Furfuryl Alcohol from China

Investigation No. 731-TA-703 (Fifth Review)

Publication 5407

February 2023

U.S. International Trade Commission

Washington, DC 20436

U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-703 (Fifth Review)

Furfuryl Alcohol from China

DETERMINATION

On the basis of the record¹ developed in the subject five-year review, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on July 1, 2022 (87 FR 39559) and determined on October 4, 2022 that it would conduct an expedited review (88 FR 2132, January 12, 2023).

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

Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Tariff Act"), that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigations. In June 1995, the Commission determined that an industry in the United States was materially injured by reason of subject imports of furfuryl alcohol sold at less than fair value ("LTFV") from China and South Africa.¹ Shortly thereafter, the Commission also determined that an industry in the United States was materially injured by reason of subject imports of furfuryl alcohol from Thailand.² On June 21, 1995, the U.S. Department of Commerce ("Commerce") issued antidumping duty orders on furfuryl alcohol from China and South Africa.³ On July 25, 1995, Commerce issued an antidumping duty order on furfuryl alcohol from Thailand.⁴ The antidumping duty order on subject imports from South Africa was revoked in July 1999.⁵

First Five-Year Reviews. In April 2001, the Commission completed its first five-year reviews of the orders on furfuryl alcohol from China and Thailand and, following full reviews, determined that revocation of the antidumping duty orders on furfuryl alcohol from China and Thailand would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.⁶ On May 4, 2001, Commerce published its notice of continuation of the antidumping duty orders on furfuryl alcohol from China and Thailand.⁷

¹ Furfuryl Alcohol from the People's Republic of China and South Africa, Inv. Nos. 731-TA-703 and 704 (Final), USITC Pub. 2897 (June 1995) ("Original Determinations").

² Furfuryl Alcohol from Thailand, Inv. No. 731-TA-705 (Final), USITC Pub. 2909 (July 1995).

³ Notice of Antidumping Duty Order: Furfuryl Alcohol From the People's Republic of China (PRC), 60 Fed. Reg. 32,302 (June 21, 1995); Notice of Amended Final Antidumping Duty Determination and Order: Furfuryl Alcohol From South Africa, 60 Fed. Reg. 32,302 (June 21, 1995).

⁴ Amended Final Antidumping Duty Determination and Order; Furfuryl Alcohol From Thailand, 60 Fed. Reg. 38,035 (July 25, 1995).

⁵ Furfuryl Alcohol From the Republic of South Africa; Final Results of Antidumping Duty Administrative Review and Revocation of Antidumping Duty Order, 64 Fed. Reg. 37,500 (July 12, 1999).

⁶ Furfuryl Alcohol from China and Thailand, Inv. Nos. 731-TA-703 and 705 (Review), USITC Pub. 3412 (Apr. 2001) ("First Reviews") at 3.

⁷ Continuation of Antidumping Duty Orders: Furfuryl Alcohol From the People's Republic of China and Thailand, 66 Fed. Reg. 22,519 (May 4, 2001).

Second Five-Year Reviews. In September 2006, the Commission completed its second five-year reviews and, following expedited reviews, determined that revocation of the antidumping duty orders on furfuryl alcohol from China and Thailand would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. On October 6, 2006, Commerce published its notice of continuation of the antidumping duty order covering furfuryl alcohol from China. However, following a subsequent negative determination in its full five-year review, Commerce revoked the order with respect to subject imports from Thailand.

Third Five-Year Review. In January 2012, the Commission completed its third five-year review of the antidumping duty order on furfuryl alcohol from China and, following an expedited review, determined that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time. On February 16, 2012, Commerce published its notice of continuation of the antidumping duty order covering furfuryl alcohol from China.

Fourth Five-Year Review. On January 3, 2017, the Commission instituted its fourth five-year review of the antidumping duty order on furfuryl alcohol from China.¹³ Following an expedited review, the Commission determined that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹⁴ On August 9, 2017, Commerce published its notice of continuation of the antidumping duty order on furfuryl alcohol from China.¹⁵

⁸ Furfuryl Alcohol from China and Thailand, Inv. Nos. 731-TA-703 and 705 (Second Review), USITC Pub. 3885 (Sept. 2006) ("Second Reviews").

⁹ Furfuryl Alcohol from the People's Republic of China: Continuation of Antidumping Duty Order, 71 Fed. Reg. 59,072 (Oct. 6, 2006).

¹⁰ Furfuryl Alcohol from Thailand; Final Results of the Second Sunset Review of the Antidumping Duty Order and Revocation of the Order, 72 Fed. Reg. 9,729 (Mar. 5, 2007).

¹¹ Furfuryl Alcohol from China, Inv. No. 731-TA-703 (Third Review), USTIC Pub. 4302 (Jan. 2012) ("Third Review").

¹² Furfuryl Alcohol From the People's Republic of China: Notice of Continuation of Antidumping Duty Order, 77 Fed. Reg. 9,203 (Feb. 16, 2012).

¹³ Furfuryl Alcohol From China; Institution of a Five-Year Review, 82 Fed. Reg. 140 (Jan. 3, 2017).

¹⁴ Furfuryl Alcohol from China, Inv. No. 731-TA-703 (Fourth Review), USTIC Pub. 4708 (July 2017) ("Fourth Review").

¹⁵ Furfuryl Alcohol From the People's Republic of China: Continuation of Antidumping Duty Order, 82 Fed. Reg. 37,194 (Aug. 9, 2017).

Current Five-Year Review. The Commission instituted this five-year review on July 1, 2022. It received a single response to its notice of institution from one U.S. producer of furfuryl alcohol, Penn A Kem LLC ("Penn"). No respondent interested party responded to the notice of institution or participated in this review. On October 4, 2022, the Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate. Finding no other circumstances that would warrant conducting a full review, the Commission determined that it would conduct an expedited review of the order. Penn submitted final comments pursuant to Commission rule 207.62(d)(1) on January 23, 2023.

U.S. industry data for this review are based on information provided by Penn in its response to the notice of institution, accounting for 100 percent of U.S. furfuryl alcohol production in 2021.²¹ U.S. import data are based on official Commerce statistics and data from the original investigations and prior five-year reviews.²² Foreign industry data and related information are based on information supplied by Penn in its response to the notice of institution, information from the original investigations and prior five-year reviews, and publicly available information gathered by the Commission.²³ Additionally, the Commission received

¹⁶ Furfuryl Alcohol From China; Institution of a Five-Year Review, 87 Fed. Reg. 39,559 (July 1, 2022).

¹⁷ Penn's Substantive Response to the Notice of Institution, August 1, 2022 ("Penn's Substantive Response").

¹⁸ Furfuryl Alcohol From China; Scheduling of an Expedited Five-Year Review, 88 Fed. Reg. 2,132 (Jan. 12, 2023).

¹⁹ Furfuryl Alcohol From China; Scheduling of an Expedited Five-Year Review, 88 Fed. Reg. 2,132 (Jan. 12, 2023). Chairman Johanson voted to conduct a full review of the order. Commission Adequacy Vote, EDIS Doc. 781716.

²⁰ Penn's Final Comments, Jan. 23, 2023.

²¹ Confidential Report, Memorandum INV-UU-091, Sep. 22, 2022 ("CR"); Furfuryl Alcohol from China, Inv. No. 731-TA-703 (Fifth Review), USITC Pub. 5407 (Feb. 2023) ("PR") at Table I-2; Penn's Substantive Response at 10. For the years 1994, 2000, 2005, 2010, and 2015, data are compiled using data submitted in the Commission's original investigations and prior five-year reviews. CR/PR at Table I-3, Source. For the year 2021, data are compiled using data submitted by Penn. CR/PR at Table I-3, Source; Penn's Substantive Response at Exh. F; Penn's Supplemental Responses to the Notice of Institution (Aug. 17, 2022, and Sep. 16, 2022) at 2.

²² For the 2016-2021 period, U.S. import data were compiled from official Commerce statistics for Harmonized Tariff Schedule ("HTS") statistical reporting number 2932.13.0000. CR/PR at Table I-4, Source. These data may be overstated as HTS subheading 2932.13 includes the out-of-scope product tetrahydrofurfuryl alcohol ("THFA"). *Id.* at Tables I-4-5, Note. For the years 1994, 2000, 2005, 2010, and 2015, data were compiled using data from the Commission's original investigations and subsequent five-year reviews. CR/PR at Table I-5, Source. ***. *Id.* at Table I-5, Note.

²³ CR/PR at I-18-21; Penn's Substantive Response at Exh. D.

responses to its adequacy phase questionnaire from three U.S. purchasers of furfuryl alcohol: *** ²⁴

II. Domestic Like Product and Industry

A. Domestic Like Product

In making its determination under section 751(c) of the Tariff Act, the Commission defines the "domestic like product" and the "industry."²⁵ The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."²⁶ The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.²⁷

Commerce has defined the imported merchandise within the scope of the order under review as follows:

Furfuryl alcohol ($C_4H_3OCH_2OH$) is a primary alcohol, and is colorless or pale yellow in appearance. It is used in the manufacture of resins and as a wetting agent and solvent for coating resins, nitrocellulose, cellulose acetate, and other soluble dyes.²⁸

Commerce's scope has remained the same since the original investigations.²⁹

²⁴ See CR/PR at Appendix D.

²⁵ 19 U.S.C. § 1677(4)(A).

²⁶ 19 U.S.C. § 1677(10); see, e.g., Cleo Inc. v. United States, 501 F.3d 1291, 1299 (Fed. Cir. 2007); 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); Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996); Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991); see also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

²⁷ See, e.g., Internal Combustion Industrial Forklift Trucks from Japan, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 at 8-9 (Dec. 2005); Crawfish Tail Meat from China, Inv. No. 731-TA-752 (Review), USITC Pub. 3614 at 4 (July 2003); Steel Concrete Reinforcing Bar from Turkey, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 at 4 (Feb. 2003).

²⁸ Furfuryl Alcohol From the People's Republic of China: Final Results of Expedited Fifth Sunset Review of Antidumping Duty Order, 87 Fed. Reg. 66,217 (Nov. 2, 2022); Department of Commerce memorandum from James Maeder to Lisa W. Wang, Issues and Decision Memorandum for the Final Results of the Expedited Fifth Sunset Review of the Antidumping Duty Order on Furfuryl from China, Oct. 27, 2022, EDIS Doc. 788955 at 2.

²⁹ Original Determinations, USITC Pub. 2897 at I-3, n.3; First Reviews, USITC Pub. 3412 at 5; Second Reviews, USITC Pub. 3885 at 4; Third Review, USITC Pub. 4302 at 5; Fourth Review, USITC Pub. 4708 at 5.

Furfuryl alcohol is a colorless or light-yellow liquid that becomes brown or dark red when exposed to light and air.³⁰ It has a slight odor variously described as that of bread, alcohol, or a burned substance and occurs naturally in beer, bread, and coffee.³¹ The principal use of furfuryl alcohol in the United States and worldwide is in the production of furan resins, which are used mainly as binders in the production of sand cores for the ferrous and nonferrous foundry industries (casting metal and nonmetal products).³² Although there are alternatives to furan resin as a binding agent, there are no known substitutes for furfuryl alcohol in the production of furan resin.³³

In the original investigations, the Commission defined a single domestic like product consisting of all furfuryl alcohol, coextensive with Commerce's scope.³⁴ In the prior five-year reviews, the Commission continued to define a single domestic like product consisting of all furfuryl alcohol, coextensive with Commerce's scope.³⁵

Current Five-Year Review. The record of this review contains no new information suggesting that the characteristics and uses of domestically produced furfuryl alcohol have changed since the original investigations and prior five-year reviews so as to warrant revisiting the Commission's domestic like product definition.³⁶ Penn agrees with the Commission's definition of the domestic like product from the prior proceedings.³⁷ Accordingly, we again define a single domestic like product consisting of all furfuryl alcohol, coextensive with Commerce's scope.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."³⁸ In defining the domestic industry, the Commission's general practice has been

³⁰ CR/PR at I-8.

