal value with export price and as adjusted by the U.S. Department of Commerce (Commerce), range from 211.58 to 307.79 percent. Neither citric acid nor sodium citrate has been the subject of any previous Commission investigation.

SUMMARY DATA

A summary of data collected in the investigation is presented in appendix C, tables C-1 (citric acid and sodium citrate), C-2 (citric acid alone), and C-3 (sodium citrate alone). U.S. industry data are based on questionnaire responses of the petitioners, which accounted for all known U.S. production of

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[1] According to the Department of Commerce, the product covered in this investigation includes all grades and granulation sizes of citric acid and sodium citrate in any type of packaging and in either dry form or any solution, including, but not limited to, solutions of water, alcohol, and ether. The scope of the investigation includes the hydrous and anhydrous forms of citric acid and the dihydrate and anhydrous forms of sodium citrate, otherwise known as citric acid sodium salt. Sodium citrate includes both trisodium citrate and monosodium citrate, which are also known as citric acid trisodium salt and citric acid monosodium salt, respectively. Citric acid is provided for in Harmonized Tariff Schedule of the United States (HTS) subheading 2918.14.00 with a normal trade relations tariff rate of 6 percent *ad valorem*, applicable to imports from China. Sodium citrate is provided for in HTS subheading 2918.15.10 with a normal trade relations tariff rate of 6.5 percent *ad valorem*, applicable to imports from China.

[2] *Federal Register* notices cited in the tabulation are presented in app. A.

[3] A list of witnesses appearing at the conference is presented in app. B.

citric acid and sodium citrate during the period for which data were collected (January 1996-September 1999). Data for U.S. imports are based on official Commerce import statistics.

THE PRODUCT

The imported products subject to this investigation are citric acid and sodium citrate.[4] The following sections present information on both imported and domestically produced citric acid and sodium citrate, as well as information related to the Commission's "domestic like product" determination, including separate data on potassium citrate when available.[5]

Physical Characteristics and Uses

Citric acid is produced as a white granular or crystalline powder by the fermentation of crude sugar solutions, molasses, or lemon, lime, or pineapple juices. It has a strong acid taste and is produced both in anhydrous form and as a monohydrate.[6] Both forms are isolated and purified through successive recrystallizations.

Sodium citrate is also a white, granular, crystalline powder with a pleasant acid taste. Sodium citrate is isolated from citric acid fermentation mixtures by a slight modification to the process for making citric acid. Sodium citrate is also produced as a solution by mixing citric acid with an appropriate amount of caustic soda (sodium hydroxide) solution.

Potassium citrate is a white, granular or crystalline powder and has a cooling saline taste. It is deliquescent, absorbing water on exposure to air and forming a liquid. Potassium citrate is usually produced directly by reacting potassium carbonate with citric acid. The predominant end use for potassium citrate is in medicine, laboratory research, and a stabilizer in some foods.[7]

Citric acid is used in the food and beverage industry as an acidulant, preservative, and flavor enhancer because of its tart flavor, high solubility, acidity, and buffering capabilities. The predominant end use for citric acid in foods is in carbonated and non-carbonated drinks. Citric acid and sodium citrate are used in the production and formulation of a wide variety of commercial and household products, including detergents, metal cleaners, textile finishing treatments, pharmaceuticals, cosmetics, and other industrial applications.

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[4] As defined previously in the Background section. Questionnaires in this investigation requested quantities of citric acid in dry pounds (anhydrous equivalent basis) and sodium citrate in dry pounds (dihydrate equivalent basis). For purposes of this report, unless otherwise specified, "pounds" is understood to be dry pounds.

[5] The Commission's decision regarding the appropriate domestic products that are "like" the subject imported products is based on a number of factors including (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and where appropriate, (6) price. Petitioners argue, based on the factors that the Commission considers in analyzing like-product issues, that citric acid and sodium citrate are a single like product. They argue that the two products are physically similar, have the same or similar end uses and are made using common facilities, processes, and workers. They maintain that the two products are interchangeable once the purchaser has developed a particular product's formulation.

Chinese respondents and importer Wego Chemical and Mineral (Wego) argue that citric acid and sodium citrate are separate like products because they are not interchangeable, and have different characteristics, uses, production facilities, channels of distribution, and customers.

Importer Ashland Chemicals Inc. (Ashland) does not contest petitioners' classification of citric acid and sodium citrate as a single like product for the purposes of this preliminary investigation; however, Ashland reserves the right to comment on this issue in the event that the investigation continues to a final phase.

[6] The hydrous form, more commonly known as citric acid monohydrate, while dry, contains an additional molecule of water, adding approximately 10 percent to the volume. The term "anhydrous" means that the chemical contains no affiliated water in the molecule.

[7] Data for potassium citrate is contained in app. C, table C-6.

Both petitioners and respondents state that citric acid and sodium citrate are produced to meet very high purity standards of the United States Pharmacopeia (USP), Food Chemicals Codex (FCC), or the British Pharmacopeia (BP). Cargill, a domestic producer, states that most of the world-class producers try to produce the best quality product so that it will pass USP or FCC standards.[8] Further, Cargill states that its largest customers are in the food and beverage business, and require the highest quality standards.[9] Ashland, a respondent, states that in addition to high purity standards, other quality factors in the product such as contamination, taste, color, sediment, solubility, particle size and consistency, and clumping play an important role in the sale of their product.[10] These factors, in addition to the food-grade standards (such as the FCC standard) mentioned above, apparently determine in what market segment the subject product will be used. In the conference, both petitioners and respondents referred to quality tiers in the end-use markets for citric acid and sodium citrate.[11] End uses in foods, beverages, and pharmaceuticals constitute an upper tier, while detergent formulations and industrial uses make up a lower tier.

There are virtually no substitutes for citric acid and sodium citrate. Citric acid and sodium citrate currently serve as a substitute for phosphate compounds in laundry detergents and cleaners.[12] In food and beverage end uses, where citric acid and sodium citrate are used as acidulants and/or preservatives, a number of other chemical products have been identified, although none individually possess the same desired characteristics, low cost, and widespread availability.[13]

Manufacturing Facilities and Production Employees

Citric acid is produced by the fermentation of sugars by molds or yeasts. Sodium citrate is produced using the same fermentation process as that for citric acid, with the exception that sodium citrate is isolated as a last step. Sodium citrate can also be produced from citric acid after it has been isolated and purified from the fermentation mixture by reacting it with sodium hydroxide solution.[14]

According to responses to the Commission's questionnaires, all three domestic producers use the same equipment and workers to produce both citric acid and sodium citrate;[15] two of the domestic producers reported production of nonsubject potassium citrate using the same equipment and workers that are used for citric acid and sodium citrate.[16] One producer reported production of *** using the same equipment and workers.[17]

Modern large-scale production of citric acid is achieved through fermentation.[18] The fermentation process involves the action of specific strains of organisms such as Aspergillus niger or

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[8] William Gruber of Cargill, conference transcript, p. 62.

[9] William Gruber of Cargill, conference transcript, p. 24.

[10] Dale MacDonald of Ashland, conference transcript, p. 95.

[11] William Gruber of Cargill, conference transcript, p. 58; Dale MacDonald of Ashland, conference transcript, pp. 92, 94; Bert Echaghpour of Wego Chemical and Mineral Corp., conference transcript, p. 119; and Walter Wang of BBCA (USA) Inc., conference transcript, p. 123.

[12] Petition, p. 6.

[13] William Gruber of Cargill, conference transcript, p. 61.

[14] Potassium citrate may be produce by alternatively using potassium hydroxide solution instead of sodium hydroxide.

[15] Tate & Lyle does not produce sodium citrate; however, Haarmann & Reimer, whose citric operations were purchased by Tate & Lyle, did produce both citric acid and sodium citrate at its Elkhart, IN, plant until its closure at the end of 1998.

[16] Commission producer questionnaires, part II-3.

[17] Commission producer questionnaires, part II-3.

[18] "Citric acid," Kirk-Othmer Encyclopedia of Chemical Technology (John Wiley & Sons, New York, 1979), vol. 6, pp. 156-159.

Candida lipolytica upon a biologically compatible (i.e., life-sustaining) substrate. The substrate contains glucose or other suitable sugars that are transformed into citric acid by the organism. The yield of citric acid can be optimized through the careful control of fermentation conditions, such as temperature, acidity or alkalinity, dissolved air or oxygen, and the rate of stirring of the mixture. Each reaction is done in batch in large tanks which hold several thousand gallons; it takes approximately 5 to 14 days to achieve an economical production of citric acid.

Citric acid was originally produced using a "shallow pan" or "surface process" technology, where microbial fermentation occurred on the surface of the liquid. Modern production of citric acid uses a "deep tank" or a "submerged culture" process, where the reaction is constantly agitated or stirred with air in order to allow the organism to grow throughout the mixture. According to petitioners, only the deep tank method is used domestically.[19] The submerged culture process is favored due to the economics of increased yields, although reaction conditions must be more tightly controlled.[20] Chinese manufacturers use the surface culture method to some extent.[21]

There are differences in the substrates used in the production of imported and domestic citric acid. Domestically, the principal substrates used are corn starch, dextrose, and molasses.[22] Chinese citric acid principally uses corn, cassava, or sweet potato.[23] Peter Boynton of Tate & Lyle stated that cane sugar is used at their manufacturing facilities in Colombia and Brazil, adding that ". . . anything that these bugs will eat we'll try to use."[24]

Citric acid is isolated from the reaction mixture by treatment with calcium hydroxide, which precipitates calcium citrate as a salt and also removes oxalic acid, an unwanted by-product. After the calcium citrate is separated by filtration, it is washed to remove soluble impurities. The citrate is then mixed with sulphuric acid to produce citric acid, which is purified through successive crystallizations. At this stage in the production process, citric acid may be (1) dried, screened, and packaged, (2) shipped in solution form, or (3) mixed with sodium hydroxide or potassium hydroxide to produce sodium citrate or potassium citrate, respectively, and then isolated as a powder or shipped in solution form. Small quantities are packaged in paper and polyethylene-layered bags holding 50 to 100 pounds, whereas larger quantities may be packaged in drums (200 to 275 pounds), "super sacks" (500 to 2,000 pounds), or rail cars.[25]

Sodium citrate is also produced by some distributors that are known as "converters." Converters can either provide citric acid as purchased from the manufacturer, or have the equipment on hand to blend sodium hydroxide and citric acid as a solution, thus producing sodium citrate solution.[26] The labor involved in the conversion of citric acid to solution sodium citrate is said to be minimal, and is normally carried out by warehouse workers.[27]

Interchangeability

According to responses to Commission questionnaires, the three U.S. producers agree that U.S.-produced and imported citric acid and sodium citrate are used interchangeably in all tiers of the U.S. end-

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[19] Petition, p. 7.

[20] "Citric acid," Kirk-Othmer Encyclopedia of Chemical Technology (John Wiley & Sons, New York, 1979), vol. 6, pp. 156-157.

[21] Petition, p. 7.

[22] Peter Boynton of Tate & Lyle, William Gruber of Cargill, and Thomas Fox of ADM, conference transcript, pp. 58-59.

[23] Petition, p. 7.

[24] Conference transcript, p. 59.

[25] Petition, p. 9.

[26] William Gruber of Cargill, conference transcript, p. 42.

[27] William Gruber of Cargill, conference transcript, p. 44.

use market. Additionally, ADM states that China traditionally provided material to the lower-tier industrial market, but currently competes in all market segments.[28] Cargill, whose customer base is in the upper-tier food and beverage segment, also states that until recently Chinese product could not meet specifications and would never be considered by the food and beverage segment.[29] Tate & Lyle states that the major food and beverage end users have qualified or are currently qualifying Chinese suppliers for purchase.[30]

Respondents contend that domestic and imported products are not interchangeable, at least not in the higher tiers of the U.S. market. Ashland, a distributor of citric acid and sodium citrate, states that the general perception in the marketplace is that the Chinese material is of inferior quality.[31] Ashland estimates that of the 100 to 150 largest domestic consumers of food grade citric acid, which together account for almost 75 percent of the U.S. market, almost none are willing to consider the Chinese material. They further state that it would be as long as 2 to 3 years or more before the quality of Chinese product becomes acceptable to the broad, higher tier of the U.S. market.[32] Wego, another distributor, reports similar problems in marketing Chinese material.[33]

Respondents acknowledge that some interchangeability exists between domestic and imported product at the industrial-use level, however. Procter & Gamble (P&G), a very large industrial user of all forms of citric acid, states that it had begun testing small quantities of Chinese material in 1997 and 1998, and then began purchasing imported material in commercial quantities in 1999 for its detergents business.[34] P&G continues to purchase Chinese material, citing domestic shortages.[35] However, P&G found that not all Chinese material passed quality testing in the lower-tier laundry detergent and home cleaner segment. Material from two different Chinese firms failed qualifications for use in P&G products.[36]

Petitioners and respondents agree that citric acid and sodium citrate are not completely interchangeable in specific formulations. Cargill states that end users design product formulations around the use of citric acid or sodium citrate only.[37] P&G states that because of potential changes in the physical characteristics of its laundry detergent formulations, it does not see citric acid and sodium citrate as interchangeable.[38]

Domestic producers state that anhydrous citric acid and citric acid monohydrate are used interchangeably in most instances. ***.[39]

Customer and Producer Perceptions

Petitioners state that citric acid and sodium citrate are perceived to be commodity products.[40] Further, ADM stated that because of this perception, citric acid and sodium citrate are sensitive to

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[28] Tom Fox of ADM, conference transcript, p. 16.

[29] William Gruber of Cargill, conference transcript, p. 24.

[30] Peter Boynton of Tate & Lyle, conference transcript, p. 31.

[31] Dale MacDonald of Ashland, conference transcript, p. 94.

[32] Dale MacDonald of Ashland, conference transcript, p. 94.

[33] Bert Echaghpour of Wego Chemical and Mineral, conference transcript, pp. 113-115.

[34] David Zint of P&G, conference transcript, pp. 74, 77, 84-85.

[35] David Zint of P&G, conference transcript, pp. 78-79.

[36] David Zint of P&G, conference transcript, p. 82.

[37] William Gruber of Cargill, conference transcript, p. 23.

[38] David Zint of P&G, conference transcript, p. 85.

[39] Commission producer questionnaires, part IV-B-18.

[40] Petition, p. 4; and Thomas Fox of ADM, conference transcript, pp. 15-17.

downward pricing pressure[41] and that there are expectations that customers will be offered the same price as that for the Chinese product.[42]

Channels of Distribution

Petitioners state that citric acid and sodium citrate are sold through the same channels of distribution. Both domestic and foreign producers sell citric acid and sodium citrate to U.S. end users either directly or through distributors and brokers.[43] Approximately 70 percent of all citric acid and sodium citrate sold in the United States is sold to about 10 to 15 end users, typically through fixed-price, fixed-term contracts.[44] Table I-1 shows the channels of distribution for U.S. producers and importers of citric acid and sodium citrate.