³¹ CR/PR at I-8.

³² CR/PR at I-8.

³³ CR/PR at I-8.

³⁴ Original Determinations, USITC Pub. 2897 at I-6-7.

³⁵ First Reviews, USITC Pub. 3412 at 4-5; Second Reviews, USITC Pub. 3885 at 4-5; Third Review, USITC Pub. 4302 at 4-5; Fourth Review, USITC Pub. 4708 at 6.

³⁶ CR/PR at I-8.

³⁷ Penn's Substantive Response at 12.

³⁸ 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

to include in the industry producers of all domestic production of the like product, whether tollproduced, captively consumed, or sold in the domestic merchant market.

In the original investigations, the Commission defined the domestic industry as QO Chemicals, generally known as Great Lakes, an integrated producer of furfuryl alcohol.³⁹ In the first five-year reviews, the Commission defined the domestic industry to encompass Penn Chemicals, Great Lakes (which had sold its facilities to Penn Chemicals in 1998), and two toll producers.⁴⁰ In the second five-year reviews, the Commission defined the domestic industry as encompassing Penn Chemicals, the sole U.S. producer of furfuryl alcohol.⁴¹ In the third and fourth five-year reviews, the Commission defined the domestic industry as encompassing Penn, successor to Penn Chemicals and the sole U.S. producer of furfuryl alcohol.⁴²

Current Five-Year Review. Penn agrees with the Commission's definition of the domestic industry from the third and fourth five-year reviews.⁴³ There are no related parties or other domestic industry issues in this review.⁴⁴ Consequently, consistent with our definition of the domestic like product, we define the domestic industry as encompassing Penn, the sole domestic producer of furfuryl alcohol.

III. Revocation of the Antidumping Duty Order Would Likely Lead to Continuation or Recurrence of Material Injury Within a Reasonably Foreseeable Time

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time." The SAA states that "under the likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of

³⁹ Original Determinations, USITC Pub. 2897 at I-7-9. Although the Commission found Advanced Resin Systems, Inc. ("ARS"), a toll producer, to be a domestic producer of furfuryl alcohol, it excluded ARS from the domestic industry pursuant to the related parties provision. *Id.*

⁴⁰ First Reviews, USITC Pub. 3412 at 6.

⁴¹ Second Reviews, USITC Pub. 3885 at 5.

⁴² Third Review, USITC Pub. 4302 at 6; Fourth Review, USITC Pub. 4708 at 6.

⁴³ Penn's Substantive Response at 12.

⁴⁴ See CR/PR at I-10-11; Penn' Substantive Response at 10.

⁴⁵ 19 U.S.C. § 1675a(a).

an important change in the status quo – the revocation or termination of a proceeding and the elimination of its restraining effects on volumes and prices of imports."⁴⁶ Thus, the likelihood standard is prospective in nature.⁴⁷ The U.S. Court of International Trade ("CIT") has found that "likely," as used in the five-year review provisions of the Act, means "probable," and the Commission applies that standard in five-year reviews.⁴⁸

The statute states that "the Commission shall consider that the effects of revocation or termination may not be imminent, but may manifest themselves only over a longer period of time." According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' timeframe applicable in a threat of injury analysis in original investigations." ⁵⁰

Although the standard in a five-year review is not the same as the standard applied in an original investigation, it contains some of the same fundamental elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the orders are revoked or the suspended investigation is terminated."⁵¹ It directs the Commission to take into account its prior injury

⁴⁶ SAA at 883-84. The SAA states that "{t}he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry). Likewise, the standard applies to suspended investigations that were never completed." *Id.* at 883.

⁴⁷ While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued {sic} prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

⁴⁸ See NMB Singapore Ltd. v. United States, 288 F. Supp. 2d 1306, 1352 (Ct. Int'l Trade 2003) ("'likely' means probable within the context of 19 U.S.C. § 1675(c) and 19 U.S.C. § 1675a(a)"), aff'd mem., 140 Fed. Appx. 268 (Fed. Cir. 2005); Nippon Steel Corp. v. United States, 26 CIT 1416, 1419 (2002) (same); Usinor Industeel, S.A. v. United States, 26 CIT 1402, 1404 nn.3, 6 (2002) ("more likely than not" standard is "consistent with the court's opinion;" "the court has not interpreted 'likely' to imply any particular degree of 'certainty'"); Indorama Chemicals (Thailand) Ltd. v. United States, 26 CIT 1059, 1070 (2002) ("standard is based on a likelihood of continuation or recurrence of injury, not a certainty"); Usinor v. United States, 26 CIT 767, 794 (2002) ("'likely' is tantamount to 'probable,' not merely 'possible'").

⁴⁹ 19 U.S.C. § 1675a(a)(5).

⁵⁰ SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

⁵¹ 19 U.S.C. § 1675a(a)(1).

determination, whether any improvement in the state of the industry is related to the order or the suspension agreement under review, whether the industry is vulnerable to material injury if an order is revoked or a suspension agreement is terminated, and any findings by Commerce regarding duty absorption pursuant to 19 U.S.C. § 1675(a)(4).⁵² The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination.⁵³

In evaluating the likely volume of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁵⁴ In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.⁵⁵

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁵⁶

In evaluating the likely impact of imports of subject merchandise if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed

⁵² 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the antidumping duty order under review. Department of Commerce memorandum from James Maeder to Lisa W. Wang *Issues and Decision Memorandum for the Final Results of the Expedited Fifth Sunset Review of the Antidumping Duty Order on Furfuryl from China*, Oct. 27, 2022, EDIS Doc. 788955 at 3.

⁵³ 19 U.S.C. § 1675a(a)(5). Although the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

⁵⁴ 19 U.S.C. § 1675a(a)(2).

⁵⁵ 19 U.S.C. § 1675a(a)(2)(A-D).

⁵⁶ See 19 U.S.C. § 1675a(a)(3). The SAA states that "{c}onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to the following: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.⁵⁷ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.⁵⁸

No respondent interested party participated in this five-year expedited review. The record, therefore, contains limited new information with respect to the furfuryl alcohol industry in China. There is also limited information on the furfuryl alcohol market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on information provided by Penn in its response to the notice of institution, the facts available from the original investigations and prior five-year reviews, publicly available information gathered by the Commission, and the limited new information on the record of this five-year expedited review.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."⁶¹ The following conditions of competition inform our determination.

⁵⁷ 19 U.S.C. § 1675a(a)(4).

⁵⁸ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, 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 may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

⁵⁹ CR/PR at I-18-19.

⁶⁰ See CR/PR at I-10-17.

⁶¹ 19 U.S.C. § 1675a(a)(4).

1. Demand Conditions

Original Investigations. The Commission found that furfuryl alcohol was used primarily as a monomer in the production of furan resins and as an intermediate in the production of other specialty products. ⁶² It observed that apparent U.S. consumption of furfuryl alcohol increased each year of the period of investigation ("POI"), with the largest increase occurring from 1993 to 1994. ⁶³ The Commission attributed the increase in demand for furfuryl alcohol to increased production by the U.S. steel industry over the POI. ⁶⁴

Prior Five-Year Reviews. In the prior five-year reviews, the Commission continued to find that demand for furfuryl alcohol was dependent upon demand for furan resins.⁶⁵ In the first five-year reviews, the Commission found that apparent U.S. consumption increased from 1996 to 2000.⁶⁶ In the second five-year reviews, the Commission found that apparent U.S. consumption again increased and reached its highest level of *** pounds in 2005.⁶⁷ According to the domestic interested party, worldwide demand for furfuryl alcohol was flat.⁶⁸ In the third five-year review, apparent U.S. consumption was *** pounds in 2010.⁶⁹ In the fourth five-year review, apparent U.S. consumption for furfuryl alcohol decreased to *** pounds in 2015, which was lower than apparent U.S. consumption in 1994, 2000, 2005, and 2010.⁷⁰

Current Five-Year Review. The information available indicates that demand for furfuryl alcohol continues to be driven by demand for furan resin.⁷¹ Penn states that it is unaware of any changes in the demand conditions for furfuryl alcohol in the U.S. market during the current period of review but ***.⁷²

Responding purchasers reported some changes to demand conditions in the U.S. market. *** reported that ***. *** reported that ***.

⁶² Original Determinations, USITC Pub. 2897 at I-6.

⁶³ Original Determinations, USITC Pub. 2897 at I-10.

⁶⁴ Original Determinations, USITC Pub. 2897 at I-10.

⁶⁵ First Reviews, USITC Pub. 3412 at 14; Second Reviews, USITC Pub. 3885 at 13; Third Review, USITC Pub. 4302 at 5; Fourth Review, USITC Pub. 4708 at 10.

⁶⁶ First Reviews, USITC Pub. 3412 at 14.

⁶⁷ Second Reviews, USITC Pub. 3885 at 14; Second Reviews Confidential Views, EDIS Doc. 779423 at 20.

⁶⁸ Second Reviews, USITC Pub. 3885 at 14.

⁶⁹ Third Review, USITC Pub. 4302 at 8; Confidential Third Review Staff Report, EDIS Doc. 779425 at Table F-2

⁷⁰ Fourth Review, USITC Pub. 4708 at 10; Fourth Review Confidential Views, EDIS Doc. 779429 at 15.

⁷¹ CR/PR at I-8.

⁷² Penn's Substantive Response at 12.

⁷³ CR/PR at Appendix D.

Apparent U.S. consumption of furfuryl alcohol was *** pounds in 2021, which was more than in 2015 but less than in 2005 and 2010.⁷⁴

2. Supply Conditions

Original Investigations. The Commission found that there were relatively few suppliers in the U.S. market.⁷⁵ It observed that the domestic industry's market share fell from *** percent in 1992 to *** percent in 1994 and that the market share of subject imports from China increased from *** percent in 1992 to *** percent in 1994.⁷⁶

First Five-Year Reviews. The Commission observed that the domestic industry had undergone significant restructuring. Specifically, Great Lakes Chemical Corporation, an integrated producer and the largest domestic producer in the original investigations, exited the market in 1998 and was replaced by Penn Chemicals in 1999. Another domestic producer, Ferro, left the market in 1999. As a result of restructuring, U.S. producers' capacity decreased from *** pounds in 1998 to *** pounds in 2000.⁷⁷ The Commission found that the domestic industry's market share decreased in 2000 to *** percent.⁷⁸ Subject imports from China were absent from the U.S. market. However, subject imports from Thailand, absent from the market in 1997, reentered the U.S. market in 1998, and their market share increased from *** percent in 1998 to *** percent in 2000.⁷⁹ Nonsubject imports' market share decreased from *** percent in 1998 to *** percent in 2000.⁸⁰

Second Five-Year Reviews. The domestic industry consisted of only one domestic producer, Penn Chemicals.⁸¹ The Commission found that in 2005, the domestic industry's market share decreased to *** percent, the market share of subject imports from Thailand decreased to *** percent, and nonsubject imports' market share increased to *** percent. Subject imports from China continued to be absent from the U.S. market.⁸²

⁷⁴ CR/PR at Table I-5.

⁷⁵ Original Determinations, USITC Pub. 2897 at I-10.

⁷⁶ Original Determinations, USITC Pub. 2897 at I-10; Confidential Third Review Staff Report, EDIS Doc. 779425 at Table E-1.

⁷⁷ First Reviews, USITC Pub. 3412 at 15; First Reviews Confidential Views, EDIS Doc. 779418 at 18.

⁷⁸ First Reviews, USITC Pub. 3412 at 18; First Reviews Confidential Views, EDIS Doc. 779418 at 22.

⁷⁹ First Reviews, USITC Pub. 3412 at 15; Confidential First Reviews Staff Report, EDIS Doc. 779419 at Table I-1.

⁸⁰ Confidential First Reviews Staff Report, EDIS Doc. 779419 at Table I-1.

⁸¹ Second Reviews, USITC Pub. 3885 at 5.

⁸² Second Reviews, USITC Pub. 3885 at 14; Second Reviews Confidential Views, EDIS Doc. 779423 at 20.

Third Five-Year Review. The domestic industry continued to be limited to one producer, Penn, the successor to Penn Chemicals.⁸³ The Commission found that market shares of the domestic industry and nonsubject imports were *** percent and *** percent, respectively, in 2010. It further found that subject imports from China returned to the U.S. market in small amounts.⁸⁴

Fourth Five-Year Review. The Commission found that the market shares for the domestic industry and nonsubject imports in 2015 were *** percent and *** percent, respectively.⁸⁵ It found that subject imports had been present in the U.S. market in minimal amounts since 2011 and accounted for *** percent of apparent U.S. consumption in 2015.⁸⁶

Current Five-Year Review. The domestic industry was the largest source of furfuryl alcohol in the U.S. market in 2021, accounting for *** percent of apparent U.S. consumption that year.⁸⁷ Since 2015, U.S. production capacity has increased by more than *** percent and the volume of U.S. production has ***.⁸⁸ ***.⁸⁹

Subject imports were the smallest source of supply in 2021, accounting for *** percent of apparent U.S. consumption that year.⁹⁰

Nonsubject imports were the second largest source of supply, accounting for *** percent of apparent U.S. consumption in 2021.⁹¹ The two largest sources of nonsubject imports were Belgium and South Africa.⁹²

Responding purchaser *** reported that ***. Responding purchaser *** reported that ***.

⁸³ Third Review, USITC Pub. 4302 at 5.

⁸⁴ *Third Review,* USITC Pub. 4302 at 9; Confidential Third Review Staff Report, EDIS Doc. 779425 at Table E-2.

⁸⁵ Fourth Review, USITC Pub. 4708 at 12; Fourth Review Confidential Views, EDIS Doc. 779429 at 17.

⁸⁶ Fourth Review, USITC Pub. 4708 at 12; Fourth Review Confidential Views, EDIS Doc. 779429 at 17.

⁸⁷ CR/PR at Table I-5. The domestic industry' share of apparent U.S. consumption may be understated due to import data potentially containing out-of-scope product THFA. *Id.* at Tables I-4-5, Note.

⁸⁸ CR/PR at I-11, Table I-3.

⁸⁹ CR/PR at I-11.

⁹⁰ CR/PR at Table I-5.

⁹¹ CR/PR at Table I-5.

⁹² CR/PR at Table I-4.

⁹³ CR/PR at Appendix D.

3. Substitutability and Other Conditions

Original Investigations. The Commission found that subject imports and the domestic like product were generally interchangeable and served as good substitutes.⁹⁴ Producers, importers, and purchasers generally considered the domestic like product and the subject imports to be comparable with regard to most factors, such as product quality and availability.⁹⁵ The Commission also found that price was an important purchasing factor.⁹⁶

Prior Five-Year Reviews. In the first and second five-year reviews, the Commission found that subject imports and the domestic like product were substitutable.⁹⁷ In the third and fourth five-year reviews, the Commission found that subject imports and the domestic like product were highly substitutable.⁹⁸ In all prior five-year reviews, the Commission also found that price was an important factor in purchasing decisions.⁹⁹ It found that the U.S. market was dominated by a few large purchasers and, as a result of the large volume purchased by a concentrated group of purchasers and the fungible, commodity nature of the product, price differentials as small as one cent per pound could be a deciding factor in purchasing decisions.¹⁰⁰ The Commission also found that price was an important factor in purchasing decisions for smaller purchasers.¹⁰¹

Current Five-Year Review. The record in these reviews contains no new information to indicate that the degree of substitutability between the domestic like product and the subject imports or the importance of price in purchasing decisions have changed since the fourth five-year review. Penn asserts that furfuryl alcohol is a commodity product sold in a mature market with flat demand and a few large customers that base purchasing decisions primarily on

⁹⁴ Original Determinations, USITC Pub. 2897 at I-17.

⁹⁵ Original Determinations, USITC Pub. 2897 at I-17.

⁹⁶ Original Determinations, USITC Pub. 2897 at I-10.

⁹⁷ First Reviews, USITC Pub. 3412 at 17; Second Reviews, USITC Pub. 3885 at 18. In the second five-year review, the Commission also found that furfuryl alcohol was generally considered readily interchangeable regardless of country of origin. Second Reviews, USITC Pub. 3885 at 13.

⁹⁸ Third Review, USITC Pub. 4302 at 12; Fourth Review, USITC Pub. 4708 at 16.

⁹⁹ First Reviews, USITC Pub. 3412 at 17; Second Reviews, USITC Pub. 3885 at 18; Third Review, USITC Pub. 4302 at 10, 12; Fourth Review, USITC Pub. 4708 at 12, 16.

¹⁰⁰ Original Determinations, USITC Pub. 2897 at I-10; First Reviews, USITC Pub. 3412 at 14-15; Second Reviews, USITC Pub. 3885 at 13, 15; Third Review, USITC Pub. 4302 at 10; Fourth Review, USITC Pub. 4708 at 12.

¹⁰¹ First Reviews, USITC Pub. 3412 at 15; Second Reviews, USITC Pub. 3885 at 15; Third Review, USITC Pub. 4302 at 10; Fourth Review, USITC Pub. 4708 at 12.

price.¹⁰² Accordingly, we continue to find that subject imports and the domestic like product are highly substitutable, and that price remains an important factor in purchasing decisions.

Penn reported that internal consumption and company transfers accounted for *** of its furfuryl alcohol production, *** of the *** pounds, in 2021.¹⁰³ Further, internal consumption accounted for *** of the value of Penn's U.S. shipments in 2021.¹⁰⁴

Furfuryl alcohol imported from China enters the U.S. market at a column 1-general duty rate of 3.7 percent *ad valorem* and became subject to an additional 25 percent *ad valorem* duty under Section 301 of the Trade Act of 1974, effective September 24, 2018.¹⁰⁵

C. Likely Volume of Subject Imports

1. The Original Investigations and Prior Five-Year Reviews

Original Investigations. The Commission found that the volume and market share of cumulated subject imports from China, South Africa, and Thailand increased substantially throughout the POI.¹⁰⁶ Specifically, the Commission observed that cumulated subject imports increased from *** pounds in 1992 to *** pounds in 1994.¹⁰⁷ Cumulated subject imports' market share increased from *** percent of apparent U.S. consumption in 1992 to *** percent in 1994.¹⁰⁸ It found that the increase in the volume and market share of cumulated subject imports came primarily at the expense of the domestic industry, which lost market share both in terms of quantity and value. The Commission concluded that the volume of cumulated subject imports and their market share, as well as the increase in these imports, were significant.¹⁰⁹

First Five-Year Reviews. The Commission found that subject imports from China had left the U.S. market following the imposition of the order. It found that several factors supported the conclusion that cumulated subject import volume would likely be significant if the orders

¹⁰² Penn's Substantive Response at 5.

¹⁰³ CR/PR at Table B-2; Penn's Substantive Response at Exh. F.

¹⁰⁴ CR/PR at Table I-3, Note.

¹⁰⁵ CR/PR at I-7, n.28.

¹⁰⁶ Original Determinations, USITC Pub. 2897 at I-17.

¹⁰⁷ Original Determinations, USITC Pub. 2897 at I-17; Confidential Third Review Staff Report, EDIS Doc. 779425 at Table E-1. Subject imports from China increased from *** pounds in 1992 to *** pounds in 1994. *Id.*

¹⁰⁸ Original Determinations, USITC Pub. 2897 at I-17; Confidential Third Review Staff Report, EDIS Doc. 779425 at Table E-1. Subject imports from China increased their market share from *** percent in 1992 to *** percent in 1994. *Id.*

¹⁰⁹ Original Determinations, USITC Pub. 2897 at I-17.

were revoked. The Commission noted there was considerable capacity in the subject countries; five producers in China, representing up to *** percent of total Chinese production capacity, reported capacity of *** pounds in 2000. It found that subject producers were export oriented and had demonstrated considerable flexibility to switch between their export markets. The Commission found that revocation of the orders would create the incentive for subject producers in China and Thailand to shift their exports to the U.S. market in light of stagnant demand for furfuryl alcohol in other markets and the size of the U.S. market. It concluded that the likely volume of cumulated subject imports would be significant within a reasonably foreseeable time if the orders were revoked.

Second Five-Year Reviews. The Commission acknowledged that there was limited information on subject producers' production capacity during the review period. It, however, pointed out that in the first five-year reviews subject producers had provided data showing substantial production capacity in both China and Thailand. Moreover, in the second five-year reviews, Penn Chemicals had provided information indicating that subject producers, particularly those in China, had increased production capacity. The Commission further emphasized that according to Global Trade Atlas ("GTA") data, subject producers continued to export substantial quantities of furfuryl alcohol to third-country markets. With respect to China, the GTA data showed that Chinese exports of the subject product to third-country markets increased from 82.5 million pounds in 2000 to 166.3 million pounds in 2005. The Commission concluded that the likely volume of cumulated subject imports would be significant within a reasonably foreseeable time if the orders were revoked. 114

Third Five-Year Review. The Commission observed that Chinese subject producers had 791.5 million pounds of production capacity, which was significantly underutilized. It further observed that subject producers in China exported substantial quantities of furfuryl alcohol to other markets. The Commission explained that GTA data indicated that Chinese exports of furfuryl alcohol to third-country markets ranged from 116.8 million pounds in 2009 to 212.3 million pounds in 2008. Furthermore, in 2010, according to data from the Chinese Customs Statistics Information Service Center, 15 subject producers exported 15.5 million pounds of furfuryl alcohol to the European Union alone. Based on the substantial capacity and export orientation of the industry in China, and the attractiveness of the United States as an export

¹¹⁰ Confidential First Reviews Staff Report, EDIS Doc. 779419 at II-6.

¹¹¹ First Reviews, USITC Pub. 3412 at 16.

¹¹² First Reviews, USITC Pub. 3412 at 16-17.

¹¹³ Second Reviews, USITC Pub. 3885 at 16. The GTA data included nonsubject THFA. Id.

¹¹⁴ Second Reviews, USITC Pub. 3885 at 16.

¹¹⁵ Third Review, USITC Pub. 4302 at 11. The GTA data included nonsubject THFA. *Id*.

market, the Commission concluded that the likely volume of subject imports would be significant upon revocation.¹¹⁶

Fourth Five-Year Review. The Commission found that subject imports had maintained a minimal presence in the U.S. market during the period of review, and were only *** pounds, equivalent to *** percent of apparent U.S. consumption, in 2015. 117 It found that subject producers in China continued to possess substantial excess capacity, remained export oriented, and had a price incentive to direct additional exports to the United States if the order were revoked. Accordingly, the Commission found that the likely volume of subject imports would be significant if the order were revoked. 119

2. The Current Five-Year Review

Subject imports maintained a limited but increasing presence in the U.S. market during the period of review under the disciplining effect of the order. Subject import volume ranged from 9,000 to 53,000 pounds during the 2016-2020 period before increasing to 55,000 pounds in 2021, equivalent to *** percent of apparent U.S. consumption that year.