Table I-1
Citric acid and sodium citrate: Shares of U.S. producers' and U.S. importers' U.S. shipments to distributors and end users, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
			U.S. producers [1]		
Distributors	***	***	***	***	***
End users	***	***	***	***	***
			U.S. importers [2]		
Distributors	82.3	86.8	79.4	79.1	64.5
End users	17.7	13.2	20.6	20.9	35.5

[1] Data are for ***. Data are not available separately for citric acid and sodium citrate for U.S. producers.
[2] Within a few percentage points, shares of importers' U.S. shipments of citric acid and sodium citrate, separately, mirror shares shown for all periods except January-September 1999. In that period, shares of U.S. importers' shipments of citric acid to distributors were 68.6 percent, and their shares of sodium citrate to distributors were 34.8 percent.

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

Price

Unit values for U.S. producers' U.S. commercial shipments of citric acid were $0.68 per pound in 1996, $0.64 in 1997, $0.62 in 1998, and $0.60 in interim 1999. Unit values for imports of Chinese citric acid were $0.60 in 1996, $0.55 in 1997, $0.52 in 1998, and $0.50 in interim 1999. Unit values for U.S. commercial shipments of sodium citrate were $0.73 in 1996, $0.69 in 1997, $0.67 in 1998, and $0.65 in interim 1999. Unit values for imports of Chinese sodium citrate were $0.50 in 1996 and 1997, $0.44 in 1998, and $0.46 in interim 1999. More detail on pricing of specific citric acid and sodium citrate products is provided in Part V of this report.

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[41] Thomas Fox of ADM, conference transcript, p. 17.

[42] Peter Boynton of Tate & Lyle, conference transcript, pp. 30-31.

[43] Petition, p. 9.

[44] Petition, p. 9.

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

U.S. MARKET SEGMENTS/CHANNELS OF DISTRIBUTION

Citric acid and sodium citrate are commodity chemicals that are used in making various types of products including fabric and home care products, paper products, food and beverage products, and health care and beauty care products. Sales in the U.S. market of both domestic and foreign citric acid and sodium citrate can go directly to end users or through distributors and brokers. Distributors generally buy in large quantities and then resell to end users.

Data reported by U.S. producers indicate that *** percent of their domestic shipments went to end users and the remainder went to distributors. Data from importers indicate that a much smaller fraction of their domestic shipments, about 10-35 percent, went to end users, while the remainder went to distributors.

Respondents claim that market segmentation exists based on the varying importance of quality to different segments of the downstream market for citric acid and sodium citrate. There seems to be a differentiation between pharmaceutical grade, food grade, and industrial grade citric acid and sodium citrate, and products used in these different applications are not fully interchangeable. A domestic purchaser stated that for pharmaceutical uses, it only buys from domestic approved suppliers whose facilities they can easily audit.[1] A number of pharmaceutical and food-producing companies reported that Chinese citric acid does not meet their quality standards, and that it is only suitable for industrial grade applications. For instance, P&G does not use any citric acid from China in any ingestible P&G products.[2]

SUPPLY AND DEMAND CONSIDERATIONS

U.S. Supply

Domestic Production

Based on available information, U.S. producers of citric acid and sodium citrate are likely to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced citric acid and sodium citrate to the U.S. market. High levels of capacity utilization may limit the degree of responsiveness of supply. However, relatively large inventories, alternative markets, and production alternatives can offer domestic producers more room to maneuver and increase the degree of responsiveness in the short term.

Industry capacity

Data reported by U.S. producers indicate that the domestic industry's capacity for producing citric acid stood at around 474 million pounds in 1998. The corresponding figure for sodium citrate was 69 million pounds. In 1997, ***.[3] Tate & Lyle stated that after its purchase of the Haarmann & Reimer citric operations, the production facilities in Elkhart, IN, were closed down in December 1998, which

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[1] Conversation with *** on January 14, 2000. Petitioners stated that pharmaceutical uses account for a small (single digit) and declining share of the U.S. market for citric acid and sodium citrate (William Gruber of Cargill, conference transcript, p. 67).

[2] David Zint of P&G, conference transcript, p. 75.

[3] ***'s producer questionnaire response, p. 3.

reduced overall industrial capacity by *** pounds. Tate & Lyle then moved the production equipment from Elkhart to its Dayton, OH, plant, effectively doubling its capacity.[4]

Respondents state that there was a shortage of domestic supply in 1999 and that domestic producers did not have the capacity to satisfy demand, which required purchasers to seek new foreign, including Chinese, suppliers.[5]

Data from the three petitioners indicate that overall domestic capacity utilization is high. In 1998, the production/capacity ratio was about 96 percent for citric acid and 82 percent for sodium citrate. Hence, there seems to be little room to significantly expand production without major capital expenditures. *** claims that the low selling price of Chinese products will reduce sales and income, which will limit capital available for planned future expansions.

Alternative markets

All three U.S. producers export some of their output. At the conference, petitioners characterized the general pattern of exports from the United States as being limited.[6] However, their questionnaire responses reveal that in 1998 they exported 12 percent of their production of citric acid, and 18 percent of their production of sodium citrate. The destinations of these exports were Canada, Mexico, Australia, Japan, the Philippines, and South America.

Inventory levels

Inventory levels of citric acid held by U.S. producers increased from about 8 percent of total shipments in 1996 to 17 percent in 1998. The ratio of inventories of sodium citrate to total shipments likewise increased from 24 percent to 37 percent between 1996 and 1998.[7] In their post-conference brief, petitioners indicated that they ***.[8]

Production alternatives

Of the three petitioners, two, ADM and Cargill, produce potassium citrate and/or *** on the same equipment and machinery as well as using the same production and related workers that are used in the production of citric acid and sodium citrate.

Subject Imports

Based on available information, the Chinese producers are likely to respond to changes in demand with large changes in the quantity of shipments of citric acid and sodium citrate to the U.S. market. The main contributing factors to the high degree of responsiveness of supply are the availability

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[4] Peter Boynton of Tate & Lyle, conference transcript, p. 29; Tate & Lyle's producers' questionnaire response.

[5] David Zint of P&G, conference transcript, pp. 78-81. (P&G reports that it made the strategic and tactical decision to pursue material from outside of the United States primarily to protect its supply of citric acid and secondarily to prepare for future initiatives (which will introduce significant, new, incremental citric acid demand)). See also Ashland's post-conference brief, p. 14; letter from *** dated January 10, 2000; and ***'s questionnaire response, p. 31. *** said, in a January 14, 2000, conversation, that his company purchases Chinese product in order to minimize risk by diversifying their source of citric acid.

[6] Warren Connelly, petitioners' counsel, conference transcript, p. 56.

[7] Note, however, that for each product in interim 1999 the ratio had decreased to at or below the 1997 level.

[8] Petitioners' post-conference brief, app. 1, p. 2.

of unused capacity and the planned expansion of Chinese companies. Petitioners estimate Chinese productive capacity for citric acid at 400,000 metric tons annually.[9] They also report that many Chinese companies have announced plans to build new plants or expand existing ones. Respondents reject these estimates as exaggerated. They estimate the capacity of the five potential Chinese exporters to the United States at around 75,000 metric tons.[10] The petitioners also indicate that the total output of Chinese citric acid producers exceeds 200,000 metric tons annually -- hence, the capacity utilization rate is over 50 percent. P&G argues that there is no evidence that the unused capacities belong to producers that exported or are qualified to export to the United States.[11]

U.S. Demand

Demand Characteristics

U.S. food and beverage manufacturers account for as much as two-thirds of the total demand for citric acid in the United States.[12] The three petitioners reported that the overall demand for citric acid and sodium citrate in the United States has increased 3-6 percent annually during the last several years. Demand for final goods using these products directly affect firms' demand for them. Hence, it can be expected that overall demand for citric acid and sodium citrate would fluctuate with the sectoral business cycles for the different end-use industries. One producer, ***, reported that seasonal factors for beverages and new detergent applications are the principal growth drivers. They also reported that demand has increased at a higher rate for beverages, an average rate for food and pharmaceutical uses, and a slower than average rate for detergents.

*** indicated that brand growth increased its demand for citric acid from *** pounds to *** pounds between 1996 and 1998. Its demand for sodium citrate also increased from *** pounds to *** pounds. ***'s volume of production declined during the period of investigation and this has directly affected its demand for citric acid.

*** reported that overall finished product demand has increased every year since 1996. Also, as citric acid pricing began to decline following the various price fixing actions in 1996 and 1997, *** became increasingly more interested in using citric acid. ***'s citric acid demand has outpaced the overall market demand for citric acid. ***'s total demand for citric acid in the United States increased from *** pounds in 1996 to an estimated *** pounds in 1999.

The type of competition in each of the downstream or end-user sectors might also affect the demand for a particular grade of citric acid. For instance, one purchaser argued that it has had to buy Chinese citric acid because its competitors are buying Chinese product and if it did not buy the less expensive Chinese citric acid, it would be driven out of business.[13]

Substitute Products

There is no one product that can substitute across the board for either citric acid or sodium citrate. *** stated that substitution would require product reformulation and generally would not be done

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[9] Petitioners' post-conference brief, p. 19.

[10] Ashland's post-conference brief, p. 36, states that the total capacity for the five potential exporters is 164 million pounds, which equates to 75,000 metric tons; however, the brief also states that the amount in metric tons is 83,000.

[11] P&G's post-conference brief, pp. 12-13.

[12] P&G's post-conference brief, p. 13.

[13] Conversation with *** on January 14, 2000.

for a short period of time. *** reported that malic, fumaric, and tartaric acids may be substituted in limited circumstances in food uses (but might result in minor flavor changes) and phosphates or other non-citric acids can be substituted in detergent builders. *** reported that to substitute products for citric acid would require fairly significant R&D resources to create new formulations and possibly new production processes to execute these new formulas. *** states that any substitution will require it to conduct significant amounts of taste tests for formula changes.

Cost Share

The cost share of citric acid and sodium citrate in end products depends on the specific application as well as the production technology employed, but it is generally 6 percent or less of total costs. *** reported that citric acid accounted for *** percent of the total costs of producing soft drink mixes, and *** percent of the cost of making processed cheese. For ***, the cost shares of citric acid and sodium citrate are *** percent for fabric and home care products, *** percent for paper products, *** percent for food and beverage products, *** percent for health care products, and *** percent for beauty care products.

Because citric acid and sodium citrate account for a small proportion of the total costs of the end use products in which they are used, substitutability with other products is limited in the short run. Hence, changes in the prices of citric acid and sodium citrate are likely to result in relatively small changes in the quantity demanded.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported citric acid and sodium citrate depends on such factors as relative prices, quality (e.g., granulation, consistency, reliability of supply), and conditions of sale (e.g., long term contract). Based on available information, staff believes that there is a moderate degree of substitution between domestic and Chinese citric acid and sodium citrate.

Factors Affecting Purchasing Decisions

While price is an important factor in the sale of citric acid and sodium citrate, other factors, such as quality, may be equally, if not more, important considerations.[14] Table II-1 summarizes seven purchasers' responses concerning the top three factors that they consider in their citric acid and sodium citrate purchase decisions. As indicated in the table, four out of seven purchasers indicated that quality was their number one factor. Only two out of seven chose price as their number one factor. However, price was named by all seven as one of the top three purchase factors, whereas only six named quality as one of the top three purchase factors.

Table II-2 shows how purchasers rate different factors in terms of their importance in purchase decisions for citric acid and sodium citrate. Five out of six purchasers consider availability, product quality, and reliability of supply to be "very important," while only three out of six consider "lowest price" to be "very important." Factors cited as not being important are discounts offered, minimum quantity requirements, and product range.

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[14] One producer, ***, reported in its questionnaire response that "marketing of these products has become price-focused. We no longer can compete on non-price factors, such as product service, technical help, order lead time, and special granulations."

Table II-1
Citric acid and sodium citrate: Ranking of factors used in purchasing decisions as reported by U.S. purchasers

Factor	Quality	Availability	Service	Price	Prearranged Contract
Number 1	4	-	-	2	1
Number 2	2	2	2	1	-
Number 3		1	1	5	-

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

Table II-2
Citric acid and sodium citrate: Rating of factors used in purchasing decisions as reported by U.S. purchasers

Factor	Very important	Somewhat important	Not important
Availability	5	1	-
Delivery terms	3	3	-
Delivery time	4	2	-
Discount offered	3	2	1
Lowest price	3	3	-
Minimum quantity requirements	2	-	3
Packaging	3	3	-
Product consistency	4	2	-
Product quality	5	1	-
Product range	2	2	2
Reliability of supply	5	1	-
Technical support/service	2	4	-
Transportation network	2	4	-
U.S. transportation costs	2	4	-

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

Comparisons of Domestic Products and Subject Imports

Table II-3 summarizes the comparisons between U.S. and Chinese citric acid and sodium citrate as perceived by U.S. purchasers. A couple of purchasers buy only from U.S. sources so they could not make the comparisons. In six factors (delivery time, consistency, quality, reliability of supply, support/service, and transportation network), three or more purchasers found the U.S. product to be superior. Only in price did three or more purchasers find the Chinese product to be superior.

Table II-3
Citric acid and sodium citrate: Comparisons between U.S. and Chinese citric acid and sodium citrate by U.S. purchasers

Factor	U.S. superior	Comparable	U.S. inferior
Availability	-	5	1
Delivery terms	1	4	-
Delivery time	4	1	-
Discount offered	-	4	1
Lowest price	1	2	3
Minimum quantity requirements	1	4	-
Packaging	-	5	-
Product consistency	3	2	-
Product quality	3	2	-
Product range	1	4	-
Reliability of supply	3	2	-
Technical support/service	3	1	1
Transportation network	3	2	-
U.S. transportation costs	-	4	-

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

One highly debated point throughout the questionnaire responses as well as in the different briefs is whether Chinese and U.S. citric acid and sodium citrate can be used interchangeably. Petitioners argue that Chinese products are increasingly interchangeable with the domestic like product. They illustrate this by "the fact that numerous U.S. food and beverage producers have either approved Chinese citric for use in their products or are intending to do so."[15] On the other hand, testimony at the conference suggests that few Chinese producers are capable of meeting U.S. quality standards even for non-food

[15] Petitioners' post-conference brief, p. 8.

grade citric acid.[16] As was mentioned before, a number of pharmaceutical and food-producing companies reported that Chinese citric acid does not meet their quality standards, and that it is only suitable for industrial grade applications. Draft Root Beer reported that it has "tried Chinese citric acid from different sources and found it unusable because of clumping, difficulty in dissolving and not remaining as soluble as the citric acid manufactured in the U.S. and by a company called JBL from Europe."[17] P&G does not use any citric acid from China in any ingestible P&G products.[18]

Comparisons of Domestic Products and Nonsubject Imports

From questionnaire responses, the domestic purchasers who could make comparisons consider U.S. and European citric acid and sodium citrate to be comparable in most respects. Only in delivery time did the U.S. product seem to have a perceived superiority by the responding purchasers. Similarly, citric acid and sodium citrate from Israel are comparable to U.S. products in most respects. For example, *** reported that it shifted to an Israeli source when it was demonstrated that Israel could supply a quality product meeting ***'s service requirements at a competitive price. *** also indicated that Israeli product had excellent quality and service and competitive pricing.