The record in this expedited review contains limited information on the subject industry in China. The information available, however, indicates that subject producers have the means and incentive to increase their exports of subject merchandise to the U.S. market to significant levels if the order were revoked.

Subject producers continued to possess substantial capacity, including excess capacity, during the period of review. Penn identified 16 known producers of furfuryl alcohol in

¹¹⁶ Third Review. USITC Pub. 4302 at 11-12.

¹¹⁷ Fourth Review, USITC Pub. 4708 at 14; Fourth Review Confidential Views, EDIS Doc. 779429 at 20.

¹¹⁸ Fourth Review, USITC Pub. 4708 at 14. Available data from GTA indicated that China was the world's largest exporter of furfuryl alcohol and THFA from 2011-2015. *Id*.

¹¹⁹ Fourth Review, USITC Pub. 4708 at 14.

¹²⁰ CR/PR at Table I-4.

 $^{^{121}}$ CR/PR at Tables I-4-5. Imports from China may be overstated as HTS subheading 2932.13 contains out-of-scope product THFA. *Id.* at Table I-4, Note.

¹²² See CR/PR at I-18-21.

¹²³ Penn's Substantive Response at 8-9, Exhs. D-E.

China. Responding purchasers *** reported that ***. Penn estimates that the subject industry's capacity was 1.4 billion pounds in 2022, and that the industry operated at a capacity utilization rate of only 50 percent that year. Based on these estimates, subject producers would have possessed excess capacity of 700 million pounds in 2022, equivalent to over *** apparent U.S. consumption in 2021. Penn estimates that the subject industry operated at a capacity utilization rate of only 50 percent that year. Based on these estimates, subject producers would have possessed excess capacity of 700 million pounds in 2022, equivalent to over ***

The available information also indicates that subject producers in China remain export oriented. Penn provided information from websites for nine subject producers indicating that each of the producers are focused on exports, including, in some cases, exports to the United States. Consistent with this information, GTA data show that China was by far the largest global exporter of furfuryl alcohol and THFA, a category that includes subject merchandise and

¹²⁴ CR/PR at I-18; Penn's Substantive Response at Exh. D. Penn noted the following recent developments with respect to the subject industry: Weifang Donghai F.A. closed its operations five years ago; Dezhou Qingyun F.A. suspended production for six years and restarted production in 2022; and Weifang Dadi F.A. suspended production for five years and restarted production in 2022. CR/PR at I-19; Penn's Substantive Response at Exh. D.

¹²⁵ CR/PR at Appendix D.

¹²⁶ Penn's Substantive Response at 8, n.17, Exh. D. Penn provided public information regarding the output/capacity of seven known subject producers in 2022. According to the firm's website, subject producer Hongye Holding Group Corporation Limited has an annual production capacity of 150,000 tons. Subject producer Shandon Zibo Baofeng I&E Cp. Ltd. is reported to have an annual output of 12,000 metric tons. Subject producer Xingtai Chunlei Furfuryl Alcohol Co., Ltd. reports on its website that its annual production is 25,000 metric tons. Subject producer Shanghai HYT Sinofuran's website states that has an annual output of 50,000 tons. Subject producer Hebei Furan International Co., Ltd. is reported to have an annual production capacity of 20,000 metric tons. Subject producer Henan Huilong Chemicals Co., Ltd. is reported to have an annual output of 10,000 tons. Finally, subject producer Shanxi Province Gaoping Chemical Industry Co., Ltd. is reported to have an annual output of 15,000 metric tons. Penn's Substantive Response at 8-9, Exhs. D-E.

¹²⁷ CR/PR at Table I-5.

¹²⁸ CR/PR at Appendix D.

Hongye Holding Group Corporation Limited exports to more than 40 countries, including the United States. Subject producer Shandon Zibo Baofeng I&E Cp. Ltd. is reportedly one of the largest exporters of furfuryl alcohol in China. Subject producer Zhucheng Taisheng Chemical Co., Ltd. reports on its website that more than 80 percent of its production is exported. Subject producer Xingtai Chunlei Furfuryl Alcohol Co., Ltd. reports on its website that it has an export license and exports to many countries around the world. Subject producer Shanghai HYT Sinofuran's website states that its products are exported to the United States. Subject producer Qingdao On-Billion Industrial Co., Ltd. reportedly exports to more than 20 countries and regions, including the United States. Subject producer Hebei Furan International Co., Ltd. claims to be widely known by customers around the world. Subject producer Henan Huilong Chemicals Co., Ltd. is reported to mainly export to Europe, Japan, and the United States. Finally, subject producer Shanxi Province Gaoping Chemical Industry Co., Ltd. is reported to have exported its products to the United States and other countries. *Id*.

an out-of-scope product, throughout the period of review.¹³⁰ During the period of review, China's global exports of such merchandise increased irregularly from 172.5 million pounds in 2016 to 176.4 million pounds in 2021.¹³¹

Available information also indicates that the U.S. market remains attractive to subject producers. Subject imports remained in the U.S. market in limited quantities during the period of review while under the disciplining effect of the order,¹³² potentially maintaining ready distribution networks in the United States through affiliated importers and sales agents. Additionally, the information provided by Penn indicates that Chinese exporters of furfuryl alcohol would have an economic incentive to increase their exports to the United States, given the relatively higher prices prevailing in the U.S. market as compared to prices in third country markets.¹³³

Given the foregoing, including the significant and increasing volume of subject imports during the original investigations, the continued presence of subject imports in the U.S. market during the current period of review, the subject industry's substantial capacity, including excess capacity, and export orientation, and the attractiveness of the U.S. market to subject producers, we find that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the order were revoked.

D. Likely Price Effects

1. The Original Investigations and Prior Reviews

Original Investigations. The Commission found that subject imports and the domestic product were fungible and that price was an important factor in purchasing decisions, with a difference of as little as one cent per pound able to affect major purchasers' decisions. It found that the subject imports had significant price depressing or suppressing effects because the record indicated that domestic producers had to cut prices or restrain price increases to retain market share in light of subject import competition. The Commission observed that lost revenue and sales data confirmed that purchasers shifted from the domestic product to subject imports on the basis of price.¹³⁴

¹³⁰ CR/PR at Table I-7.

¹³¹ CR/PR at Table I-7.

¹³² CR/PR at Table I-4. Imports from China may be overstated as HTS subheading 2932.13 contains out-of-scope product THFA. *Id.* at Table I-4, Note.

¹³³ Penn's Substantive Response at 6. Penn claims that the average unit value ("AUV") of Chinese producers' exports in 2021, *** per pound, ***. *Id*.

¹³⁴ Original Determinations, USITC Pub. 2897 at I-17-20.

First Five-Year Reviews. The Commission found that a number of factors made significant price effects likely. Subject imports and the domestic product were fungible and price was an important factor in purchasing decisions. According to the Commission, in light of the stagnant demand for furfuryl alcohol worldwide, subject producers had considerable incentive to price their product aggressively in order to capture market share. In light of subject imports from Thailand underselling the domestic like product during the first period of review, and the adverse price effects observed during the original investigations, the Commission concluded that if the orders were revoked, cumulated subject imports would likely have significant price depressing or suppressing effects on the domestic like product.¹³⁵

Second Five-Year Reviews. The Commission found that competitive conditions would likely return to those prevailing in the original investigations if the antidumping duty orders were revoked. According to the Commission, given the importance of price in the market, the substitutability of the domestic like product and subject imports, the negative price effects of low-priced subject imports in the original investigations, and the incentive to obtain market share in the relatively high-priced, large, and stable U.S. market, cumulated subject imports would likely have adverse effects on domestic prices. The Commission therefore determined that, if the orders were revoked, significant volumes of cumulated subject imports would be likely to significantly undersell the domestic like product to gain market share and would be likely to have significant depressing or suppressing effects on the prices of the domestic like product within a reasonably foreseeable time.¹³⁶

Third Five-Year Review. The Commission again found that significant price effects were likely if the order were revoked. According to the Commission, furfuryl alcohol was highly substitutable regardless of the country of origin and price remained the principal factor in purchasing decisions. As the Commission found in the prior five-year reviews, as a result of the large volume purchased by the concentrated group of purchasers and the fungible commodity nature of the product, a price differential of as little as one cent per pound could be a deciding factor in purchasing decisions. It stated that if the order were revoked, subject imports would enter the U.S. market at low prices to obtain market share; domestic producers would be forced to cut prices or relinquish market share as a result. The Commission consequently found that the likely significant increase in subject import volume at prices that would likely undersell the domestic like product would likely have significant price effects on the domestic industry.¹³⁷

¹³⁵ First Reviews, USITC Pub. 3412 at 18.

¹³⁶ Second Reviews, USITC Pub. 3885 at 17-18.

¹³⁷ Third Review, USITC Pub. 4302 at 12-13.

Fourth Five-Year Review. The Commission again found that significant price effects were likely if the order were revoked. As in the third five-year review, the Commission found that furfuryl alcohol was highly substitutable regardless of the country of origin and that the U.S. market was highly price sensitive, such that price differences of as little as one cent per pound could be decisive. Given these factors, the Commission found that, absent the order, subject imports would likely significantly undersell the domestic like product to gain market share, thereby forcing the domestic industry to either lower prices or lose market share. Consequently, the Commission found that revocation of the order would likely result in significant subject import underselling and significant depressing or suppressing effects on domestic prices.

2. The Current Five-Year Review

As discussed above, we continue to find that subject imports and the domestic like product are highly substitutable, and that price remains an important factor in purchasing decisions for furfuryl alcohol. As in past reviews, the information available continues to show that, due to the commodity nature of the furfuryl alcohol market, pricing decisions are often made based on a difference in price as little as one cent per pound.¹⁴²

The record in these expedited reviews does not contain new product-specific pricing information. ¹⁴³ Based on the information available, including adverse price effects by subject imports in the original investigations, the high degree of substitutability between subject imports and the domestic like product, and the importance of price in purchasing decisions, we find that underselling by subject imports would likely be significant in the event of revocation of the order. Given this, and the likely significant volume of subject imports, subject imports would likely force the domestic industry to lower prices, forgo needed price increases, or lose sales and market share to subject imports, as they did in the original investigations. Consequently, we find that if the order were revoked, subject imports would likely have significant price effects.

¹³⁸ Fourth Review, USITC Pub. 4708 at 16.

¹³⁹ Fourth Review, USITC Pub. 4708 at 16.

¹⁴⁰ Fourth Review, USITC Pub. 4708 at 16.

¹⁴¹ Fourth Review, USITC Pub. 4708 at 16.

¹⁴² Penn's Substantive Response at 9.

¹⁴³ Some pricing information was provided by Penn, which claims that the AUV of Chinese producers' exports in 2021, *** per pound, was ***. Penn's Substantive Response at 6. Also, responding purchaser *** reported that ***. CR/PR at Appendix D.

E. Likely Impact

1. The Original Investigations and Prior Five-Year Reviews

Original Investigations. The Commission found that the increasing volume of subject imports, and the significant market share accounted for by those imports, depressed or suppressed prices to a significant degree, leading to the domestic industry's loss of market share, reduced production and shipments, and financial losses.¹⁴⁴

First Five-Year Reviews. The Commission found that cumulated subject imports from China and Thailand would have a significant impact on the domestic industry if the orders were revoked. Although the domestic industry's commercial shipments declined in terms of quantity and value, its operating margins remained strong. As such, the Commission concluded that the domestic industry was not then in a weakened condition. However, the Commission found that the likely volume and price effects of the cumulated subject imports would likely cause the domestic industry to lose market share, with a significant impact on the domestic industry's production, shipments, sales, and revenue levels. This likely reduction in the industry's production, sales, and revenue levels would have a direct adverse impact on the industry's profitability as well as its ability to raise capital investments. In addition, the Commission found that revocation of the orders would likely result in employment declines.¹⁴⁵

Second Five-Year Reviews. Given the generally substitutable nature of subject imports from both countries and the domestic like product and the attractiveness of the U.S. market, the Commission found that the likely significant volume of subject imports, when combined with the likely adverse price effects of those imports, would likely have a significant impact on the domestic industry's production, shipments, sales, and revenues. According to the Commission, reductions in these performance factors would have a direct adverse impact on the domestic industry's profitability and employment levels, as well as its ability to raise capital and make and maintain necessary capital investments. Accordingly, the Commission concluded that, if the antidumping duty orders were revoked, cumulated subject imports would likely have a significant impact on the domestic industry within a reasonably foreseeable time. The Commission did not find that the domestic industry was vulnerable to material

¹⁴⁴ Original Determinations, USITC Pub. 2897 at I-21.

¹⁴⁵ First Reviews, USITC Pub. 3412 at 19.

¹⁴⁶ Second Reviews, USITC Pub. 3885 at 19-20.

¹⁴⁷ Second Reviews, USITC Pub. 3885 at 20.

¹⁴⁸ Second Reviews, USITC Pub. 3885 at 20.

injury if the antidumping duty orders on cumulated subject imports were revoked, given the absence of industry performance data.¹⁴⁹

Third Five-Year Review. The Commission found that, if the order were revoked, subject imports from China would be likely to re-enter the U.S. market in significant quantities at the expense of the domestic industry. Further, it reiterated its finding that revocation of the antidumping duty order likely would lead to significant increases in the volume of subject imports at prices that would likely undersell the domestic like product and significantly depress or suppress U.S. prices. 150 As a result, the Commission found that the likely volume and price effects of subject imports would likely cause the domestic industry to lose market share, with a significant impact on the domestic industry's production, shipments, sales, revenue levels, and employment. Further, it determined that a reduction in the industry's production, shipments, sales, and revenue levels would have a direct adverse impact on the industry's profitability as well as its ability to raise capital and make and maintain necessary capital investments. The Commission stated that the limited 2010 data in the record were insufficient for determining whether the domestic industry was vulnerable to the continuation or recurrence of material injury in the event of revocation of the order. It also considered the role of nonsubject imports in the U.S. market to ensure that it did not attribute injury from nonsubject imports to subject imports. The Commission found that nonsubject imports had increased their market share in 2010, but concluded that nonsubject imports were unlikely to prevent subject imports from increasing their market share at the expense of the domestic industry upon revocation.¹⁵¹

Fourth Five-Year Review. The Commission found that if the order were revoked, the likely significant volume of subject imports and their price effects would likely have an adverse impact on the domestic industry's market share and/or prices, production, shipments, sales, revenues, profitability, employment levels, and capital investments. ¹⁵² It found that information concerning the industry's performance was too limited for the Commission to make a vulnerability finding. ¹⁵³ Considering the role of nonsubject imports, the Commission found that the domestic industry's financial performance improved in 2015 relative to 2010 notwithstanding the substantial and increasing participation of nonsubject import's in the U.S.

¹⁴⁹ Second Reviews, USITC Pub. 3885 at 19.

¹⁵⁰ Third Review, USITC Pub. 4302 at 19-20.

¹⁵¹ Third Review, USITC Pub. 4302 at 19-20.

¹⁵² Fourth Review, USITC Pub. 4708 at 18.

¹⁵³ Fourth Review, USITC Pub. 4708 at 18. The Commission found that Penn's capacity in 2015 was the same as in 2010, but that its production was lower. It also found that Penn's operating income ratio was higher in 2015 than in 1994, 2000, and 2010. *Id.* at 18, n.103.

market.¹⁵⁴ The Commission also found that, given the fungible nature of furfuryl alcohol, any increase in subject imports was likely to come substantially at the expense of the domestic industry.¹⁵⁵

2. The Current Five-Year Review

The record in these expedited reviews contains limited information concerning the domestic industry's performance since the fourth five-year review.

The information available indicates that the domestic industry's performance in 2021 was generally stronger than in the last years of the periods examined in the prior proceedings. The domestic industry's production of *** pounds in 2021 was higher than in the prior proceedings. Its capacity and capacity utilization were *** pounds and *** percent, respectively, in 2021, which were both higher than in 2010 and 2015. The quantity and value of the domestic industry's U.S. shipments, at *** pounds and \$***, respectively, in 2021, were both higher than in 2000, 2005, 2010, and 2015. In 2021, the domestic industry's net sales value, at \$***, was higher than in the prior proceedings, and its COGS to net sales ratio, at *** percent, was lower than in all of the prior proceedings except the fourth five-year review.

¹⁵⁴ Fourth Review, USITC Pub. 4708 at 18.

¹⁵⁵ Fourth Review, USITC Pub. 4708 at 18.

¹⁵⁶ CR/PR at Table I-3. For the years 1994, 2000, 2005, 2010, and 2015, data were compiled using data submitted in the Commission's original investigations and prior five-year reviews. *Id.* at Table I-3, Source. For the year 2021, data are compiled using data submitted by Penn. *Id.* at Table I-3, Source; Penn's Substantive Response at Exh. F; Penn's Supplemental Responses to the Notice of Institution (Aug. 17, 2022, and Sep. 16, 2022) at 2.

¹⁵⁷ CR/PR at Table I-3. The domestic industry's production was *** pounds in 1994, *** pounds in 2000, *** pounds in 2005, *** pounds in 2010, and *** pounds in 2015. *Id*.

¹⁵⁸ CR/PR at Table I-3. The domestic industry's capacity and capacity utilization were *** and *** percent, respectively, in 2010 and *** and *** percent, respectively, in 2015. *Id.* *** for 2005. *Id.* at Table I-3, Note. The domestic industry's capacity in 1994, at *** pounds, was higher than in 2021, but its capacity in 2000, at *** pounds, was lower than in 2021. The domestic industry's capacity utilization in 1994, at *** percent, was lower than in 2021, but its capacity utilization in 2000, at *** percent, was higher than in 2021. *Id.* at Table I-3.

¹⁵⁹ CR/PR at Table I-3. The domestic industry's quantity and value of U.S. shipments were *** pounds and \$***, respectively, in 2000; *** pounds and \$***, respectively, in 2015; *** pounds and \$***, respectively, in 2010; and *** pounds and \$***, respectively in 2015. The industry's quantity of U.S. shipment was higher in 1994, at ***, than in 2021, but its value of U.S. Shipment in 1994, at \$***, was lower than in 2021. *Id.* at Table I-3.

¹⁶⁰ CR/PR at Table I-3. The domestic industry's net sales and COGS to net sales ratio were \$*** and *** percent, respectively, in 1994; \$*** and *** percent, respectively, in 2000; \$*** and *** percent, respectively, in 2010; and \$*** and *** percent, respectively, in 2015. *Id.* *** for 2005. *Id.* at Table I-3, Note.

prior proceedings.¹⁶¹ Its operating income, at \$***, and operating income to net sales ratio, at *** percent, were also higher in 2021 than in the prior proceedings.¹⁶² This limited information is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.

Based on the information available, we find that revocation of the order would likely result in a significant volume of subject imports that would likely undersell the domestic like product to a significant degree. The likely significant volume of subject imports and their price effects, as discussed above, would negatively affect the domestic industry's production, capacity utilization, shipments, net sales values and quantities, and market share, which, in turn, would have a direct adverse impact on the industry's profitability and employment, as well as its ability to raise capital and make necessary capital investments. Consequently, we conclude that, if the order were revoked, subject imports from China would be likely to have an adverse impact on the domestic industry within a reasonably foreseeable time.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute injury from other factors to the subject imports. Nonsubject imports have declined as a share of apparent U.S. consumption since the fourth five-year reviews, accounting for *** percent of apparent U.S. consumption in 2021 as compared to *** percent in 2015. The record does not provide any indication that the presence of nonsubject imports would prevent subject imports from entering the U.S. market in significant volumes through significant underselling upon revocation of the orders. Given the high degree of substitutability between subject imports and the domestic like product, and the importance of price in purchasing decisions, we find it likely that the increase in low-priced subject imports would come at least in part at the expense of the domestic industry and/or depress or suppress prices for the domestic like product. In light of these considerations, we find that any effects of nonsubject imports would be distinct from the likely effects attributable to the subject imports.

 $^{^{161}}$ CR/PR at Table I-3. The domestic industry's gross profit was \$*** in 1994, \$*** in 2000, \$*** in 2010, and \$*** in 2015. *Id.* *** for 2005. *Id.* at Table I-3, Note.

¹⁶² CR/PR at Table I-3. The domestic industry's operating income and operating income to net sales ratio were *** and *** percent, respectively, in 1994; \$*** and *** percent, respectively, in 2000; \$*** and *** percent, respectively, in 2010; and \$*** and *** percent, respectively, in 2015. *Id.* *** for 2005. *Id.* at Table I-3, Note.

¹⁶³ CR/PR Table I-5. Import data may be overstated as HTS subheading 2932.13 contains out-of-scope product THFA. *Id.* at Tables I-4-5, Note.

¹⁶⁴ CR/PR at Table I-5. The domestic industry' share of apparent U.S. consumption may be understated due to import data potentially containing out-of-scope product THFA. *Id.* at Tables I-4-5, Note.

In sum, we conclude that if the order were revoked, subject imports of furfuryl alcohol from China would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the above reasons, we determine that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

Information obtained in this review

Background

On July 1, 2022, the U.S. International Trade Commission ("Commission") gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that it had instituted a review to determine whether revocation of the antidumping duty order on furfuryl alcohol from China would likely lead to the continuation or recurrence of material injury to a domestic industry. All interested parties were requested to respond to this notice by submitting certain information requested by the Commission. Table I-1 presents information relating to the background and schedule of this proceeding:

Table I-1
Furfuryl alcohol: Information relating to the background and schedule of this proceeding

Effective date	Action		
July 1, 2022	Notice of initiation by Commerce (87 FR 39459, July 1, 2022)		
July 1, 2022	Notice of institution by Commission (87 FR 39559, July 1, 2022)		
October 4, 2022	Commission's vote on adequacy (88 FR 2132, January 12, 2023)		
October 31, 2022	Commerce's final results of its expedited review (87 FR 66127, November 2, 2022)		
February 15, 2023	Commission's determination and views		

¹ 19 U.S.C. 1675(c).

² 87 FR 39559, July 1, 2022. In accordance with section 751(c) of the Act, the U.S. Department of Commerce ("Commerce") published a notice of initiation of a five-year review of the subject antidumping duty order. 87 FR 39459, July 1, 2022. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission's website (www.usitc.gov).

³ As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in the original investigation and subsequent full reviews are presented in app. C.

⁴ Interested parties were also requested to provide a list of three to five leading purchasers in the U.S. market for the domestic like product and the subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

Responses to the Commission's notice of institution

Individual responses

The Commission received one submission in response to its notice of institution in the subject review, filed on behalf of Penn A Kem LLC ("Penn A Kem"), a domestic producer of furfuryl alcohol (referred to herein as "domestic interested party").