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[16] Dale MacDonald of Ashland, conference transcript, pp. 94-95; Bert Echaghpour of Wego, conference transcript, pp. 114-115; and Walter Wang of BBCA (USA), conference transcript, pp. 124-125.

[17] Letter by Clay Long (Draft Root Beer, Inc.) dated January 3, 2000. See also letter by John Wagner (Universal Flavors) dated January 3, 2000, letter by Brooke Hogan (First Food Co., Inc.) received January 5, 2000, and letter by Mark A. Schaefer (Northwestern Foods, Inc.) dated January 3, 2000. On January 6, 2000, ***.

[18] David Zint of P&G, conference transcript, p. 75.

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the alleged margin of dumping was presented earlier in this report and information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V. Information on the other factors specified is presented in this section and/or Part VI and (except as noted) is based on the questionnaire responses of three firms that accounted for 100 percent of U.S. production of citric acid and sodium citrate during 1998.

U.S. PRODUCERS

The three firms making up the domestic industry producing citric acid and sodium citrate are shown in table III-1.[1] All three firms are petitioners. ADM and Cargill produce both citric acid and sodium citrate, while Tate & Lyle[2] produces only citric acid.[3] [4]

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[1] The Commission is aware that U.S. companies other than the petitioners purchase citric acid and convert it into sodium citrate in solution for sale to the processed cheese industry. Petitioners argue that these "converters" are not domestic producers because the process they use to convert citric acid to sodium citrate is simple and inexpensive. Petitioners maintain that the capital requirements and conversion costs incurred by these firms are minimal, little technical expertise is used, and minimal value is added. Petitioners note that if converters are found by the Commission to be part of the domestic industry, the Commission should exercise its discretion to exclude the converters since they are known to frequently consume Chinese citric acid and, therefore, do not share the interests of the three large domestic producers. The Commission sent producer questionnaires to the four known converters and received a questionnaire response from one of those firms.

[2] Tate & Lyle acquired the worldwide citric acid business of Haarmann & Reimer Co. as of July 1, 1998. As part of the transaction, Tate & Lyle acquired the Dayton, OH, citric acid production facility and four foreign operations in Brazil, Colombia, Mexico, and England. Haarmann & Reimer retained ownership of its Elkhart, IN, citric acid production facility and produced citric acid and sodium citrate for Tate & Lyle for the period of July 1, 1998, to December 31, 1998, at which time the Elkhart plant was shut down. The citric acid production equipment and inventories located in Haarmann & Reimer's Elkhart facility were acquired by Tate & Lyle and moved to Dayton. Although the Elkhart plant produced sodium citrate, the Dayton plant does not. Another Tate & Lyle company, A.E. Staley Manufacturing Co., operates the Tate & Lyle facilities and sells its citric products.

[3] ADM and Haarmann & Reimer pled guilty in October 1996 and January 1997, respectively, to participation, along with two European producers, in a price-fixing scheme which the U.S. Justice Department found to be in place as early as 1991. These indictments on criminal charges resulted in total fines of $100 million for the four firms. (Matthew Lerner, "Citric Acid Competitive in Wake of Big Changes," *Chemical Market Reporter*, New York, March 17, 1997.) ADM's and Haarmann & Reimer's shares were $30 million and $50 million, respectively. (P&G post-conference brief, p. 2 and exhibit 1. Petition, exhibit 2.) Several U.S. civil class action law suits were filed in 1996 and 1997 in which ADM agreed to pay $85 million and Haarmann & Reimer agreed to pay $46 million to bottlers and food processors. ("Companies Settle Price Fixing Suit Over Citric Acid," *Chemical Market Reporter*, New York, December 16, 1996.) In all, fines paid out on the cases totaled over $200 million. (William Silverman, Ashland's counsel, conference transcript, p. 151. Petition, exhibit 2.) Haarmann & Reimer put its citric acid and sodium citrate business on the market in 1997, and it was bought a year later by Tate & Lyle.

[4] All three firms also produce potassium citrate. ADM and Cargill produce potassium citrate on the same equipment and using the same production and related workers that they use to produce citric acid and sodium citrate. Both of these firms produce potassium citrate, as they do sodium citrate, in a continuous process. Tate & Lyle (and Haarmann & Reimer before it) produces potassium citrate at a separate facility (Duluth, MN) from its

(continued...)

Table III-1
Citric acid and sodium citrate: U.S. producers, plant locations, and shares of production in 1998

Firm	Location of production facilities	Share *(percent)* of reported production in 1998
ADM	Southport, NC	***
Cargill	Eddyville, IA	***
Tate & Lyle	Dayton, OH	***[1]

[1] Includes production by Haarmann & Reimer at its Elkhart, IN, plant for Tate & Lyle.

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

U.S. CAPACITY, PRODUCTION, AND CAPACITY UTILIZATION

During the period for which the Commission requested information in its questionnaires, January 1, 1996, through September 30, 1999, the domestic industry producing citric acid and sodium citrate underwent several changes. Cargill ***. Haarmann & Reimer's Elkhart facility was closed down in December 1998, removing approximately *** pounds of capacity from the domestic market. Tate & Lyle then doubled the capacity of its recently purchased Dayton facility, which came on stream in July 1999, to *** pounds annually. The net effect of Tate & Lyle's purchase of Haarmann & Reimer's citric operations on annual production capacity in the United States was a *** of *** pounds of citric acid (with a loss of *** pounds of sodium citrate).

Data concerning U.S. producers' citric acid and sodium citrate production capacity, production, and capacity utilization are presented in table III-2.[5] Capacity to produce citric acid grew 7.0 percent during 1996-98, but fell during the interim period of 1999. Sodium citrate capacity, however, increased 1.0 percent from 1996 to 1998 and then fell by *** percent between the interim periods. Production levels of both products grew during 1996-98 and then decreased between the two interim periods, with the production of both products, together, declining by 25.2 percent.

U.S. PRODUCERS' DOMESTIC SHIPMENTS, COMPANY TRANSFERS, AND EXPORT SHIPMENTS

U.S. producers' shipments are presented in table III-3. Quantities of commercial shipments increased at a faster rate than corresponding values due to decreasing unit values between 1996 and 1998. Unit values of commercial shipments reached their lowest point in interim period 1999, dropping 3.2 percent compared with the same period in 1998.

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[4] (...continued)
citric acid (and sodium citrate for Haarmann & Reimer) operations. Prior to the closure of its Elkhart plant, Haarmann & Reimer produced sodium citrate and citric acid on the same equipment and using the same production and related workers.

[5] Although the production of sodium citrate from citric acid is an instream process in which the citric acid is not captured or isolated, U.S. producers provided estimates of the quantities and values of citric acid used to produce sodium citrate each year during the period. Staff estimated the value of the internal consumption reported by *** based on the unit values of U.S. commercial shipments reported by the firm.

Table III-2
Citric acid and sodium citrate: U.S. producers' capacity, production, and capacity utilization, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
	Capacity (1,000 pounds)				
Citric acid (1)	442,646	472,646	473,846	355,085	***
Sodium citrate	68,536	69,232	69,204	51,603	***
	Production (1,000 pounds)				
Citric acid	387,050	439,318	455,397	341,599	***
Sodium citrate	49,487	51,756	56,543	40,576	***
Total (2)	403,993	457,086	474,778	355,499	265,808
	Capacity utilization (percent)				
Citric acid	87.4	92.9	96.1	96.2	85.1
Sodium citrate	72.2	74.8	81.7	78.6	***

(1) Includes capacity to produce citric acid used in downstream production of sodium citrate and potassium citrate.
(2) Not additive because citric acid consumed to produce sodium citrate has been removed to avoid double counting.

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

Table III-3
Citric acid and sodium citrate: U.S. producers' shipments, by type, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
	Quantity (1,000 pounds)				
Commercial shipments	340,564	358,147	366,959	288,572	259,589
Internal shipments	9,594	8,669	11,651	11,113	7,184
U.S. shipments	350,158	366,816	378,610	299,685	266,773
Export shipments	63,587	66,839	62,727	48,576	36,712
Total	413,745	433,655	441,337	348,261	303,485
	Value ($1,000)				
Commercial shipments	228,483	231,422	229,412	181,130	157,726
Internal shipments	6,361	5,293	7,035	6,638	4,005
U.S. shipments	234,844	236,715	236,447	187,768	161,731
Export shipments	38,847	37,691	35,572	27,654	21,609
Total	273,691	274,406	272,019	215,422	183,340
	Unit value (per pound)				
Commercial shipments	$0.67	$0.65	$0.63	$0.63	$0.61
Internal shipments	0.66	0.61	0.60	0.60	0.56
U.S. shipments	0.67	0.65	0.62	0.63	0.61
Export shipments	0.61	0.56	0.57	0.57	0.59
Average	0.66	0.63	0.62	0.62	0.60

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

U.S. PRODUCERS' INVENTORIES

U.S. producers' end-of-period inventories are shown in table III-4. Inventories grew steadily throughout the period between 1996 and 1998, ending the 3-year period 118 percent higher than in 1996. Inventories in the first nine months of 1999, however, were 21.0 percent lower than in the same period a year earlier.

Table III-4
Citric acid and sodium citrate: U.S. producers' end-of-period inventories, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
Inventories (1,000 pounds)	41,384	60,137	90,424	66,355	52,420
Ratio to production (percent)	10.2	13.2	19.0	14.0	14.8
Ratio to U.S. shipments (percent)	11.8	16.4	23.9	16.6	14.7
Ratio to total shipments (percent)	10.0	13.9	20.5	14.3	13.0

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

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-5 shows employment data for the U.S. industry. The number of production related workers, hours worked, and wages paid increased from 1996 to 1998; wages continued to rise between the interim periods while workers and hours worked declined. Productivity increased *** percent between 1996-98, but fell *** percent between the two interim periods. Unit labor costs *** per dry pound throughout the period, rising by *** in interim 1999.

Table III-5
Citric acid and sodium citrate: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 1996-98, January-September 1998, and January-September 1999

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

U.S. IMPORTERS

Questionnaires were sent to 43 firms believed to be importers of citric acid or sodium citrate, based on information provided by the U.S. Customs Service and information provided in the petition. In addition, importer questionnaires were sent to the eight firms that received the producer questionnaire. Twenty-three firms, including ***, provided usable importer questionnaires. ***. Sixteen of the 23 responding importers accounted for 69.9 percent (45.5 million pounds) of total imports of citric acid and sodium citrate from China (65.1 million pounds) as reported by Commerce for January-September 1999; they accounted for 49.9 percent (22.0 million pounds) of total imports of citric acid and sodium citrate from China (44.0 million pounds) as reported by Commerce for 1998. Ten firms, including ***, reported that they did not import citric acid or sodium citrate during the period. Sixteen firms failed to respond to the Commission's request for information.

U.S. IMPORTS

U.S. Department of Commerce data[1] on U.S. imports of citric acid and sodium citrate, by sources, are presented in table IV-1.[2] Chinese imports grew 74.6 percent during 1996-98, and more than doubled during January-September 1999 as compared to January-September 1998. In contrast, imports from all other sources, including Hong Kong, rose 14.5 percent during 1996-98, and increased by almost the same amount (14.9 percent) between the two interim periods.

APPARENT CONSUMPTION AND U.S. MARKET SHARES

Tables IV-2 and IV-3 show data on apparent U.S. consumption and market shares for citric acid and sodium citrate. Apparent consumption rose steadily between 1996 and 1998, rising 12.9 percent over the 3-year period. Between the interim periods of 1998 and 1999, apparent consumption increased by 2.5 percent. U.S. producers' market share based on apparent consumption quantity remained relatively steady, dropping 3.3 percentage points during 1996-98. The quantity of those shipments lost 9.9 percentage points of market share between the two interim periods.

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[1] The HTS subheadings include all forms of citric acid and sodium citrate. However, sodium citrate is believed to always be imported in the dihydrate form and the bulk of imports of citric acid are believed to be in the anhydrous form (the same equivalency in which data was requested in Commission questionnaires).

[2] Petitioners allege transshipment of Chinese citric acid through Hong Kong and South Korea because there are no citric acid producers in either of these countries. Staff confirmed the nonexistence of citric acid production in Hong Kong in telephone conversations with firms listed on the Customs Net Import file as having imported from Hong Kong. Brokers operating in Hong Kong handle some of the Chinese material that is shipped to the United States. According to official Commerce statistics, citric acid was only imported from South Korea in 1996. Staff was unable to confirm the nonexistence of South Korean citric acid production.

Table IV-1
Citric acid and sodium citrate: U.S. imports, by sources, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
			Quantity (1,000 pounds)		
China	25,215	35,838	44,023	32,216	65,092
Hong Kong (1)	251	621	171	171	953
Other sources	73,169	79,376	83,913	66,399	75,552
Total	98,636	115,836	128,106	98,785	141,597
			Value ($1,000)		
China	14,746	19,650	22,540	16,594	32,237
Hong Kong (1)	160	372	94	94	511
Other sources	51,031	53,192	55,151	43,961	47,906
Total	65,937	73,213	77,786	60,650	80,655
			Unit value (per pound)		
China	$0.58	$0.55	$0.51	$0.52	$0.50
Hong Kong (1)	0.64	0.60	0.55	0.55	0.54
Other sources	0.70	0.67	0.66	0.66	0.63
Average	0.67	0.63	0.61	0.61	0.57
			Share of quantity (percent)		
China	25.6	30.9	34.4	32.6	46.0
Hong Kong (1)	0.3	0.5	0.1	0.2	0.7
Other sources	74.2	68.5	65.5	67.2	53.4
Total	100.0	100.0	100.0	100.0	100.0
			Share of value (percent)		
China	22.4	26.8	29.0	27.4	40.0
Hong Kong (1)	0.2	0.5	0.1	0.2	0.6
Other sources	77.4	72.7	70.9	72.5	59.4
Total	100.0	100.0	100.0	100.0	100.0

(1) Petitioners allege transshipment of Chinese citric acid through Hong Kong.

Source: Compiled from official Commerce statistics.

Table IV-2
Citric acid and sodium citrate: U.S. shipments of domestic product, U.S. imports, by sources, and apparent U.S. consumption, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
	Quantity (1,000 pounds)				
U.S. producers' shipments	350,158	366,816	378,610	299,685	266,773
U.S. imports from--					
China	25,215	35,838	44,023	32,216	65,092
Hong Kong (1)	251	621	171	171	953
All other	73,169	79,376	83,913	66,399	75,552
Total U.S. imports	98,636	115,836	128,106	98,785	141,597
Apparent consumption	448,794	482,652	506,716	398,470	408,370
	Value ($1,000)				
U.S. producers' shipments	234,844	236,715	236,447	187,768	161,731
U.S. imports from--					
China	14,746	19,650	22,540	16,594	32,237
Hong Kong (1)	160	372	94	94	511
All other	51,031	53,192	55,151	43,961	47,906
Total U.S. imports	65,937	73,213	77,786	60,650	80,655
Apparent consumption	300,781	309,928	314,233	248,418	242,386

(1) Petitioners allege transshipment of Chinese citric acid through Hong Kong.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistic

Table IV-3
Citric acid and sodium citrate: Apparent U.S. consumption and market shares, 1996-98, January-September 1998 and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
			Quantity (1,000 pounds)		
Apparent consumption	448,794	482,652	506,716	398,470	408,370
			Value ($1,000)		
Apparent consumption	300,781	309,928	314,233	248,418	242,386
			Share of quantity (percent)		
U.S. producers' shipments	78.0	76.0	74.7	75.2	65.3
U.S. imports from--					
China	5.6	7.4	8.7	8.1	15.9
Hong Kong	0.1	0.1	(1)	(1)	0.2
All other	16.3	16.4	16.6	16.7	18.5
Total U.S. imports	22.0	24.0	25.3	24.8	34.7
			Share of value (percent)		
U.S. producers' shipments	78.1	76.4	75.2	75.6	66.7
U.S. imports from--					
China	4.9	6.3	7.2	6.7	13.3
Hong Kong	0.1	0.1	(1)	(1)	0.2
All other	17.0	17.2	17.6	17.7	19.8
Total U.S. imports	21.9	23.6	24.8	24.4	33.3

(1) Less than 0.05 percent.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistic

PART V: PRICING AND RELATED INFORMATION

FACTORS AFFECTING PRICES

Raw Material Costs

Citric acid and sodium citrate are produced through the fermentation of a starch or sugar base. U.S. producers use corn as the base. Chinese producers, on the other hand, use a variety of bases including sweet potato powder, tapioca, wheat, and corn. The significance of raw materials in the overall cost structure varies among producers. According to questionnaire responses, raw materials accounted for between *** percent and *** percent of the total cost of goods sold by U.S. producers.

U.S. Inland Transportation Costs

Transportation costs of citric acid and sodium citrate for delivery within the United States vary from firm to firm but tend to account for a significant percentage of total cost. One producer puts this number at *** percent, another at *** percent, and the last one between *** and *** percent. Five out of the 11 importers who responded to this question claim that transportation costs account for more than 10 percent of total delivered cost. The (unweighted) average for importers was 7.1 percent; the median value was 6 percent.

Producers and importers were also requested to provide estimates of the percentages of their shipments that were made within specified distance ranges. Among the three U.S. producers, an average of 2.6 percent of shipments occurred within 100 miles and 68.3 percent within 1,000 miles. Among importers, an average of 64 percent occurred within 100 miles and 94.4 percent within 1,000 miles.

Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that the nominal value of the Chinese yuan appreciated 0.5 percent relative to the U.S. dollar from January 1996 to September 1999 (figure V-1). Real exchange rates cannot be calculated due to the unavailability of Chinese producer price information.

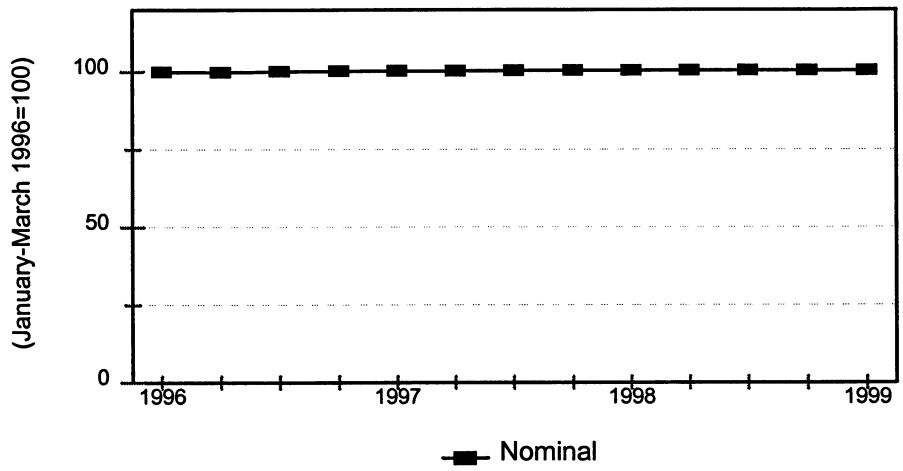
PRICING PRACTICES

Pricing Methods

Most sales of citric acid and sodium citrate in the United States are made on a transaction-by-transaction basis with prices quoted based on current market conditions. Available information indicates that the majority of sales by U.S. producers (approximately 70 percent) are made on a contract basis, while the remainder are on a spot basis. In contrast, importers of Chinese citric acid and sodium citrate reported that a small fraction of their sales (approximately 21.5 percent) are made on a contract basis. In those instances where suppliers use contracts to sell the product, the usual duration of the contract is 1 year. These contracts usually fix both quantity and price.

One market development that should be mentioned is the use of online auctioning method or e-commerce. The bid process takes place online among pre-qualified producers and lasts for a prescribed period of time during which bidders can see the bids that are placed by their competitors without seeing

Figure V-1
Exchange rates: Index of the nominal value of the Chinese yuan relative to the U.S. dollar, by quarters, January 1996-September 1999



Source: International Monetary Fund, *International Financial Statistics*, December 1999.

their identities. According to a respondent, this new bidding technology is going to bring down pricing in the marketplace because it is making the whole bid process more transparent.[1]

Sales Terms and Discounts

A couple of importers point out that they give discounts depending on the volume purchased. The vast majority of citric acid and sodium citrate producers and importers, however, did not report having either price lists or discount policies.

PRICE DATA

The Commission requested that U.S. producers and importers of citric acid and sodium citrate provide quarterly data for the total quantities and values of citric acid and sodium citrate that were shipped to unrelated customers in the U.S. market. Data were requested for the period January 1996-September 1999. The products for which pricing data were requested are as follows:

***Product 1.*–Citric acid, anhydrous or hydrous, fine granular, in 50 pound or 25 kilogram bags.**
***Product 2.*–Citric acid, anhydrous or hydrous, granular, in 50 pound or 25 kilogram bags.**
***Product 3.*–Citric acid, anhydrous or hydrous, fine granular, in bulk bags (500 pounds or more).**
***Product 4.*–Citric acid, anhydrous or hydrous, granular, in bulk bags (500 pounds or more).**
***Product 5.*–Sodium citrate dihydrate, fine granular, in 50 pound or 25 kilogram bags.**
***Product 6.*–Sodium citrate dihydrate, granular, in 50 pound or 25 kilogram bags.**

[1] Dale MacDonald of Ashland, conference transcript, pp. 96 and 104-105.

Three U.S. producers and nine importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters. Pricing data reported by these firms accounted for virtually all of U.S. producers' shipments of citric acid and sodium citrate and about 30 percent of subject imports from China in 1998.

Price Trends

Data reported by U.S. producers and importers of Chinese product all reveal that prices (or the average unit values) of domestically produced and imported citric acid and sodium citrate have generally declined over the period examined (tables V-1 to V-6). Prices of sodium citrate fell at a slower rate than those of citric acid. Prices of domestic citric acid, for example, decreased from *** cents per pound in the first quarter of 1996 to *** cents per pound in the third quarter of 1999. The price of domestic sodium citrate fell from *** cents per pound to *** cents per pound in the same time period. According to the respondents, one should expect such price declines following the break-up of the cartel which controlled prices and output from 1991 to 1995.

Price Comparisons

Complete data for margin calculations were available only for a total of 66 quarters out of the 90 possible ones.[2] The Chinese product undersold the U.S. product for 46 of those 66 quarters.

For product 1 (citric acid, fine granular, in 50 pound or 25 kilo bags (table V-1)), the Chinese product was, except for the first quarter of 1996, consistently priced above the U.S. product, with margins of overselling ranging from 2 percent to 12 percent. This margin shows no significant trend during the period.

For product 2 (citric acid, granular, in 50 pound or 25 kilo bags (table V-2)), the Chinese product was priced below the U.S. product in 13 out of the 15 quarters. The margins of underselling ranged from less that 1 percent to 7 percent. For the other two quarters, the margins of overselling were 8 percent and 2 percent. Product 2 (granular) accounted for more than three-fourths of the citric acid imported from China, while the more than two-thirds of the U.S. product is in the form of product 1 (fine granular).

For product 3 (citric acid, fine granular, in bulk bags (table V-3)), the Chinese product was imported in only one quarter. For product 4 (citric acid, granular, in bulk bags (table V-4)), data were available for eight quarters, during six of which Chinese citric acid undersold U.S. citric acid.

For product 5 (sodium citrate, fine granular, in 50 pound or 25 kilo bags (table V-5)), data were available starting from the last quarter of 1996. Except for one quarter, the Chinese product was consistently priced below the U.S. product. The margin of underselling ranged from over 1 percent to 15 percent.

For product 6 (sodium citrate, granular, in 50 pound or 25 kilo bags), the Chinese product was, throughout the period examined, consistently priced below the U.S. product. The margins of underselling ranged from 1 percent to 23 percent. During the period reviewed, this margin increased from around 8 percent to 20 percent.

[2] The 90 quarters are the 15 quarters making up the period of investigation times 6 products.

Table V-1: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarters, January 1996-September 1999

Period	United States		China		Margin (percent)
	Price (per pound)	Quantity (pounds)	Price (per pound)	Quantity (pounds)	
1996:					
January-March	***	***	***	***	15.22
April-June	***	***	***	***	(3.64)
July-September	***	***	***	***	(2.58)
October-December	***	***	***	***	(9.46)
1997:					
January-March	***	***	***	***	(10.19)
April-June	***	***	***	***	(5.04)
July-September	***	***	***	***	(1.78)
October-December	***	***	***	***	(7.08)
1998:					
January-March	***	***	***	***	(6.94)
April-June	***	***	***	***	(9.66)
July-September	***	***	***	***	(3.16)
October-December	***	***	***	***	(2.63)
1999:					
January-March	***	***	***	***	(7.92)
April-June	***	***	***	***	(5.60)
July-September	***	***	***	***	(11.94)

[1] Product 1 is defined as citric acid, fine granular, in 50 pound or 25 kilo bags.

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

Table V-2: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarters, January 1996-September 1999

Period	United States		China		Margin (percent)
	Price (per pound)	Quantity (pounds)	Price (per pound)	Quantity (pounds)	
1996:					
January-March	***	***	***	***	2.82
April-June	***	***	***	***	(8.06)
July-September	***	***	***	***	0.13
October-December	***	***	***	***	6.83
1997:					
January-March	***	***	***	***	2.67
April-June	***	***	***	***	1.90
July-September	***	***	***	***	3.21
October-December	***	***	***	***	(1.52)
1998:					
January-March	***	***	***	***	1.05
April-June	***	***	***	***	3.04
July-September	***	***	***	***	5.06
October-December	***	***	***	***	2.55
1999:					
January-March	***	***	***	***	4.13
April-June	***	***	***	***	5.86
July-September	***	***	***	***	3.45

[1] Product 2 is defined as citric acid, granular, in 50 pound or 25 kilo bags.

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

Table V-3: Weighted-average f.o.b. prices and quantities of domestic and imported product 3[1] and margins of underselling/(overselling), by quarters, January 1996-September 1999

Period	United States		China		Margin (percent)
	Price (per pound)	Quantity (pounds)	Price (per pound)	Quantity (pounds)	
1996:					
January-March	***	***	***	***	--
April-June	***	***	***	***	--
July-September	***	***	***	***	--
October-December	***	***	***	***	--
1997:					
January-March	***	***	***	***	--
April-June	***	***	***	***	--
July-September	***	***	***	***	--
October-December	***	***	***	***	--
1998:					
January-March	***	***	***	***	--
April-June	***	***	***	***	(187.51)
July-September	***	***	***	***	--
October-December	***	***	***	***	--
1999:					
January-March	***	***	***	***	--
April-June	***	***	***	***	--
July-September	***	***	***	***	--

[1] Product 3 is defined as citric acid, fine granular, in bulk bags.

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

Table V-4: Weighted-average f.o.b. prices and quantities of domestic and imported product 4[1] and margins of underselling/(overselling), by quarters, January 1996-September 1999

Period	United States		China		Margin (percent)
	Price (per pound)	Quantity (pounds)	Price (per pound)	Quantity (pounds)	
1996:					
January-March	***	***	***	***	--
April-June	***	***	***	***	--
July-September	***	***	***	***	--
October-December	***	***	***	***	--
1997:					
January-March	***	***	***	***	--
April-June	***	***	***	***	1.18
July-September	***	***	***	***	--
October-December	***	***	***	***	(3.14)
1998:					
January-March	***	***	***	***	(7.96)
April-June	***	***	***	***	--
July-September	***	***	***	***	22.82
October-December	***	***	***	***	14.62
1999:					
January-March	***	***	***	***	19.65
April-June	***	***	***	***	16.67
July-September	***	***	***	***	17.11

[1] Product 4 is defined as citric acid, granular, in bulk bags.

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

Table V-5: Weighted-average f.o.b. prices and quantities of domestic and imported product 5[1] and margins of underselling/(overselling), by quarters, January 1996-September 1999

Period	United States		China		Margin (percent)
	Price (per pound)	Quantity (pounds)	Price (per pound)	Quantity (pounds)	
1996:					
January-March	***	***	***	***	--
April-June	***	***	***	***	--
July-September	***	***	***	***	--
October-December	***	***	***	***	12.86
1997:					
January-March	***	***	***	***	3.23
April-June	***	***	***	***	6.28
July-September	***	***	***	***	1.82
October-December	***	***	***	***	5.84
1998:					
January-March	***	***	***	***	6.90
April-June	***	***	***	***	(1.47)
July-September	***	***	***	***	1.54
October-December	***	***	***	***	6.06
1999:					
January-March	***	***	***	***	9.09
April-June	***	***	***	***	13.64
July-September	***	***	***	***	15.15

[1] Product 5 is defined as sodium citrate, fine granular, in 50 pound or 25 kilo bags.

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

Table V-6: Weighted-average f.o.b. prices and quantities of domestic and imported product 6[1] and margins of underselling/(overselling), by quarters, January 1996-September 1999

Period	United States		China		Margin (percent)
	Price (per pound)	Quantity (pounds)	Price (per pound)	Quantity (pounds)	
1996:					
January-March	***	***	***	***	7.46
April-June	***	***	***	***	7.40
July-September	***	***	***	***	7.74
October-December	***	***	***	***	1.25
1997:					
January-March	***	***	***	***	4.55
April-June	***	***	***	***	7.35
July-September	***	***	***	***	7.58
October-December	***	***	***	***	7.95
1998:					
January-March	***	***	***	***	15.15
April-June	***	***	***	***	6.57
July-September	***	***	***	***	11.01
October-December	***	***	***	***	12.36
1999:					
January-March	***	***	***	***	17.74
April-June	***	***	***	***	23.44
July-September	***	***	***	***	19.05

[1] Product 6 is defined as sodium citrate, granular, in 50 pound or 25 kilo bags.