A complete response to the Commission's notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

Table I-2 Furfuryl alcohol: Summary of completed responses to the Commission's notice of institution

	Interested party	Туре	Number of firms	Coverage
U.S	S. producer	Domestic	1	100%

Note: The U.S. producer coverage figure presented is the domestic interested party's estimate of its share of total U.S. production of furfuryl alcohol during 2021. Domestic interested party's response to the notice of institution, August 1, 2022, p. 10.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review from the domestic interested party, Penn A Kem. Penn A Kem requests that the Commission conduct an expedited review of the antidumping duty order on furfuryl alcohol.⁵

⁵ Domestic interested party's comments on adequacy, September 13, 2022, p. 2.

The original investigation

The original investigation resulted from a petition filed on May 31, 1994, with Commerce and the Commission by Quaker Oats Chemicals, Inc. ("QO"), West Lafayette, Indiana.⁶ On May 8, 1995, Commerce determined that imports of furfuryl alcohol from China were being sold at less than fair value ("LTFV").⁷ The Commission determined on June 14, 1995, that the domestic industry was materially injured by reason of LTFV imports of furfuryl alcohol from China.⁸ On June 21, 1995, Commerce issued its antidumping duty order with the final weighted-average dumping margins ranging from 43.54 percent to 50.43 percent.⁹ ¹⁰

The first five-year review

On August 3, 2000, the Commission determined that it would conduct a full review of the antidumping duty order on furfuryl alcohol from China. On September 5, 2000, Commerce published its determination that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of dumping. On April 26, 2001, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time. Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, May 4, 2001, Commerce issued a continuation of the antidumping duty order on imports of furfuryl alcohol from China.

⁶ Furfuryl Alcohol from the People's Republic of China and South Africa, Inv. Nos. 731-TA-703-704 (Final), USITC Publication 2897, June 1995 ("Original publication"), p. II-3. QO, a subsidiary of Great Lakes Chemical Corp., is also referred to as "Great Lakes" in subsequent five-year reviews.

⁷ 60 FR 22544, May 8, 1995.

⁸ 60 FR 32339, June 21, 1995.

⁹ 60 FR 32302, June 21, 1995.

¹⁰ While the original petition was also filed with respect to imports of furfuryl alcohol from South Africa and Thailand, the antidumping duty orders were revoked effective June 1, 1998 (prior to the first five-year review) for South Africa, and May 4, 2006 (after the Commission's determination in the second five-year review) for Thailand. 64 FR 37500, July 12, 1999, and 72 FR 9729, March 5, 2007.

¹¹ 65 FR 50003, August 16, 2000.

¹² 65 FR 53701, September 5, 2000.

¹³ 66 FR 21015, April 26, 2001.

¹⁴ 66 FR 22519, May 4, 2001.

The second five-year review

On July 7, 2006, the Commission determined that it would conduct an expedited review of the antidumping duty order on furfuryl alcohol from China. ¹⁵ On June 20, 2006, Commerce published its determination that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of dumping. ¹⁶ On September 15, 2006, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time. ¹⁷ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, October 6, 2006, Commerce issued a continuation of the antidumping duty order on imports of furfuryl alcohol from China. ¹⁸

The third five-year review

On September 1, 2011, the Commission determined that it would conduct an expedited review of the antidumping duty order on furfuryl alcohol from China. On December 19, 2011, Commerce published its determination that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of dumping. On January 30, 2012, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time. Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective, February 16, 2012, Commerce issued a continuation of the antidumping duty order on imports of furfuryl alcohol from China.

¹⁵ 71 FR 41469, July 21, 2006.

¹⁶ 71 FR 35412, June 20, 2006.

¹⁷ 71 FR 55804, September 25, 2006.

¹⁸ 71 FR 59072, October 6, 2006.

¹⁹ 76 FR 78613, December 19, 2011.

²⁰ 77 FR 5844, February 6, 2012.

²¹ 77 FR 9203, February 16, 2012.

The fourth five-year review

On April 10, 2017, the Commission determined that it would conduct an expedited review of the antidumping duty order on furfuryl alcohol from China.²² On May 1, 2017, Commerce published its determination that revocation of the antidumping duty order on furfuryl alcohol from China would be likely to lead to continuation or recurrence of dumping.²³ On July 28, 2017, the Commission notified Commerce of its determination that material injury would be likely to continue or recur within a reasonably foreseeable time.²⁴ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective August 9, 2017, Commerce issued a continuation of the antidumping duty order on imports of furfuryl alcohol from China.²⁵

Previous and related investigations

Furfuryl alcohol has not been the subject of any prior related antidumping or countervailing duty investigations in the United States.

²² 82 FR 23063, May 19, 2017.

²³ 82 FR 20318, May 1, 2017.

²⁴ 82 FR 36154, August 3, 2017.

²⁵ 82 FR 37194, August 9, 2017.

Commerce's five-year review

Commerce announced that it would conduct an expedited review with respect to the orders on imports of furfuryl alcohol from China with the intent of issuing the final results of this review based on the facts available not later than October 31, 2022. Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at http://enforcement.trade.gov/frn/. Issues and Decision Memoranda contain complete and up-to-date information regarding the background and history of the order, including scope rulings, duty absorption, changed circumstances review, and anticircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping duty order on imports of furfuryl alcohol from China are noted in the sections titled "The original investigation" and "U.S. imports," if applicable.

²⁶ Letter from Alex Villanueva, Senior Director Office I, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, August 23, 2022.

The product

Commerce's scope

Commerce has defined the scope as follows:

The merchandise covered by this order is furfuryl alcohol (C_4 H_3 OCH_2 OH). Furfuryl alcohol is a primary alcohol, and is colorless or pale yellow in appearance. It is used in the manufacture of resins and as a wetting agent and solvent for coating resins, nitrocellulose, cellulose acetate, and other soluble dyes. ²⁷

U.S. tariff treatment

Furfuryl alcohol is currently provided for in Harmonized Tariff Schedule of the United States ("HTS") subheading 2932.13.00, which also includes the out-of-scope downstream product tetrahydrofurfuryl alcohol (THFA). Furfuryl alcohol imported from China enters the U.S. market at a column 1-general duty rate of 3.7 percent ad valorem. Furfuryl alcohol produced in China is currently subject to an additional 25 percent ad valorem duty under Section 301 of the Trade Act of 1974.²⁸ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

²⁷ 82 FR 37194, August 9, 2017.

²⁸ The additional duty on furfuryl alcohol from China became effective on September 24, 2018.

Description and uses²⁹

Furfuryl alcohol is a colorless or light-yellow liquid that becomes brown or dark red when exposed to light and air.³⁰ It has a slight odor variously described as that of bread, alcohol, or a burned substance and occurs naturally in beer, bread, and coffee.³¹

The principal use of furfuryl alcohol in the United States and worldwide (*** percent) is in the production of furan resins, which are used mainly as binders in the production of sand cores for the ferrous and nonferrous foundry industries (casting metal and nonmetal products).³² Although there are alternatives to furan resin as a binding agent, there are no known substitutes for furfuryl alcohol in the production of furan resin.

The second principal use of furfuryl alcohol is in the production of THFA, which is used in pesticides, pharmaceuticals, and commercial and industrial cleaners and in coating and dyeing operations.³³ Other uses for furfuryl alcohol include production of copolymer resins, fiber-reinforced plastics, low–fire hazard foams, corrosion-resistant cements, flavor and fragrance chemicals, pharmaceutical and pesticide products, and specialty solvents in paint strippers and biocides.

Manufacturing process³⁴

Furfuryl alcohol is produced by the addition of hydrogen to furfural and use of a copper chromite catalyst (figure I-1).

²⁹ Unless otherwise noted, this information is based on Furfuryl Alcohol from China, Investigation No. 731-TA-703 (Fourth Review), USITC Publication 4708, July 2017 ("Fourth review publication"), pp. I-5-I-6.

³⁰ Its Chemical Abstracts Service (CAS) Registry Number is 98-00-0. The properties of furfuryl alcohol are typical of those of all alcohols. It can be reacted with acids to form esters, dehydrated or reacted with certain other chemicals to form ethers, or reacted with oxygen to form an aldehyde or acid.

^{31 &}quot;Furfuryl Alcohol," Good Scents Company, n.d.,

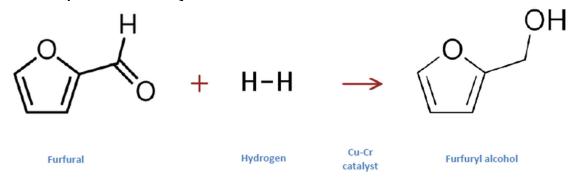
http://www.thegoodscentscompany.com/data/rw1013391.html (accessed September 6, 2022).

³² In the original investigation, furan resin production accounted for more than 90 percent of furfuryl alcohol consumption. Original publication, p. II-6. One industry source estimated that ***.

^{33 ***.}

³⁴ Unless otherwise noted, this information is based on the fourth review publication, pp. I-6-I-7.

Figure I-1
Production process for furfuryl alcohol



Source: Fourth review publication, p. I-6

Furfural is produced by combining agricultural by-products such as corncobs, sugarcane bagasse, and other biomass with an acid. The two commercial methods of producing furfuryl alcohol are a vapor-based process and a liquid-based process. In the vapor-based process, used by manufacturers other than in China, the furfural feedstock is vaporized, mixed with hydrogen gas, and passed through a copper catalyst to produce crude furfuryl alcohol vapor, which is then condensed and distilled to yield the desired level of purity.³⁵ In the older liquid-based method, used by producers in China, liquid furfural is mixed with a powdered catalyst and hydrogen gas is bubbled through the mixture, yielding crude furfuryl alcohol.

The vapor-based process generally is considered more cost efficient because it consumes less energy and feedstock per pound of product and results in a higher grade of crude material, reducing distillation needs. Regardless of the method used, the final product marketed by all world producers is a fungible commodity chemical. Production equipment is specific to furfuryl alcohol production and is not readily converted to alternative use.

(accessed September 14, 2022).

³⁵ Furfuryl alcohol is sold at 98 percent or greater purity levels. See fourth review publication, p. I-6; domestic interested party's response to the notice of institution, August 1, 2022, p. 5; and "Safety Data Sheet (Furfuryl Alcohol)," Parchem fine & specialty chemicals, https://www.parchem.com/siteimages/Attachment/GHS%20Furfuryl%20Alcohol%20MSDS.pdf

The industry in the United States

U.S. producers

During the final phase of the original investigations, the Commission received U.S. producer questionnaire responses from two firms that accounted for virtually all U.S. production of furfuryl alcohol during the period of investigation.^{36 37}

During the first five-year reviews, the Commission received U.S. producer questionnaires from two firms that accounted for virtually all U.S. production of furfuryl alcohol during the period of review.³⁸

During the second expedited reviews, responding firm Penn Chemicals was the sole domestic producer of furfuryl alcohol in the United States.³⁹

During the third expedited reviews, responding firm Penn A Kem reported that, in July 2008, Minafin SARL, a Luxembourg-registered company, acquired the assets of Penn Chemicals and named the new company Penn A Kem LLC. Penn A Kem further reported that it was the

³⁶ In addition to QO, Advanced Resin Systems, Inc. ("ARS") produced furfuryl alcohol under toll agreement from June 1990 through November 1992. While the Commission recognized ARS as a domestic producer, it determined to exclude ARS from the domestic industry as a related party. Thus, the domestic industry was comprised of one domestic producer, QO. Original publication, pp. I-8 and I-9.