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

LOST SALES AND LOST REVENUES

No allegations of lost sales or lost revenues were provided with the petition. The petitioners stated that "it is difficult for a producer to identify specific instances of lost sales and revenue for a commodity product because purchasers are unlikely to identify the seller which they have chosen or specify the exact price which the seller has agreed to charge."[3] Sixty allegations were, however, reported in the petitioners' questionnaire responses. Some of these involve transactions that occurred well prior to the filing of the petition, while others involved transactions near or after the filing of the petition. Some involve ongoing transactions.

*** U.S. producers reported that they had to either reduce prices or roll back announced price increases due to competition from imports of citric acid and sodium citrate from China. Of the 60 allegations, 29 did not include correct contact information or did not include sufficient information for staff to investigate. Due to the lack of information, it is difficult to give one number as to the extent of lost sales or revenue.

Of the 31 allegations (which are listed in appendix D) of lost sales and revenues containing adequate information, only 20 were able to actually be investigated (7 purchasers could not be reached and another 4 refused to answer staff questions). Of those 20 allegations, purchasers agreed with 7, partially agreed with 4, and disagreed with 9. A summary of the information obtained by staff follows.

*** refused to discuss regarding ***'s allegation that it uses over *** pounds per year of Chinese citric acid and that it is ***.

*** disagreed with ***'s allegation that it switched to Chinese citric to take advantage of lower prices. On January 14, 2000, *** stated that *** has bought Chinese citric acid for a different reason. It wants to diversify its source: ***.

*** agreed with ***'s allegation that *** Chinese citric acid.

*** agreed with ***'s allegation that it has indicated that Chinese price continues to drop, and that they have found Chinese citric acid at *** cents per pound.

*** partially agreed with ***'s allegations that it was buying *** several years ago and has converted to Chinese citric acid. On January 14, 2000, *** agreed with the fact that *** lost the bid but he thinks that the claimed loss of *** is exaggerated.

*** refused to answer regarding ***'s allegations of lost sales and revenues.

*** partially agreed with ***'s allegation that it has lost *** worth of revenues due to Chinese competition. *** told staff, on January 19, 2000, that the drop in price was due more to competition from another domestic producer than from Chinese competition.

*** agreed with ***'s allegations that it had switched to Chinese product. *** told staff, on January 14, 2000, that his firm has to buy Chinese because its competitors are buying Chinese. If it did not buy Chinese, it would be out of business now. However, he thinks that the claim of *** is an exaggeration.

*** agreed with ***'s allegations that it has purchased approximately *** pounds from Chinese sources to offset higher domestic prices.

*** disagreed with ***'s allegation that it has ***. In a conversation with *** on January 14, 2000, staff learned that *** is not yet an approved supplier for ***. For pharmaceutical uses, they use only approved domestic suppliers because they can audit facilities.

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[3] Petition, p. 14. However, the petition went on to say that the petitioners "have experienced instances of lost sales and lost revenue due to imports of Chinese citric acid and sodium citrate. Information regarding specific instances is still being compiled and will be provided in petitioners' responses to the Commission's producers' questionnaire and at the staff conference." Ibid.

*** disagreed with ***'s allegation of lost sales and revenue of ***. *** maintains that petitioners have refused to sell to them.

*** disagreed with ***'s allegation that *** they bought Chinese citric acid. On January 6, 2000, *** said that ***.

*** disagreed with ***'s allegations that it ***.

*** partially agreed with ***'s allegation that it had bought Chinese citric acid at *** per pound. However, *** stated on January 14, 2000, that the estimated loss of *** is exaggerated.

*** agreed with ***'s allegation that it lost ***'s business in ***.

*** disagreed with ***'s allegation that it had bought *** pounds of Chinese citric acid at ***.

PART VI: FINANCIAL CONDITION OF THE U.S. INDUSTRY

BACKGROUND

Two producers[1] of citric acid and sodium citrate, accounting for approximately *** percent of known U.S. production of citric acid and sodium citrate in 1998, provided usable financial data. Tate & Lyle[2] acquired the worldwide citric acid business of Haarmann & Reimer on or about July 1, 1998. Tate & Lyle provided financial data for July-December 1998 and January-September 1999, and supplied only estimated key financial data for calender years 1996 and 1997 from Haarmann & Reimer records. These data are presented separately but not included in the total industry data because data for all periods are not available. FBC Industries, a converter of sodium citrate solution from citric acid, provided certain financial data which are shown separately.

OPERATIONS ON CITRIC ACID AND SODIUM CITRATE

Income-and-loss data for the U.S. producers on their citric acid and sodium citrate operations are presented in table VI-1; selected financial data, by firm, are presented in table VI-2. The operating income margin rose from *** percent of total net sales in 1996 to *** percent in 1998. The operating income margin increased from *** percent in January-September 1998 to *** percent in January-September 1999.

Table VI-1
Results of operations of U.S. producers in the production of citric acid and sodium citrate, fiscal years 1996-98, January-September 1998, and January-September 1999

* * * * * * *

Table VI-2
Results of operations of U.S. producers in the production of citric acid and sodium citrate, by firms, fiscal years 1996-98, January-September 1998, and January-September 1999

* * * * * * *

Net sales of citric acid accounted for over *** percent of total net sales during the period examined. The volume of net sales for citric acid increased from 1996 to 1998 while the volume of sodium citrate declined *** in 1998. Such volume declined for both products in January-September 1999 as compared with January-September 1998. Average selling prices per pound for both products, by firm, are presented in table VI-3. Sodium citrate had a higher unit value than citric acid in all periods, and ***. Average selling prices per pound declined for both products during 1996 to 1998 but remained

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[1] These U.S. producers of citric acid and sodium citrate and their fiscal year ends are ADM (***) and Cargill (***).

[2] Tate & Lyle's fiscal year ends on *** but it provided data on a calendar year basis. Tate & Lyle did not supply all requested data because of its limited access to various records maintained by Haarmann & Reimer.

Table VI-3
Average selling price per pound for citric acid and sodium citrate, by firms, fiscal years 1996-98, January-September 1998, and January-September 1999

* * * * * * *

steady during January-September 1998-99. The operating income margins of sodium citrate operations were ***.[3]

* * * * * * *

***.[4] ***[5] ***.

The Commission staff reconciled the key reported data of ***.[6]

Tate & Lyle did not provide Haarmann & Reimer's data for January-June 1998. Likewise, data for January-September 1998 were not available. Therefore, Tate & Lyle's data were not included in the total industry data. Its data are shown separately in table VI-2. If the data of Tale & Lyle for January-September 1999 were included in the total industry data, the average operating income margin would be *** percent of net sales for that interim period.

FBC, a converter, supplied data on its sodium citrate solution operations; these data are presented in the following tabulation:

* * * * * * *

A variance analysis for citric acid and sodium citrate, combined, is not presented because, although combined financial data were requested for citric acid and sodium citrate, quantity data for sales were only collected separately for citric acid and sodium citrate operations. Therefore, a variance analysis for citric acid operations is presented in table VI-4 and one for sodium citrate operations is shown in table VI-5. The information for these variance analyses is derived from tables C-2 and C-3, respectively. A variance analysis provides an assessment of changes in profitability as related to changes in pricing, cost, and volume. This analysis is more effective when the product involved is a homogeneous product with no variation in product mix. The analysis shows that the increase in operating income for each product's operations from 1996 to 1998 is attributable to favorable net cost/expense and net volume variances only partially offset by an unfavorable price variance, whereas the increase in operating income for citric acid operations from January-September 1998 to January-September 1999 is attributable to a favorable net cost/expense variance (only partially offset by unfavorable price and volume variances) and the decrease in operating income for sodium citrate operations is attributable to unfavorable price, net cost/expense, and net volume variances.

Table VI-4
Variance analysis of U.S. producers' citric acid operations, fiscal years 1996-98, January-September 1998, and January-September 1999

* * * * * * *

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[3] See tables C-2 and C-3 in app. C for separate financial data for citric acid and sodium citrate.

[4] ***'s letter dated January 14, 2000.

[5] ***.

[6] Staff telephone conversation with ***, January 13, 2000.

Table VI-5
Variance analysis of U.S. producers' sodium citrate operations, fiscal years 1996-98, January-September 1998, and January-September 1999

* * * * * * *

VALUE ADDED

The Commission asked value added data for the production of sodium citrate and potassium citrate from citric acid. The summary data, by firms, are presented in table VI-6.

Table VI-6
Domestic value added for the production of sodium citrate and potassium citrate from citric acid, by firms, for their most recently completed fiscal year

* * * * * * *

INVESTMENT IN PRODUCTIVE FACILITIES, CAPITAL EXPENDITURES, AND RESEARCH AND DEVELOPMENT EXPENSES

The responding firms' data on capital expenditures, R&D expenses, and the value of their property, plant, and equipment for their citric acid and sodium citrate operations are shown in table VI-7.

Table VI-7
Capital expenditures, research and development expenses, and value of assets of U.S. producers of citric acid and sodium citrate, fiscal years 1996-98, January-September 1998, and January-September 1999

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers to describe any actual or potential negative effects of imports of citric acid and sodium citrate from China on their firms' growth, investment, ability to raise capital and/or development and production efforts (including efforts to develop a derivative or more advanced version of the product). Their responses are shown in appendix E.

PART VII: THREAT CONSIDERATIONS

The Commission analyzes a number of factors in making threat determinations (see 19 U.S.C. § 1677(7)(F)(i)). Information on the volume and pricing of imports of the subject merchandise is presented in Parts IV and V and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in Part VI. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, if applicable; and any dumping in third-country markets, follows.

THE INDUSTRY IN CHINA

There are very few large citric acid producers in China; the majority of companies have annual capacities of 2.2 million pounds or less.[1] [2] Chinese producers produce mostly unrefined citric acid with poor packaging which is inferior in quality for several end-use markets and is frequently further refined or purified in some importing countries.[3]

Petitioners provided a list of over 100 possible citric acid and sodium citrate producers in China.[4] Conference testimony revealed that of that number there are only eight factories in China that can produce acceptable-quality citric acid with a continuous supply for the U.S. market.[5] These firms were identified as Anhui Fuyang Pharmaceutical Factory (Fuyang); China BBCA Biochemcial Group Corp. (Bengbu); High Hope International Group Jiangsu Native Produce Import/Export Corp., Ltd. (Nantung); Laiwu IDC Biochemistry Co., Ltd. (Laiwu); Nanning Citric Acid Co., Ltd. (Nanning); Ningxia Ningxiner Biological Engineering Co., Ltd. (Ningxia); Roche Zhongya Wuxi Citric Acid Ltd. (Roche/Wuxi); and Tangshan Jidong Pharmaceutical Factory (Tangshan). The Commission has received questionnaire responses from all eight of these firms.[6]

Table VII-1 presents aggregate data for production and shipments of citric acid and sodium citrate for the following 10 responding Chinese producers: Bengbu, Fuyang, Laiwu, Nanning, Nantung, Ningxia, Roche/Wuxi, Shandong Jiejing Group Corp. (Rizhao Citric Acid), Tangshan, and Zibo ICD Biochemistry Co., Ltd. These 10 firms reported shipments to the United States that were 61.7 percent of official import statistics in 1998. Disaggregated data for these producers are presented in appendix C, tables C-4 and C-5.

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[1] Petition, exhibit 2, p. 84.

[2] ***. Ashland's post-conference brief, exhibit 2. Petitioners report an annual aggregate citric acid production capacity of 400,000 metric tons (881.8 million pounds) but annual production of only 200,000 metric tons (440.9 million pounds) in China. Petition, p. 41 and exhibit 21, p. 1.

[3] Petition, exhibit 2, p. 84 and exhibit 21, p. 2.

[4] The list of producers is presented in app. F.

[5] Bert Echaghpour of Wego, conference transcript, p. 113.

[6] Three of these firms, ***, reported production of sodium citrate as well as citric acid during the period examined.

Table VII-1
Citric acid and sodium citrate: Data for producers in China, 1996-98, January-September 1998, January-September 1999, and projected 1999-2000

Item	1996	1997	1998	January-September 1998	January-September 1999	Projected 1999	Projected 2000
	Quantity (1,000 pounds)						
Capacity	100,626	150,807	267,619	195,519	244,981	335,299	(1)
Production	82,563	140,230	222,147	159,946	219,211	313,567	(1)
End-of-period inventories	7,835	7,359	10,224	9,953	15,362	15,734	(1)
Shipments:							
Internal consumption/transfers:							
Used to make sodium citrate	0	0	***	***	***	***	(1)
Other consumption/transfers	0	0	0	0	0	***	(1)
Home market (2)	34,111	53,349	***	***	***	***	(1)
Exports to:							
United States	5,719	14,348	27,243	20,956	38,237	53,504	(1)
All other markets	39,937	73,098	124,646	89,970	120,254	170,003	(1)
Total exports	45,657	87,446	151,888	110,925	158,492	223,508	(1)
Total shipments	79,767	140,794	151,888	110,925	158,492	223,508	(1)
	Ratios and shares (percent)						
Capacity utilization	82.0	93.0	84.2	83.3	93.3	96.6	(3)
Inventories/production	9.5	5.2	4.6	4.7	5.3	5.0	(3)
Inventories/shipments	9.8	5.2	6.7	6.7	7.3	7.0	(3)
Share of total shipments:							
Internal consumption/transfers:							
Used to make sodium citrate	0.0	0.0	***	***	***	***	(3)
Other consumption/transfers	0.0	0.0	0.0	0.0	0.0	***	(3)
Home market (2)	42.8	37.9	***	***	***	***	(3)
Exports to:							
United States	7.2	10.2	17.9	18.9	24.1	23.9	(3)
All other markets	50.1	51.9	82.1	81.1	75.9	76.1	(3)
Total exports	57.2	62.1	100.0	100.0	100.0	100.0	(3)

(1) Five Chinese producers did not provide data for year 2000 projections of shipments and inventories; however, three of these five provided year 2000 production and capacity projections. These three firms, plus five others that provided data for all items, accounted for 81.8 percent of total 1999 projected capacity and 81.0 percent of total 1999 projected production; these eight firms reported 254 million pounds of production in 1999 and 322 million pounds of production in 2000, as well as 274 million pounds of capacity in 1999 and 344 million pounds of capacity in 2000.

(2) Home market sales may be overstated as Chinese producer *** reported that it had no direct exports yet U.S. importers indicated in questionnaire responses that they purchase *** product.

(3) Not available.

Note. -- Data includes small quantities of citric acid reportedly consumed to produce sodium citrate and may, therefore, include some double counting. However, since for most sodium citrate reported there was no corresponding production and transfer of the citric acid reported, the overstatement is minor.

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

Two Chinese firms reported, in response to Commission questionnaires, plans to expand production capacity.[7] ***.[8]

Petitioners report the existence of antidumping duty orders on Chinese citric acid issued by the Governments of India and Mexico.[9] *** confirms that Chinese citric acid is the subject of April 1999 antidumping findings or remedies in India. No other Chinese producer reported knowledge of such findings or remedies with respect to citric acid or sodium citrate.

U.S. INVENTORIES OF PRODUCT FROM CHINA

U.S. importers' end-of-period inventories of imports are presented in table VII-2. Inventories of imports from China increased between 1996 and 1998 by 197 percent, and further increased between the interim periods by more than 100 percent. Inventories from other sources also increased between 1996 and 1998, by 21.7 percent, but then fell by 26.5 percent in the first nine months of 1999 as compared with the same period in 1998.

Table VII-2
Citric acid and sodium citrate: U.S. importers' end-of-period inventories of imports, 1996-98, January-September 1998, and January-September 1999

Item	1996	1997	1998	January-September 1998	January-September 1999
Imports from China:					
Inventories (1,000 pounds)	1,668	3,593	4,947	4,843	10,146
Ratio to imports (percent)	13.0	16.2	22.5	21.8	16.7
Ratio to U.S. shipments of imports (percent)	11.7	18.0	24.1	23.7	18.9
Imports from all other sources:					
Inventories (1,000 pounds)	5,860	6,412	7,131	7,792	5,725
Ratio to imports (percent)	23.3	20.7	20.9	22.4	12.9
Ratio to U.S. shipments of imports (percent)	24.9	21.3	21.4	24.2	12.5
Imports from all sources:					
Inventories (1,000 pounds)	7,528	10,005	12,078	12,635	15,871
Ratio to imports (percent)	19.8	18.8	21.6	22.2	15.1
Ratio to U.S. shipments of imports (percent)	19.9	20.0	22.4	24.0	15.9

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

[7] ***. Petition, p. 43 and exhibit 14.

[8] However, petitioners provided copies of Bengbu announcements to increase its annual citric acid production capacity to 120,000 metric tons (265 million pounds) by October 1999. Petition, exhibit 23.

[9] India published its Final Findings on March 15, 1999, and Mexico published its Final Resolution in 1994 and extended it in the fall of 1999. Petitioners' post-conference brief, p. 41.

APPENDIX A

FEDERAL REGISTER NOTICES

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731–TA–863 (Preliminary)]

Citric Acid and Sodium Citrate From China

AGENCY: United States International Trade Commission.

ACTION: Institution of antidumping investigation and scheduling of a preliminary phase investigation.

SUMMARY: The Commission hereby gives notice of the institution of an investigation and commencement of preliminary phase antidumping investigation No. 731–TA–863 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) (the Act) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from China of citric acid and sodium citrate, provided for in subheadings 2918.14.00 and 2918.15.10 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value. Unless the Department of Commerce extends the time for initiation pursuant to section 732(c)(1)(B) of the Act (19 U.S.C. 1673a(c)(1)(B)), the Commission must reach a preliminary determination in antidumping investigations in 45 days, or in this case by January 31, 2000. The Commission's views are due at the Department of Commerce within five business days thereafter, or by February 7, 2000.

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

EFFECTIVE DATE: December 15, 1999.

FOR FURTHER INFORMATION CONTACT: Joanna Bonarriva (202–708–4083), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202–205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (*http://www.usitc.gov*).

SUPPLEMENTARY INFORMATION:

Background.—This investigation is being instituted in response to a petition filed on December 15, 1999, by Archer Daniels Midland Co., Decatur, IL, Cargill, Inc., Naperville, IL, and Tate & Lyle Citric Acid, Decatur, IL.

Participation in the investigation and public service list.—Persons (other than petitioners) 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 and 207.10 of the Commission's rules, not later than seven days after publication of this notice in the **Federal Register**. Industrial users and (if the merchandise under investigation is sold at the retail level) representative consumer organizations have the right to appear as parties in Commission antidumping investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

Limited disclosure of business proprietary information (BPI) under an administrative protective order (APO) and BPI service list.—Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this investigation available to authorized applicants representing interested parties (as defined in 19 U.S.C. 1677(9)) who are parties to the investigation under the APO issued in the investigation, provided that the application is made not later than seven days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

Conference.—The Commission's Director of Operations has scheduled a conference in connection with this investigation for 9:30 a.m. on January 5, 2000, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Joanna Bonarriva (202–708–4083) not later than December 30, 1999, to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

Written submissions.—As provided in §§ 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before January 10, 2000, a written brief containing information and arguments pertinent to the subject matter of the investigation. Parties may file written testimony in connection with their presentation at the conference no later than three days before the conference. If briefs or written testimony contain BPI, they must conform with the requirements of §§ 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means.

In accordance with §§ 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Authority: This investigation is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published

pursuant to § 207.12 of the Commission's rules.

Issued: December 17, 1999.

By order of the Commission.

Donna R. Koehnke,

Secretary.

[FR Doc. 99–33192 Filed 12–21–99; 8:45 am]

BILLING CODE 7020–02–P

DEPARTMENT OF COMMERCE

International Trade Administration

[A–570–858]

Initiation of Antidumping Investigation: Citric Acid and Sodium Citrate From the People's Republic of China

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

EFFECTIVE DATE: January 11, 2000.

FOR FURTHER INFORMATION CONTACT: Sunkyu Kim, AD/CVD Enforcement Group I, Office 2, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW, Washington, DC 20230; telephone: (202) 482–2613.

Initiation of Investigation

The Applicable Statute and Regulations

Unless otherwise indicated, all citations to the statute are references to the provisions effective January 1, 1995, the effective date of the amendments made to the Tariff Act of 1930 (the Act) by the Uruguay Round Agreements Act (URAA). In addition, unless otherwise indicated, all citations to the Department of Commerce's (the Department's) regulations are to 19 CFR Part 351 (April 1999).

The Petition

On December 15, 1999, the Department received a petition filed in proper form by Archer Daniels Midland Company, Cargill, Incorporated, and Tate & Lyle Citric Acid, Inc. (collectively, the petitioners). On December 20, 1999, the Department requested further information on industry support from the petitioners. The Department received supplemental information in response to that request on December 27, 1999.

In accordance with section 732(b) of the Act, the petitioners allege that imports of citric acid and sodium citrate from the People's Republic of China (PRC) are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Act, and that such imports pose a serious and imminent threat of material injury to an industry in the United States.

The Department finds that the petitioners filed the petition on behalf of the domestic industry because they are interested parties as defined in sections 771(9) (C) and (D) of the Act and have demonstrated sufficient industry support. *See* "Determination of Industry Support for the Petition" section, below.

Scope of Investigation

The scope of the investigation includes all grades and granulation sizes of citric acid and sodium citrate in any type of packaging and in either dry form or in any solution, including, but not limited to, solutions of water, alcohol and ether. The scope of the investigation includes the hydrous and anhydrous forms of citric acid and the dihydrate and anhydrous forms of sodium citrate, otherwise known as citric acid sodium salt. Sodium citrate includes both trisodium citrate and monosodium citrate which are also known as citric acid trisodium salt and citric acid monosodium salt, respectively.

Citric acid and sodium citrate are classifiable under 2918.14.0000 and 2918.15.1000 of the Harmonized Tariff Schedule of the United States (HTSUS), respectively. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

During our review of the petition, we discussed the definition of the scope of the investigation with the petitioners to ensure that the definition accurately reflects the products for which they are seeking relief. As we discussed in the preamble to the Department's regulations, we are setting aside a period for parties to raise issues regarding product coverage. *See* Antidumping Duties; Countervailing Duties: Final Rule, 62 FR 27296, 27323 (May 19, 1997). The Department encourages all parties to submit such comments by January 25, 2000. Comments should be addressed to Import Administration's Central Records Unit at Room 1870, U.S. Department of Commerce, Pennsylvania Avenue and 14th Street, NW, Washington, DC 20230. This scope consultation period is intended to provide the Department with ample opportunity to consider all comments and consult with parties prior to the issuance of the preliminary determination.

Determination of Industry Support for the Petition

Section 732(b)(1) of the Act requires that a petition be filed on behalf of the domestic industry. Section 732(c)(4)(A) of the Act provides that a petition meets this requirement if the domestic producers or workers who support the petition account for: (1) At least 25 percent of the total production of the domestic like product; and (2) more than 50 percent of the production of the domestic like product produced by that portion of the industry expressing support for, or opposition to, the petition.

Section 771(4)(A) of the Act defines the term "industry" as the producers of a domestic like product. Thus, to determine whether the petition has the requisite industry support, the statute directs the Department to look to producers and workers who account for production of the domestic like product. The International Trade Commission (ITC), which is responsible for determining whether the domestic industry has been injured, must also determine what constitutes a domestic like product in order to define the industry. While both the Department and the ITC must apply the same statutory provision regarding the domestic like product (section 771(10) of the Act), they do so for different purposes and pursuant to separate and distinct authority. In addition, the Department's determination is subject to limitations of time and information. Although this may result in different definitions of the domestic like product, such differences do not render the decision of either agency contrary to the law.[1] Section 771(10) of the Act defines

[1] *See Algoma Steel Corp., Ltdv. United States*, 688 F. Supp. 639, 644 (CIT 1988); *High Information Content Flat Panel Displays and Display Glass*

domestic like product as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this title." Thus, the reference point from which the domestic like product analysis begins is "the article subject to an investigation," *i.e.*, the class or kind of merchandise to be investigated, which normally will be the scope as defined in the petition. In this case, the petitioners claim that all citric acid and sodium citrate constitute one class or kind of merchandise.

Based on our analysis of the information and arguments presented to the Department, we have determined that, for purposes of initiation of this investigation, there is a single domestic like product which is defined in the "Scope of Investigation" section, above.

Moreover, the Department has determined that the petition and supplemental information contain adequate evidence of sufficient industry support. *See* January 4, 2000, Initiation Checklist (public version on file in the Central Records Unit of the Department of Commerce, Room B–099). The petitioners demonstrated that they account for all of the domestic production of citric acid; however they did not provide data on the total domestic production of sodium citrate. The Department is aware that U.S. companies other than the petitioners purchase citric acid and convert it into sodium citrate. If we conservatively estimate the maximum quantity of sodium citrate produced by non-petitioning U.S. companies, from imported citric acid and domestically-produced citric acid, the petitioners still account for more than 50 percent of the U.S. production of citric acid and sodium citrate. Therefore, the producers who support the petition account for more than 50 percent of the production of the domestic like product. *See* January 4, 2000, Initiation Checklist (public version on file in the Central Records Unit of the Department of Commerce, Room B–099).

We received a letter in opposition to the petition from Proctor & Gamble, Inc., which is both a domestic producer of the subject merchandise, as well as an importer of subject merchandise from the PRC. Because Proctor & Gamble, Inc. is an importer of the subject merchandise from the PRC, the Department may disregard Proctor & Gamble, Inc.'s position, in accordance with section 732(c)(4)(B)(ii) of the Act. The Department has disregarded Proctor & Gamble, Inc.'s opposition because, according to Proctor & Gamble, Inc., they are a major purchaser and user of domestic and imported citric acid and sodium citrate. However, even if the Department had considered Proctor & Gamble, Inc.'s opposition to the petition, the petitioners, as discussed above, have demonstrated that they account for more than 50 percent of the total production of the domestic like product. Accordingly, the Department determines that this petition is filed on behalf of the domestic industry within the meaning of section 732(b)(1) of the Act.

Export Price and Normal Value

The following describes the allegations of sales at less than fair value upon which our decision to initiate this investigation is based. Should the need arise to use any of this information in our preliminary or final determinations for purposes of facts available under section 776 of the Act, we may re-examine the information and revise the margin calculations, if appropriate.

The petitioners identified 102 known or potential PRC producers of subject merchandise. The petitioners based export price (EP) on brokers' offers for the sale of PRC-origin anhydrous citric acid and sodium citrate in solution to U.S. purchasers. For citric acid, the petitioners made deductions from the starting price for a U.S. distributor mark-up, U.S. and home market freight expenses, international movement expenses, U.S. customs, processing and harbor fees, and a solution expense. For sodium citrate, the petitioners made the same deductions as for citric acid but did not make a deduction for solution expense. We adjusted the petitioners' calculation of EP for sodium citrate to include a deduction for solution expense because the starting price quoted was for sodium citrate in solution.

Because the PRC is considered a nonmarket economy (NME) country under section 771(18) of the Act, the petitioners based normal value (NV) on the factors of production valued in a surrogate country, in accordance with section 773(c) of the Act. For purposes of the petition, the petitioners selected India as the most appropriate surrogate market economy. The petitioners developed information on the representative factors of production for citric acid in the PRC from their knowledge of citric acid production in the PRC. For sodium citrate, the petitioners based the factors of production on their experience in manufacturing the product because the information available to them did not include the factors for sodium citrate production in the PRC.

The petitioners valued raw material inputs based on publicly available price data in India. The petitioners identified the major material input in the production of citric acid and sodium citrate as starch. The petitioners valued starch using the average Indian import value for a type of starch which most closely corresponds to the particular type of starch used by the Chinese producer, as published in *Chemical Weekly* on November 9, 1999. The petitioners also identified additional material inputs used in the production of citric acid and sodium citrate. The additional material inputs were valued using both *Chemical Weekly* and United Nations Trade Statistics publications. Where appropriate, the petitioners adjusted the values reported in *Chemical Weekly* to exclude sales and excise taxes. For starch and other raw materials, the petitioners increased the unit value to include estimated transportation costs. However, because the petitioners did not provide an appropriate surrogate value for costs associated with transporting inputs in the PRC, we adjusted the petitioners' normal value calculation by excluding freight costs associated with transporting raw material inputs.

To value energy inputs, the petitioners used publicly available prices in India, with the exception of one input. For this particular input, the petitioners relied on a U.S. producer's experience. However, because the petitioners did not provide an appropriate surrogate value for the cost of this input in the PRC, we adjusted the petitioners' normal value calculation by excluding this input's cost from the calculation.

For labor and packing materials, the petitioners estimated the consumption amounts based on their own experiences. The petitioners valued labor based on a regression-based wage rate, in accordance with 19 CFR 351.408 (c)(3). For packing materials, the petitioners used 1996–1997 Indian import values from the *Monthly Statistics of Foreign Trade of India.*

Where appropriate, the petitioners adjusted the factor values for inflation using either the Indian wholesale price index (WPI) or the U.S. WPI for the period April through June 1999, as published in the International Monetary Fund's *International Financial Statistics* (IFS Data). Additionally, the petitioners converted factors based on Indian rupees to U.S. dollars using an average Indian rupee to U.S. dollar exchange rate from the monthly average rates as

Therefor from Japan: Final Determination; Rescission of Investigation and Partial Dismissal of Petition, 56 FR 32376, 32380–81 (July 16, 1991).

reported in the IFS Data for the period April through August 1999.

Finally, for factory overhead, selling, general, and administrative expenses (SG&A), and profit, the petitioners used publicly available financial statements of Indian metal and chemical producers as published by the Reserve Bank of India in 1997.

Based on comparisons of EP to NV, as adjusted by the Department, the petitioners estimate dumping margins ranging from 211.58 to 307.79 percent.

Fair Value Comparisons

Based on the data provided by the petitioners, there is reason to believe that imports of citric acid and sodium citrate from the PRC are being, or are likely to be, sold at less than fair value.