³⁷ Between the original investigations and the first reviews, substantial restructuring of the domestic furfuryl alcohol industry took place, which led to a lasting shift in sales from commercial end users on the open market to ***. In 1999, Penn Specialty Chemicals, Inc. ("Penn Chemicals") purchased QO's two furfuryl alcohol production facilities from Great Lakes. One of the two plants, in Omaha, Nebraska, ***. This plant was already idle at the time of this purchase, and was subsequently shut down and sold in December 1999. The other plant, in Memphis, Tennessee *** has produced furfuryl alcohol continuously in the U.S. since 1992. Investigation Nos. 731-TA-703 and 705 (Review): Furfuryl Alcohol From China and Thailand, Confidential Report, INV-Y-054, March 23, 2001, as revised in INV-Y-057, March 26, 2001 ("First review confidential report"), p. I-12 and Investigation Nos. 731-TA-703 and 705 (Second Review): Furfuryl Alcohol From China and Thailand, Confidential Report, INV-DD-116, August 14, 2006 ("Second review confidential report"), p. I-16.

³⁸ In addition to Penn Chemicals, a U.S. plant owned and operated by Ferro Corp. in Walton Hills, Ohio, was refitted to produce furfuryl alcohol under toll agreement *** and was then idled. First review confidential report, p. I-12. By the year 2000 (the terminal year of the first review), Penn Chemicals was the sole producer of furfuryl alcohol in the United States.

³⁹ Furfuryl Alcohol from China, Inv. No. 731-703 (Second Review), USITC Publication 3885, September 2006 ("Second review publication"), p. 5.

only domestic producer of furfuryl alcohol and that it was not related to any exporter or importer of the subject merchandise.⁴⁰

In response to the Commission's notice of institution in both the fourth review and this current review, responding firm Penn A Kem reported that it was the sole U.S. producer of furfuryl alcohol.⁴¹

Recent developments

Since 2015, U.S. production capacity increased by more than *** percent and the volume of U.S. production has *** (Table I-3). ***.⁴² ***.⁴³

⁴⁰ Furfuryl Alcohol from China, Inv. No. 731-703 (Third Review), USITC Publication 4302, January 2012 ("Third review publication"), p. I-10.

⁴¹ Fourth review publication, p. I-19 and domestic interested party's response to the notice of institution, August 1, 2022, p. 1.

⁴² Domestic producer's supplemental response to the notice of institution, August 17, 2022, p. 4.

⁴³ Domestic interested party's response to the notice of institution, August 1, 2022, p. 12.

U.S. producers' trade and financial data

The Commission asked domestic interested parties to provide trade and financial data in their response to the notice of institution in the current five-year review.⁴⁴ Table I-3 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigation and subsequent five-year reviews.

Table I-3 Furfuryl alcohol: Trade and financial data submitted by U.S. producers, by period

Quantity in 1,000 pounds; value in 1,000 dollars; unit value in dollars per pound; ratio is in percent

Item	Measure	1994	2000	2005	2010	2015	2021
Capacity	Quantity	***	***	***	***	***	***
Production	Quantity	***	***	***	***	***	***
Capacity utilization	Ratio	***	***	***	***	***	***
U.S. shipments	Quantity	***	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***	***
Net sales	Value	***	***	***	***	***	***
COGS	Value	***	***	***	***	***	***
COGS to net sales	Ratio	***	***	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***	***	***
SG&A expenses	Value	***	***	***	***	***	***
Operating income or							
(loss)	Value	***	***	***	***	***	***
Operating income or							
(loss) to net sales	Ratio	***	***	***	***	***	***

Source: For the years 1994, 2000, 2005, 2010, and 2015, data are compiled using data submitted in the Commission's original investigations and prior five-year reviews. For the year 2021, data are compiled using data submitted by the domestic interested party. Domestic interested party's response to the notice of institution, August 1, 2022, Exhibit F; and its supplemental responses to the notice of institution, August 17, 2022, p. 3, and September 16, 2022, p. 2.

Note: ***.

Note: Internal consumption accounted for *** percent of the value of the domestic interested party's 2021 U.S. shipments.

Note: For a discussion of data coverage, please see "U.S. producers" section.

⁴⁴ Individual company trade and financial data are presented in app. B.

Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties provision, the Commission may exclude a U.S. producer from the domestic industry for purposes of its injury determination if "appropriate circumstances" exist.⁴⁵

In its original determination, the Commission defined the domestic industry as QO Chemicals, generally known as Great Lakes, an integrated producer of furfuryl alcohol. In its full first five-year review determination, the Commission defined the domestic industry to encompass Penn Chemicals, Great Lakes (which had sold its facilities to Penn Chemicals in 1998), and two toll producers. In its expedited second, third, and fourth five-year review determinations, the Commission defined a single domestic industry consisting of the sole domestic producer of furfuryl alcohol, Penn Chemicals (including its successor firm, Penn A Kem LLC). In its original determination, its full first five-year review determination, and its expedited second, third, and fourth five-year review determinations, the Commission defined the domestic like product as furfuryl alcohol, coextensive with Commerce's scope.⁴⁶

⁴⁵ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

⁴⁶ 87 FR 39559, July 1, 2022.

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from seven firms, which accounted for the vast majority of total U.S. imports of furfuryl alcohol from China during the period 1992-94.⁴⁷ Import data presented in the original investigations were based on questionnaire responses and official Commerce statistics.⁴⁸

During the first five-year reviews, the Commission received U.S. importer questionnaires from three firms, which accounted for approximately 100 percent of total U.S. imports of furfuryl alcohol from all sources in 2000.⁴⁹ There were no imports from China during the period of review. Import data presented in the first five-year reviews were based on questionnaire responses.

The Commission did not receive responses from any respondent interested parties in its second expedited five-year reviews, and there were no imports of the subject merchandise from China. There was no information on the record concerning importers of furfuryl alcohol from other sources. ⁵⁰

The Commission did not receive responses from any respondent interested parties in its expedited third five-year review. According to the domestic interested party, Penn A Kem, subject imports from China left the U.S. market upon issuance of the original order and subject imports from China had not returned to the U.S. market. Penn A Kem further reported that to the best of its knowledge, Chinese exporters had not sold furfuryl alcohol in the United States since the imposition of the order.⁵¹

Although the Commission did not receive responses from any respondent interested parties in its fourth five-year review, the domestic interested party provided one potential U.S. importer of furfuryl alcohol from China.⁵²

Although the Commission did not receive responses from any respondent interested parties in this current review, in its response to the Commission's notice of institution, the domestic interested party provided one potential U.S. importer of furfuryl alcohol. The

⁴⁷ Original publication, p. II-14.

⁴⁸ Original publication, p. II-11.

⁴⁹ First review publication, p. I-4.

⁵⁰ Second review publication, p. 3.

⁵¹ Third review publication, p. I-11.

⁵² Fourth review publication, p. I-11.

domestic interested party still believes that shipments of Chinese furfuryl alcohol to the United States either ceased or were significantly reduced after the imposition of the order. ⁵³

U.S. imports

Table I-4 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2021 imports by quantity).

⁵³ Domestic interested parties' response to the notice of institution, August 1, 2022, pp. 10-11.

Table I-4 Furfuryl alcohol: U.S. imports, by source and period

Quantity in 1,000 pounds; value in 1,000 dollars; unit value in dollars per pound

U.S. imports							
from	Measure	2016	2017	2018	2019	2020	2021
China	Quantity	15	53	47	41	9	55
Belgium	Quantity	11,146	10,943	18,673	11,951	14,277	16,171
South Africa	Quantity	3,070	22	2,804	4,554	1,511	1,935
Thailand	Quantity	1,114	665	569	835	0	85
All other sources	Quantity	0	0	0	0	55	0
Nonsubject		15,330	11,630	22,046	17,340	15,843	18,192
sources	Quantity						
All import sources	Quantity	15,345	11,683	22,092	17,381	15,853	18,246
China	Value	44	91	85	58	34	176
Belgium	Value	6,121	6,065	12,182	11,350	11,103	20,535
South Africa	Value	2,496	56	3,227	2,930	1,111	2,689
Thailand	Value	910	785	820	877	0	117
All other sources	Value	7	7	7	5	61	0
Nonsubject							
sources	Value	9,533	6,913	16,236	15,163	12,275	23,341
All import sources	Value	9,577	7,005	16,322	15,221	12,308	23,517
China	Unit value	2.93	1.71	1.84	1.41	3.60	3.23
Belgium	Unit value	0.55	0.55	0.65	0.95	0.78	1.27
South Africa	Unit value	0.81	2.59	1.15	0.64	0.73	1.39
Thailand	Unit value	0.82	1.18	1.44	1.05	0	1.38
All other sources	Unit value	0	0	0	0	1.10	0
Nonsubject							
sources	Unit value	0.62	0.59	0.74	0.87	0.77	1.28
All import sources	Unit value	0.62	0.60	0.74	0.88	0.78	1.29

Source: Compiled from official Commerce statistics for HTS statistical reporting number 2932.13.0000, accessed August 29, 2022.

Note: These data may be overstated as the HTS statistical reporting number 2932.13.000 contains out-of-scope product THFA.

Note: Zero ("0") values indicate data greater than zero, but less than 1,000 pounds/dollars.

Note: Because of rounding, figure may not add to total shown.

Apparent U.S. consumption and market shares

Table I-5 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table I-5
Furfuryl alcohol: Apparent U.S. consumption and market shares, by source and period

Quantity in 1,000 pounds; value in 1,000 dollars; shares in percent

***	***
***	55
***	18,192
***	18,246
***	***
***	***
***	176
***	23,341
***	23,517
***	***
***	***
***	***
***	***
***	***
***	***
***	***
***	***
	*** *** *** *** ***

Source: For the years 1994, 2000, 2005, 2010, and 2015, data are compiled using data submitted in the Commission's original investigation and subsequent reviews. For the year 2021, U.S. producers' U.S. shipments are compiled from the domestic interested party's response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting number 2932.13.0000, accessed August 29, 2022.

Note: Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent. Zeroes, null values, and undefined calculations are suppressed and shown as "---."

Note: Import data may be overstated as the HTS statistical reporting number 2932.13.000 contains out-of-scope product THFA.

Note: Share of quantity is the share of apparent U.S. consumption by quantity in percent; share of value is the share of apparent U.S. consumption by value in percent.

Note: ***. See Investigation Nos. 731-TA-703 (Fourth Review): Furfuryl Alcohol From China, Confidential Report, INV-KK-004, March 27, 2017 ("Fourth review confidential report"), table I-5.

Note: For a discussion of data coverage, please see "U.S. producers" and "U.S. importers" sections.

The industry in China

During the final phase of the original investigation, the Commission reported that there were at least 16 producers of furfuryl alcohol in China. Data were provided to the Commission in that original investigation by one Chinese producer that accounted for an estimated *** percent of China's production in 1994.⁵⁴

Respondents in the first five-year review of the order indicated that there were as many as 32 Chinese producers of furfuryl alcohol at that time.⁵⁵ Five Chinese producers representing an estimated *** percent of production capacity in China during 2000 and three Chinese exporters answered the Commission's foreign producer questionnaire in the full first five-year review of the order.⁵⁶

In the expedited second five-year review, the Commission did not receive responses from Chinese producers; however, the domestic interested party, Penn Chemical, listed 32 producers of furfuryl alcohol in China.⁵⁷

In the expedited third five-year review, the Commission did not receive responses from Chinese producers; however, the domestic interested party, Penn A Chem, identified 17 known producers of furfuryl alcohol in China.⁵⁸

In the expedited fourth five-year review, the Commission did not receive responses from Chinese producers; however, Penn A Chem identified 14 known producers of furfuryl alcohol in China.⁵⁹

In this review, the Commission did not receive responses from any Chinese producers or respondent interested parties; however, the domestic interested party, Penn A Chem, identified 16 known producers of the subject merchandise.⁶⁰

⁵⁴ Original confidential report, p. II-37 and second review confidential report, p. I-29. repl⁵⁵ First review confidential report, p. II-2.