Allegations and Evidence of Material Injury and Causation

The petitioners allege that the U.S. industry producing the domestic like product is threatened with material injury by reason of imports of the subject merchandise sold at less than NV. The allegations of threat of injury and causation are supported by relevant evidence including business proprietary data from the petitioners and U.S. Customs import data. The Department assessed the allegations and supporting evidence regarding the threat of material injury and causation and determined that these allegations are sufficiently supported by accurate and adequate evidence and meet the statutory requirements for initiation. *See* Initiation Checklist (public version on file in the Central Records Unit of the Department of Commerce, Room B–099).

Initiation of Antidumping Investigation

We have examined the petition on citric acid and sodium citrate from the PRC and have found that it meets the requirements of section 732 of the Act. Therefore, we are initiating an antidumping duty investigation to determine whether imports of citric acid and sodium citrate from the PRC are being, or are likely to be, sold in the United States at less than fair value. Unless postponed, we will make our preliminary determination for the antidumping duty investigation by May 23, 2000.

Distribution of Copies of the Petitions

In accordance with section 732(b)(3)(A) of the Act, a copy of the public version of the petition has been provided to the representatives of the government of the PRC. We will attempt to provide a copy of the public version of the petition to each exporter named in the petition (as appropriate).

International Trade Commission Notification

We have notified the ITC of our initiation, as required by section 732(d) of the Act.

Preliminary Determination by the ITC

The ITC will determine by January 31, 2000, whether there is a reasonable indication that imports of citric acid and sodium citrate from the PRC are threatening to cause material injury to a U.S. industry. A negative ITC determination will result in the investigation being terminated; otherwise, the investigation will proceed according to statutory and regulatory time limits.

This notice is published in accordance with section 777(i)(1) of the Act.

Dated: January 4, 2000.

Robert S. LaRussa,

Assistant Secretary for Import Administration.

[FR Doc. 00–638 Filed 1–10–00; 8:45 am]

BILLING CODE 3510–DS–P

APPENDIX B

CONFERENCE WITNESSES

CALENDAR OF THE PUBLIC CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's conference held in connection with the following investigation:

CITRIC ACID AND SODIUM CITRATE FROM CHINA

Investigation No. 731-TA-863 (Preliminary)

January 5, 2000 - 9:30 am

The conference was held in Room 101 (Main Hearing Room) of the United States International Trade Commission Building, 500 E Street, SW, Washington, DC.

IN SUPPORT OF THE IMPOSITION OF ANTIDUMPING DUTIES:

Akin, Gump, Strauss, Hauer & Feld, L.L.P.
Washington, DC
on behalf of

Archer Daniels Midland Co., Decatur, IL

Thomas Fox, Vice President, Archer Daniels Midland Co.

Cargill, Inc., Naperville, IL

William Gruber, Vice President, Cargill, Inc.
Jack Staloch, Vice President, Cargill, Inc.
Randall Romsdahl, Esq., Cargill, Inc.

Tate & Lyle Citric Acid, Decatur, IL

Peter Boynton, Vice President, Tate & Lyle Citric Acid, Inc.
Peter Castelli, Esq., Tate & Lyle Citric Acid, Inc.

Warren Connelly-OF COUNSEL
Stephen Claeys-OF COUNSEL

IN OPPOSITION TO THE IMPOSITION OF ANTIDUMPING DUTIES:

Dickstein Shapiro Morin & Oshinsky LLP
Washington, D.C.
on behalf of

Procter & Gamble Co.

John Gleason, Group Purchasing Manager, Chemical Purchases-Fabric and Home Care Products Group, Proctor & Gamble Co.

David Zint, Purchasing Group, Chemical Purchases-Fabric and Home Care Products Group, Proctor & Gamble Co.

Arthur J. Lafave III-OF COUNSEL

Clifford Chance Rogers & Wells LLP
Washington, D.C.
Kegler, Brown, Hill & Ritter
Columbus, Ohio
on behalf of

Ashland Distribution Co., a division of Ashland, Inc.

Dale M. MacDonald, Director, Source Management and Customer Support, Fine Ingredients Division, Ashland Distribution Co.

Gerald M. Snyder, Vice President and General Manager, Fine Ingredients Division, Ashland Distribution Co.

William Silverman-OF COUNSEL (Clifford Chance)
Richard P. Ferrin-OF COUNSEL (Clifford Chance)
S. Martijn Steger-OF COUNSEL (Kegler Brown)

Garvey, Schubert & Barer
Washington, D.C.
on behalf of

Ningxiner Biological Engineering Co., Ltd.
Wego Chemical and Mineral Corp.

Bert Echaghpour, President, Wego Chemical and Mineral Corp.

William E. Perry-OF COUNSEL

IN OPPOSITION TO THE IMPOSITION OF ANTIDUMPING DUTIES-*continued*:

Manatt, Phelps & Phillips, LLP
Washington, D.C.
on behalf of

BBCA (USA), Inc.
China BBCA Biochemical Group Corp.

Walter Wang, President, BBCA (USA), Inc.

Jeffrey S. Neeley-OF COUNSEL

Respondents' Economic Presentation:

Kenneth R. Button, Senior Vice President, Economic Consulting Services, Inc.

APPENDIX C

ADDITIONAL STATISTICAL DATA

Table C-1
Citric acid and sodium citrate: Summary data concerning the U.S. market, 1996-98, January-September 1998, and January-September 1999

(Quantity=1,000 dry pounds, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per dry pound; period changes=percent, except where noted)

Item	Reported data			January-September		Period changes			Jan.-Sept.
	1996	1997	1998	1998	1999	1996-98	1996-97	1997-98	1998-99
U.S. consumption quantity:									
Amount	448,794	482,652	506,716	398,470	408,370	12.9	7.5	5.0	2.5
Producers' share (1)	78.0	76.0	74.7	75.2	65.3	-3.3	-2.0	-1.3	-9.9
Importers' share (1):									
China	5.6	7.4	8.7	8.1	15.9	3.1	1.8	1.3	7.9
Hong Kong	0.1	0.1	0.0	0.0	0.2	-0.0	0.1	-0.1	0.2
Other sources	16.3	16.4	16.6	16.7	18.5	0.3	0.1	0.1	1.8
Total imports	22.0	24.0	25.3	24.8	34.7	3.3	2.0	1.3	9.9
U.S. consumption value:									
Amount	300,781	309,928	314,233	248,418	242,386	4.5	3.0	1.4	-2.4
Producers' share (1)	78.1	76.4	75.2	75.6	66.7	-2.8	-1.7	-1.1	-8.9
Importers' share (1):									
China	4.9	6.3	7.2	6.7	13.3	2.3	1.4	0.8	6.6
Hong Kong	0.1	0.1	0.0	0.0	0.2	-0.0	0.1	-0.1	0.2
Other sources	17.0	17.2	17.6	17.7	19.8	0.6	0.2	0.4	2.1
Total imports	21.9	23.6	24.8	24.4	33.3	2.8	1.7	1.1	8.9
U.S. imports from:									
China:									
Quantity	25,215	35,838	44,023	32,216	65,092	74.6	42.1	22.8	102.1
Value	14,746	19,650	22,540	16,594	32,237	52.9	33.3	14.7	94.3
Unit value	$0.58	$0.55	$0.51	$0.52	$0.50	-12.4	-6.2	-6.6	-3.9
Ending inventory quantity	1,668	3,593	4,947	4,843	10,146	196.6	115.4	37.7	109.5
Hong Kong:									
Quantity	251	621	171	171	953	-32.1	147.1	-72.5	458.4
Value	160	372	94	94	511	-41.0	132.4	-74.6	441.3
Unit value	$0.64	$0.60	$0.55	$0.55	$0.54	-13.1	-5.9	-7.6	-3.1
Ending inventory quantity	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Other sources:									
Quantity	73,169	79,376	83,913	66,399	75,552	14.7	8.5	5.7	13.8
Value	51,031	53,192	55,151	43,961	47,906	8.1	4.2	3.7	9.0
Unit value	$0.70	$0.67	$0.66	$0.66	$0.63	-5.8	-3.9	-1.9	-4.2
Ending inventory quantity	5,860	6,412	7,131	7,792	5,725	21.7	9.4	11.2	-26.5
All sources:									
Quantity	98,636	115,836	128,106	98,785	141,597	29.9	17.4	10.6	43.3
Value	65,937	73,213	77,786	60,650	80,655	18.0	11.0	6.2	33.0
Unit value	$0.67	$0.63	$0.61	$0.61	$0.57	-9.2	-5.5	-3.9	-7.2
Ending inventory quantity	7,528	10,005	12,078	12,635	15,871	60.4	32.9	20.7	25.6
U.S. producers': (3)									
Production quantity	403,993	457,086	474,778	355,499	265,808	17.5	13.1	3.9	-25.2
U.S. shipments:									
Quantity	350,158	366,816	378,610	299,685	266,773	8.1	4.8	3.2	-11.0
Value	234,844	236,715	236,447	187,768	161,731	0.7	0.8	-0.1	-13.9
Unit value	$0.67	$0.65	$0.62	$0.63	$0.61	-6.9	-3.8	-3.2	-3.2
Export shipments:									
Quantity	63,587	66,839	62,727	48,576	36,712	-1.4	5.1	-6.2	-24.4
Value	38,847	37,691	35,572	27,654	21,609	-8.4	-3.0	-5.6	-21.9
Unit value	$0.61	$0.56	$0.57	$0.57	$0.59	-7.2	-7.7	0.6	3.4
Ending inventory quantity	41,384	60,137	90,424	66,355	52,420	118.5	45.3	50.4	-21.0
Inventories/total shipments (1)	10.0	13.9	20.5	14.3	13.0	10.5	3.9	6.6	-1.3
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000s)	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not available.
(3) Financial and employment data do not include Tate & Lyle.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-2
Citric acid: Summary data concerning the U.S. market, 1996-98, January-September 1998, and January-September 1999

(Quantity=1,000 dry pounds, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per dry pound; period changes=percent, except where noted)

	Reported data					Period changes			
				January-September					Jan.-Sept.
Item	1996	1997	1998	1998	1999	1996-98	1996-97	1997-98	1998-99
U.S. consumption quantity:									
Amount	418,403	456,470	483,414	376,787	379,978	15.5	9.1	5.9	0.8
Producers' share (1)	81.0	78.9	77.7	78.3	67.4	-3.2	-2.1	-1.2	-10.9
Importers' share (1):									
China	5.3	7.3	8.7	8.2	15.9	3.4	2.0	1.4	7.7
Hong Kong	0.1	0.1	0.0	0.0	0.2	-0.0	0.1	-0.1	0.2
Other sources	13.7	13.7	13.5	13.4	16.4	-0.1	-0.0	-0.1	3.0
Total imports	19.0	21.1	22.3	21.7	32.6	3.2	2.1	1.2	10.9
U.S. consumption value:									
Amount	279,672	287,984	293,585	230,119	221,672	5.0	3.0	1.9	-3.7
Producers' share (1)	80.9	78.9	77.9	78.4	68.3	-3.0	-2.1	-0.9	-10.1
Importers' share (1):									
China	4.7	6.4	7.4	7.0	13.6	2.6	1.6	1.0	6.6
Hong Kong	0.1	0.1	0.0	0.0	0.2	-0.0	0.1	-0.1	0.2
Other sources	14.3	14.6	14.7	14.6	17.9	0.4	0.3	0.0	3.2
Total imports	19.1	21.1	22.1	21.6	31.7	3.0	2.1	0.9	10.1
U.S. imports from:									
China:									
Quantity	22,260	33,345	42,075	30,872	60,524	89.0	49.8	26.2	96.0
Value	13,276	18,406	21,684	16,021	30,149	63.3	38.6	17.8	88.2
Unit value	$0.60	$0.55	$0.52	$0.52	$0.50	-13.6	-7.4	-6.6	-4.0
Ending inventory quantity	1,078	2,993	4,443	4,440	9,241	312.1	177.6	48.4	108.1
Hong Kong:									
Quantity	251	617	171	171	865	-32.1	145.5	-72.3	406.9
Value	160	370	94	94	469	-41.0	131.2	-74.5	397.1
Unit value	$0.64	$0.60	$0.55	$0.55	$0.54	-13.1	-5.8	-7.7	-1.9
Ending inventory quantity	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Other sources:									
Quantity	57,166	62,353	65,352	50,676	62,451	14.3	9.1	4.8	23.2
Value	39,928	42,102	43,050	33,650	39,613	7.8	5.4	2.3	17.7
Unit value	$0.70	$0.68	$0.66	$0.66	$0.63	-5.7	-3.3	-2.4	-4.5
Ending inventory quantity	4,833	4,882	5,691	6,116	4,208	17.8	1.0	16.6	-31.2
All sources:									
Quantity	79,677	96,315	107,598	81,719	123,840	35.0	20.9	11.7	51.5
Value	53,364	60,878	64,829	49,765	70,231	21.5	14.1	6.5	41.1
Unit value	$0.67	$0.63	$0.60	$0.61	$0.57	-10.0	-5.6	-4.7	-6.9
Ending inventory quantity	5,911	7,875	10,134	10,556	13,449	71.4	33.2	28.7	27.4
U.S. producers': (3)									
Average capacity quantity	442,646	472,646	473,846	355,085	***	7.0	6.8	0.3	***
Production quantity	387,050	439,318	455,397	341,599	***	17.7	13.5	3.7	***
Capacity utilization (1)	87.4	92.9	96.1	96.2	85.1	8.7	5.5	3.2	-11.1
U.S. shipments:									
Quantity	338,726	360,155	375,816	295,068	256,138	10.9	6.3	4.3	-13.2
Value	226,308	227,106	228,756	180,354	151,441	1.1	0.4	0.7	-16.0
Unit value	$0.67	$0.63	$0.61	$0.61	$0.59	-8.9	-5.6	-3.5	-3.3
Export shipments:									
Quantity	53,404	56,397	52,569	40,808	30,485	-1.6	5.6	-6.8	-25.3
Value	31,888	31,129	29,768	22,949	18,518	-6.6	-2.4	-4.4	-19.3
Unit value	$0.60	$0.55	$0.57	$0.56	$0.61	-5.2	-7.6	2.6	8.0
Ending inventory quantity	30,597	48,183	71,866	49,394	41,465	134.9	57.5	49.2	-16.1
Inventories/total shipments (1)	7.8	11.6	16.8	11.0	10.9	9.0	3.8	5.2	-0.2
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000s)	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:	***	***	***	***	***	***	***	***	***
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not available.
(3) Financial and employment data do not include Tate & Lyle.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-3
Sodium citrate: Summary data concerning the U.S. market, 1996-98, January-September 1998, and January-September 1999

(Quantity=1,000 dry pounds, value=1,000 dollars, unit values, unit labor costs, and unit expenses are per dry pound; period changes=percent, except where noted)