⁵⁶ First review confidential report, p. IV-2.

⁵⁷ Second review confidential report, p. I-30.

⁵⁸ Third review publication, p. I-12.

⁵⁹ Fourth review publication, pp. I-12.

⁶⁰ Domestic interested party's response to the notice of institution, August 1, 2022, exhibit D.

Recent developments

The domestic interested party noted the following recent developments in its list of known Chinese producers: Weifang Donghai F.A. in Weifang City, Shandong Province, closed operations five years ago; Dezhou Qingyun F.A. in Dezhou City, Shandong Province, suspended production for six years and restarted production in 2022; and Weifang Dadi F.A. in Weifang City, Shandong Province, suspended production for five years and restarted production in 2022.

Exports

Table I-6 presents export data for HS subheading 2932.13, a category that includes furfuryl alcohol and the out-of-scope product THFA, from China (by export destination in descending order of quantity for 2016-21).

Table I-6
Furfuryl Alcohol and THFA: Quantity of exports from China, by destination and period

Quantity in 1,000 pounds

Destination market	2016	2017	2018	2019	2020	2021
Japan	40,865	38,275	44,316	39,316	30,559	35,287
Taiwan	25,049	25,498	27,370	19,282	15,984	24,956
South Korea	38,327	30,687	30,211	26,258	21,898	22,739
Germany	9,498	10,087	8,106	10,960	7,076	14,587
Thailand	3,700	4,257	5,160	5,073	3,377	11,400
Canada	10,199	11,303	12,353	13,133	9,033	10,428
India	11,953	5,685	6,938	7,717	6,150	8,998
Brazil	5,777	3,479	3,785	3,099	4,783	8,262
Netherlands	4,335	4,854	5,972	3,714	460	6,877
Turkey	4,427	2,877	3,839	4,240	3,577	6,782
All other markets	18,349	22,353	26,210	23,462	13,999	26,106
All markets	172,478	159,355	174,262	156,254	116,896	176,419

Note: Because of rounding, figures may not add to totals shown.

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2932.13, accessed September 7, 2022. These data may be overstated as HS subheadings 2932.13 contains the out-of-scope product THFA.

⁶¹ Domestic interested party's response to the notice of institution, August 1, 2022, exhibit D.

Third-country trade actions

The EU imposed antidumping duties on furfuryl alcohol from China on October 27, 2003.⁶² On December 7, 2009, the EU extended antidumping duties on furfuryl alcohol from China following an expiry review.⁶³ The EU's antidumping duties expired on December 10, 2011.⁶⁴

The global market

Global trade in furfuryl alcohol is tracked under HS subheading 2932.13, which contains furfuryl alcohol and THFA. Table I-7 presents global export data for furfuryl alcohol and THFA during 2016-21. China's share of global exports decreased from 74 percent in 2016 to 61 percent in 2021, while total global exports increased by 24 percent during the same period. Global consumption of furfuryl alcohol is forecast to increase *** for the next few years. 65

⁶² Fourth review publication, p. I-12, and "Council Regulation (EC) No 1905/2003 of 27 October 2003 imposing a definitive anti-dumping duty and collecting definitively the provisional duty imposed on imports of furfuryl alcohol originating in the People's Republic of China," *Official Journal of the European Union*, L 283/1, October 31, 2003, http://data.europa.eu/eli/reg/2003/1905 (accessed September 19, 2022).

⁶³ "Council implementing Regulation (EU) No 1202/2009 of 7 December 2009 imposing a definitive anti-dumping duty on imports of furfuryl alcohol originating in the People's Republic of China following an expiry review pursuant to Article 11(2) of Regulation (EC) No 384/96," *Official Journal of the European Union*, L 323/48, December 10, 2009, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32009R1202&qid=1662574417481 (accessed September 7, 2022).

⁶⁴ Ibid., p. L 323/60.. The EU notified the World Trade Organization (WTO) Committee on Anti-Dumping Practices of the termination of antidumping duties on furfuryl alcohol from China in 2012. "Semi-annual Report Under Article 16.4 of the Agreement: European Union," WTO document G/ADP/N/230/EU, p. 25,

https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=Q:/G/ADP/N230EU.pdf (accessed September 19, 2022).

⁶⁵***. Another industry source estimates annual growth to be 5.9 percent. Future Market Insights, "Furfuryl Alcohol Market to grow at a steady 5.9% CAGR, pushing sales past US\$ 1.5 Bn in 2028," July 20, 2022, https://www.globenewswire.com/en/news-release/2022/07/20/2482768/0/en/Furfuryl-Alcohol-Market-to-grow-at-a-steady-5-9-CAGR-pushing-sales-past-US-1-5-Bn-in-2028-Future-Market-Insights-Inc.html (accessed September 14, 2022).

Table I-7
Furfuryl Alcohol and THFA: Quantity of global exports by country and period

Quantity in 1,000 pounds

Exporting country	2016	2017	2018	2019	2020	2021
China	172,478	159,355	174,262	156,254	116,896	176,419
Belgium	0	0	85,776	81,557	70,776	85,982
Netherlands	22,935	26,947	30,421	15,035	10,883	10,459
South Africa	18,024	9,365	10,369	10,289	7,052	6,678
United States	4,813	7,039	7,104	5,337	4,884	5,233
Thailand	14,680	16,570	20,296	12,235	10,526	5,019
All other exporters	1,050	779	1,150	854	553	1,439
All exporters	233,981	220,054	329,378	281,560	221,570	291,229

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheadings 2932.13, accessed September 2, 2022. These data may be overstated as HS subheadings 2932.13 contains the out-of-scope product THFA.

Note: Because of rounding, figures may not add to total shown.

APPENDIX A FEDERAL REGISTER NOTICES

The Commission makes available notices relevant to its investigations and reviews on its website, www.usitc.gov. In addition, the following tabulation presents, in chronological order, Federal Register notices issued by the Commission and Commerce during the current proceeding.

Citation	Title	Link
87 FR 39559,	Furfuryl Alcohol from China;	https://www.govinfo.gov/content/pkg/FR-
July 1, 2022	Institution of a Five-Year Review	2022-07-01/pdf/2022-14161.pdf
87 FR 39459,	Initiation of Five-Year (Sunset)	https://www.govinfo.gov/content/pkg/FR-
July 1, 2022	Reviews	2022-07-01/pdf/2022-14144.pdf

APPENDIX B COMPANY-SPECIFIC DATA

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APPENDIX C

SUMMARY DATA COMPILED IN PRIOR REVIEWS

Table A-1 Furfuryl alcohol: Summary data concerning the U.S. market, 1992-94

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

	Reported data			Period changes		
Item	1992	1993	1994	1992-94	1992-93	1993-94
U.S. consumption quantity:						
Amount	***	***	***	***	***	***
Producers' share ¹	***	***	***	***	***	***
Importers' share:1						
China	***	***	***	***	***	***
South Africa	***	***	***	***	***	***
Thailand	***	***	***	***	***	***
Subtotal	***	***	***	***	***	***
Other sources	***	***	***	***	***	***
Total	***	***	***	***	***	***
U.S. consumption value:						
Amount	***	***	***	***	***	***
Producers' share ¹		***	***	***	***	***
Importers' share:1						
China	***	***	***	***	***	***
South Africa	***	***	***	***	***	***
Thailand	***	***	***	***	***	***
Subtotal	***	***	***	***	***	***
Other sources	***	***	***	***	***	***
Total	***	***	***	***	***	***
U.S. imports from						
China:						
Imports quantity	***	***	***	***	***	***
Imports value		***	***	***	***	www
Unit value		***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
South Africa:						
Imports quantity	***	***	***	***	***	***
Imports value		***	***	***	***	***
Unit value		***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Thailand:						
Imports quantity	***	***	***	***	***	***
Imports value		***	***	***	***	***
Unit value		***	***	***	***	***
Ending inventory quantity		***	***	***	***	***

Table continued...

Table A-1--continued
Furfuryl alcohol: Summary data concerning the U.S. market, 1992-94

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

	Reported data		where noted) Period changes			
ltem	1992	1993	1994	1992-94	1992-93	1993-94
U.S. imports from						
Subject sources:						
Imports quantity	***	***	13,521	***	***	***
Imports value	***	***	7,137	***	***	***
Unit value	***	***	\$0.53	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Other sources:						
Imports quantity	15	84	1,152	(1)	+460.0	ለ
Imports value	53	51	682	Ŏ	-3.8	ď
Unit value	\$3.45	\$0.61	\$0.59	-82.8	-82.4	-2.6
Ending inventory quantity	. 0	0	***	(5)	0	(5)
All sources:				()	•	()
Imports quantity	***	***	14,673	***	***	***
Imports value	***	***	7,819	***	***	***
Unit value	***	***	\$0.53	www	www	***
U.S. producers'			V			
Average capacity quantity	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***
Capacity utilization 1	***	***	***	***	***	***
U.S. shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Export shipments:						
Quantity	***	***	***	***	***	***
Exports/shipments ¹	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Inventory/shipments ¹	***	***	***	***	***	***
Production workers	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***
Total compensation (\$1,000)	***	***	***	***	***	***
Hourly total compensation	www	***	***	***	***	***
Productivity (lbs/hour)	***	***	***	***	***	***
Unit labor costs	***	***	***	***	***	***

Table continued...

Table A-1--continued

Furfuryl alcohol: Summary data concerning the U.S. market, 1992-94

(Quantity=1,000 pounds; value=1,000 dollars; unit values and unit labor

	Reported	Reported data			Period changes		
ltem	1992	1993	1994	1992-94	1992-93	1993-94	
U.S. producers'							
Net sales							
Quantity	***	***	***	***	***	***	
Value	***	***	***	***	***	***	
Unit sales value	***	***	***	***	***	***	
Cost of goods sold (COGS)	***	***	***	***	***	***	
Gross profit (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.

Note.--Period changes are derived from the unrounded data. Period changes involving negative period data are positive if the amount of the negativity decreases and negative if the amount of the negativity increases. Because of rounding, figures may not add to the totals shown. Unit values and other ratios are calculated from the unrounded figures, using data of firms supplying both numerator and denominator information.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

² Positive figure, but less than significant digits displayed.

³ A decrease of less than 0.05 percentage points.

⁴ An increase of 1,000 percent or more.

⁵ Not applicable.

Table C-1 Furfuryl alc ohol: Summary data concerning the U.S. market, 1996-2000

Table C-1 - Continued

Furfuryl aic ohol: Summary data concerning the U.S. market, 1996-2000

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from domestic interested parties and it provided contact information for the following three firms as top purchasers of furfuryl alcohol: ***. Purchaser questionnaires were sent to these three firms and three firms (***) provided responses, which are presented below.

1. Have there been any significant changes in the supply and demand conditions for furfuryl alcohol that have occurred in the United States or in the market for furfuryl alcohol in China since January 1, 2016?

Purchaser	Yes / No	Changes that have occurred		
***	***	***.		
***	***	***.		
***	***	***		

2. Do you anticipate any significant changes in the supply and demand conditions for furfuryl alcohol in the United States or in the market for furfuryl alcohol in China within a reasonably foreseeable time?

Purchaser	Yes / No	Anticipated changes
***	***	***
***	***	***
***	***	***.