	Reported data					Period changes			
				January-September					Jan.-Sept.
Item	1996	1997	1998	1998	1999	1996-98	1996-97	1997-98	1998-99
U.S. consumption quantity:									
Amount	62,960	60,139	60,531	48,382	46,633	-3.9	-4.5	0.7	-3.6
Producers' share (1)	69.9	67.5	66.1	64.7	61.9	-3.8	-2.3	-1.4	-2.8
Importers' share (1):									
China	4.7	4.1	3.2	2.8	9.8	-1.5	-0.5	-0.9	7.0
Hong Kong	0.0	0.0	0.0	0.0	0.2	0.0	0.0	-0.0	0.2
Other sources	25.4	28.3	30.7	32.5	28.1	5.2	2.9	2.4	-4.4
Total imports	30.1	32.5	33.9	35.3	38.1	3.8	2.3	1.4	2.8
U.S. consumption value:									
Amount	44,521	40,384	39,682	31,838	29,273	-10.9	-9.3	-1.7	-8.1
Producers' share (1)	71.8	69.5	67.3	65.8	64.4	-4.4	-2.3	-2.1	-1.4
Importers' share (1):									
China	3.3	3.1	2.2	1.8	7.1	-1.1	-0.2	-0.9	5.3
Hong Kong	0.0	0.0	0.0	0.0	0.1	0.0	0.0	-0.0	0.1
Other sources	24.9	27.5	30.5	32.4	28.3	5.6	2.5	3.0	-4.1
Total imports	28.2	30.5	32.7	34.2	35.6	4.4	2.3	2.1	1.4
U.S. imports from:									
China:									
Quantity	2,955	2,493	1,947	1,343	4,568	-34.1	-15.6	-21.9	240.1
Value	1,470	1,243	856	573	2,088	-41.8	-15.4	-31.2	264.1
Unit value	$0.50	$0.50	$0.44	$0.43	$0.46	-11.6	0.2	-11.9	7.1
Ending inventory quantity	590	600	504	403	905	-14.6	1.7	-16.0	124.3
Hong Kong:									
Quantity	0	4	0	0	88	(2)	(2)	-100.0	(2)
Value	0	2	0	0	42	(2)	(2)	-100.0	(2)
Unit value	(2)	$0.50	(2)	(2)	$0.47	(2)	(2)	(2)	(2)
Ending inventory quantity	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)	(2)
Other sources:									
Quantity	16,003	17,024	18,561	15,723	13,101	16.0	6.4	9.0	-16.7
Value	11,103	11,089	12,101	10,311	8,294	9.0	-0.1	9.1	-19.6
Unit value	$0.69	$0.65	$0.65	$0.66	$0.63	-6.0	-6.1	0.1	-3.5
Ending inventory quantity	1,027	1,530	1,440	1,676	1,517	40.2	49.0	-5.9	-9.5
All sources:									
Quantity	18,959	19,521	20,508	17,066	17,757	8.2	3.0	5.1	4.0
Value	12,573	12,335	12,957	10,884	10,423	3.1	-1.9	5.0	-4.2
Unit value	$0.66	$0.63	$0.63	$0.64	$0.59	-4.7	-4.7	-0.0	-8.0
Ending inventory quantity	1,617	2,130	1,944	2,079	2,422	20.2	31.7	-8.7	16.5
U.S. producers': (3)									
Average capacity quantity	68,536	69,232	69,204	51,603	***	1.0	1.0	-0.0	***
Production quantity	49,487	51,756	56,543	40,576	***	14.3	4.6	9.2	***
Capacity utilization (1)	72.2	74.8	81.7	78.6	***	9.5	2.6	6.9	***
U.S. shipments:									
Quantity	44,001	40,618	40,023	31,316	28,876	-9.0	-7.7	-1.5	-7.8
Value	31,948	28,049	26,725	20,954	18,850	-16.3	-12.2	-4.7	-10.0
Unit value	$0.73	$0.69	$0.67	$0.67	$0.65	-8.0	-4.9	-3.3	-2.4
Export shipments:									
Quantity	10,189	10,441	10,158	7,792	6,227	-0.3	2.5	-2.7	-20.1
Value	6,964	6,559	6,065	4,620	3,593	-12.9	-5.8	-7.5	-22.2
Unit value	$0.68	$0.63	$0.60	$0.59	$0.58	-12.6	-8.1	-5.0	-2.7
Ending inventory quantity	12,789	11,956	18,559	16,961	10,955	45.1	-6.5	55.2	-35.4
Inventories/total shipments (1)	23.6	23.4	37.0	32.5	23.4	13.4	-0.2	13.6	-9.1
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000s)	***	***	***	***	***	***	***	***	***
Hourly wages	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour)	***	***	***	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	***	***	***	***	***	***	***	***	***
Unit SG&A expenses	***	***	***	***	***	***	***	***	***
Unit operating income or (loss)	***	***	***	***	***	***	***	***	***
COGS/sales (1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/ sales (1)	***	***	***	***	***	***	***	***	***

(1) "Reported data" are in percent and "period changes" are in percentage points.
(2) Not available/applicable.
(3) Financial and employment data do not include Tate & Lyle.

Note.--Financial data are reported on a fiscal year basis and may not necessarily be comparable to data reported on a calendar year basis.

Source: Compiled from data submitted in response to Commission questionnaires and from official Commerce statistics.

Table C-4
Citric acid: Data for producers in China, 1996-98, January-September 1998, January-September 1999, and projected 1999-2000

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Table C-5
Sodium citrate: Data for producers in China, 1996-98, January-September 1998, January-September 1999, and projected 1999-2000

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Table C-6
Potassium citrate: Summary data concerning the U.S. market, 1996-98, January-September 1998, and January-September 1999

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APPENDIX D

LIST OF LOST SALES AND REVENUES ALLEGATIONS

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APPENDIX E

ALLEGED EFFECTS OF IMPORTS ON PRODUCERS' EXISTING DEVELOPMENT AND PRODUCTION EFFORTS, GROWTH, INVESTMENT, AND ABILITY TO RAISE CAPITAL

The Commission requested U.S. producers to describe any actual or anticipated negative effects of imports of citric acid or sodium citrate from China on their return on investment or their growth, investment, ability to raise capital, and existing development and production efforts (including efforts to develop a derivative or more advanced version of the product), or their scale of capital investments undertaken as a result of such imports. The responses are as follows:

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APPENDIX F

POSSIBLE CITRIC ACID AND SODIUM CITRATE PRODUCERS IN CHINA

Known or Possible Chinese Producers of Citric Acid

Anhui Chemicals
Jin An Mansion
306 Tunxi Road
Hefei, Anhui Province, China
Phone: 0086-551-4655345

Anhui Fuyang Pharmaceutical Co.
Liang Hua Road
Fuyang City, Anhui Province, China

Anhui Huangshi Citric Acid Factory

Ankang Area Chemical Plant
Ankang City, Shaanxi Province, China

Bengbu Citric Acid Factory (also BBCA Biochemical)
No. 73 Daqing Road
Beugbu City, Anhui Province 233010
Phone: 86-552 4926238

Changzhou Monosodium Glutamate Factory
Changzhou, Jiangsu Province, China

China Export Bases Development Guizhou Corp.
No. 295 Hequn Road
Guiyang, Guizhou, China
Phone: 86-0851-6833783

China Jiangsu International Economic Technical Cooperative
No. 278 Zhongyang Road
Nanjing, China 210009
Phone: 6632365

China National Chemical Construction Co.
No. 131 Yanan Road
QD, China 266071
Phone: 3861912

China North Industries Guangzhou Co.
376 Huanshi Dong Road
Guangzhou, China 510060
Phone: 83862888

China Tuhsu Anhui Tea Corp.
4-5/F Financial Building
256 Jinzhai Road
Hefei, China
Phone: 551-2679320

China Yantai Greenleaf Pharmacy Group
Yantai, Shandong Province, China

Chuxiong Citric Acid Plant
Chuxiong City, Yunnan Province, China

Daqing Citric Acid Plant
Daqing, Helongjiang, China

Fuyang Citric Acid Factory
Anhui Province, China

Gansu Linze Starch Mill
Linze, China

Gonzhuling (Jilin)
Jilin Province, China

Hainan Dingan Citric Acid Factory
Dingan, Hainan Province, China

Hangzhou Fangda Citric Acid Plant
Hangzhou, Zhejiang Province, China

Hebei Cangzhou Citric Acid Plant
Cangzhou City, Hebei Province, China

Hebei Dingzhou Citric Acid Factory
No. 41 Zhong Shan Road
Dingzhou City, Hebei Province, China

Hebei Shijiazhuang 1st Chemical Factory

Hebei Wanquan Citric Acid Factory
Kongjiazhuang Town, Hebei Province, China

Hebei Zanhuang County Citric Acid Plant
Hebei, China

Heilongjiang Heping Sugar Refinery
Heping, Guandong Province, China

Heilongjiang Hongwei Biochemical Co. Ltd.
Ma An Shan
Daqing City, Heilongjiang Province, China

Hengyang Solvents Factory
Hengyang, Hunan Province, China

Huangshi Citric Acid Plant
Huangshi, Hubei Province, China

Hubei Laohekou Citric Acid Factory

Hubei Shashi Winery
Shashi, Hubei Province, China

Hubei Yunxi Pharmaceutical and Chemical
Yunxi, Hubei Province, China

Hengyang Nanfang Chemical Plant
Hengyang City, Hunan Province, China

Hunan Ningxiang Petrochemical
Ningxiang, Hunan Province, China

Hunan Yiyang City Alcohol Plant
Yiyang City, Hunan Province, China

Huoshan Citric Acid Plant
Liuan, China

Innermongol Tongliao City No. 3 Chemical Plant
Tongliao City, Innermongol Province, China

Jiangsu Guanyun Country Fermentation Factory

Jiangxi Air Compressor Factory
Jiangxi Province, China

Jiangxi Guixi Pesticide Plant
Jiangxi, Jiangxi Province, China

Jiangxi Guoyao Plant
Nanchang City, Jiangxi Province, China

Jiangxi National Pharmaceutical Factory

Jiangxi No. 2 Sugar Plant
Ganzhou City, Jiangxi Province, China

Jiangxi Traditional Chinese Medicines Factory
Nanchang, Jiangxi Province, China

Jiangxi Yingtan City Taqiao Citric Acid Plant
Yingtan City, Jiangxi Province, China

Laohekou Citric Acid Factory
Laohekou, Hubei Province, China

Lianyungang Fermentation Factory
No. 58 Xingfu Road
Lianyungang, Jiangsu Province, China

Lianyungang Honqui Chemical Plant
Lianyungang, Jiangsu Province, China

Lianyungang Redflag Chemical Factory

Meihekou Citric Acid Factory
Meihekou, Jilin Province, China

Miwon Co., Ltd
Dingzhou, Hebei Province, China

Nanning Citric Acid Co.
No. 2 Bei Hu Bei Road
Nanning City, Guangxi Province, China

Nanning Citric Acid Co. Ltd.
No. 11-1 Northern Beihu Road
Nanning City, Guangxi Province, China 530001
Phone: 3808923

Nanning City Gourmet Powder Factory
Nanning City, Guangxi Province, China

Nanning Monosodium Glutamate Factory
Nanning City, Guangxi Province, China

Nantong Citric Acid Factory
No. 30 Heng He Road
Nantong, Jiangsu Province, China

Nantong Fermentation Plant
Nantong, Jiangsu Province, China

Ningxia Fermenting Factory
No. 22 Mangcheng North Street
Xincheng
Yinchuan City, China 750001
Phone: 0951-3066526

Ningxiang Petro-Chemical Co.
No. 16 Jing Ting Road
Ningxing City, Hunan Province, China

No. 1 Branch Plant of Jiangxi Gas Compressor Works
Ganzhou City, Jiangxi Province, China

QD Fuso Refining and Processing
QD Science and Industry Garden
Quingdao, Shangdong, China 266100
Phone: 3865662

Qingjiang Foodstuffs Company
Qingjiang, Jiangsu Province, China

Quanzhou Sugar Refinery
Quanzhou, Fujian Province, China

Rizhao Citric Acid Company
No. 126 Hai Qu Xi Road
Rizhao City, Shandong Province, China

Roche Zhuongya (Wuxi) Citric Acid
West of Qing Cheng Bridge
Wuxi City, Jiangsu Province, China

RZC
Jiangsu Province, China

Shandong Linyi Citric Acid Mill
Meibuhedong District
Linyi City, Shandong, China 276024
Phone: 8891139

Shanghai Fengxian Simei Monsodium Glutmate Factory
Shanghai, Shanghai Province, China

Shanghai Hujiang Biochemical Plant
Nanqiao Town, Shanghai Province, China

Shanghai Jiading Monosodium Glutamate Factory
Shanghai, Shanghai Province, China

Shanghai Jinyi Food Company
Nanmenwai, Shanghai Province, China

Shanghai New-Type Fermentation Plant
Shanghai, Shanghai Province, China

Shanghai Tian Yi MSG Factory

Shanghai Xingxing Fermentation Factory

Shanghai Yeast Factory
Shanghai, Shanghai Province, China

Shanhaiguan Huayuan Citric Acid Factory
Tuanjie Street
Shanhaiguan, Hebei Province, China
Phone: 0086-335-5051395

Shanxi Fenhe Pharmaceutical Company
Hexi Industry Area
Linfen City, Shanxi Province, China 041000
Phone: 3068421

Shijiazuang Chemical Plant
Shijiazhuang City, Hebei Province, China

Sichuan Jiangtang Co. Ltd.
Yangwei
Jiang Wei County, Sichuan Province, China

Sichuan Jianwei Sugar Factory

Sichuan Chongqing 5th Pharmaceutical Factory
Chongqing, Sichuan Province, China

Sichuan Wanxian Feiya Enterprise Co.
Wanxian, Sichuan Province, China

Songyuan

Suining Citric Acid Factory
Jiangsu Province, China

Tangshan Jidong Pharmaceutical
22 of Park Road
New District
Tangshan, Hebei, Province, China 063030
Phone: 86 3153242848

Texpo International
57 Wyndham Street, 5th Floor
Hong Kong, China
Phone: (852) 2524 4948

Tianjin Citric Acid Factory
Tianjin, Tianjin Province, China

Tianjin Yisaier Precision Chemical Co. Ltd.
No. 1 Jinan Road
Peace District
China 300060
Phone: 23351909

Wanquan
Hebei Province, China

Wuxi No. 2 Pharmaceutical Plant
Wuxi, Jiangsu Province, China

Wuxi Yixing Citric Acid Factory

Wuxi Zhongya Chemical Ltd
(see Roche Zhuongya (Wuxi) Citric Acid)

Xiamen Sugar Refinery
Xiamen, China

Xinhe County Biochemical Plant
Hebei Province, China

Xintai Branch of Shanghai Xinxing Ferment Plant
Xintai City, Shandong Province, China

Xinyi Chemical Factory
Xinyl, Jiangsu Province, China

Xuchang Citric Acid Plant
Xuchang, Huenan Province, China

Xuzhou Pharmaceutical Factory No. 3
Xuzhou, Jiangsu Province, China

Yangzijiang Citric Acid Co. Ltd.
No. 170 Huang Shi Street
Huangshi City, Hebei Province, China

Yichang Municipal Citric Acid Plant
Yichang, Hebei Province, China

Yunnan Tianli Biological Fermentation Factory

Zhangjiang Hangzhou Citric Acid Factory

Zibo Hualong Industrial General Corporation
Mengji Village
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