

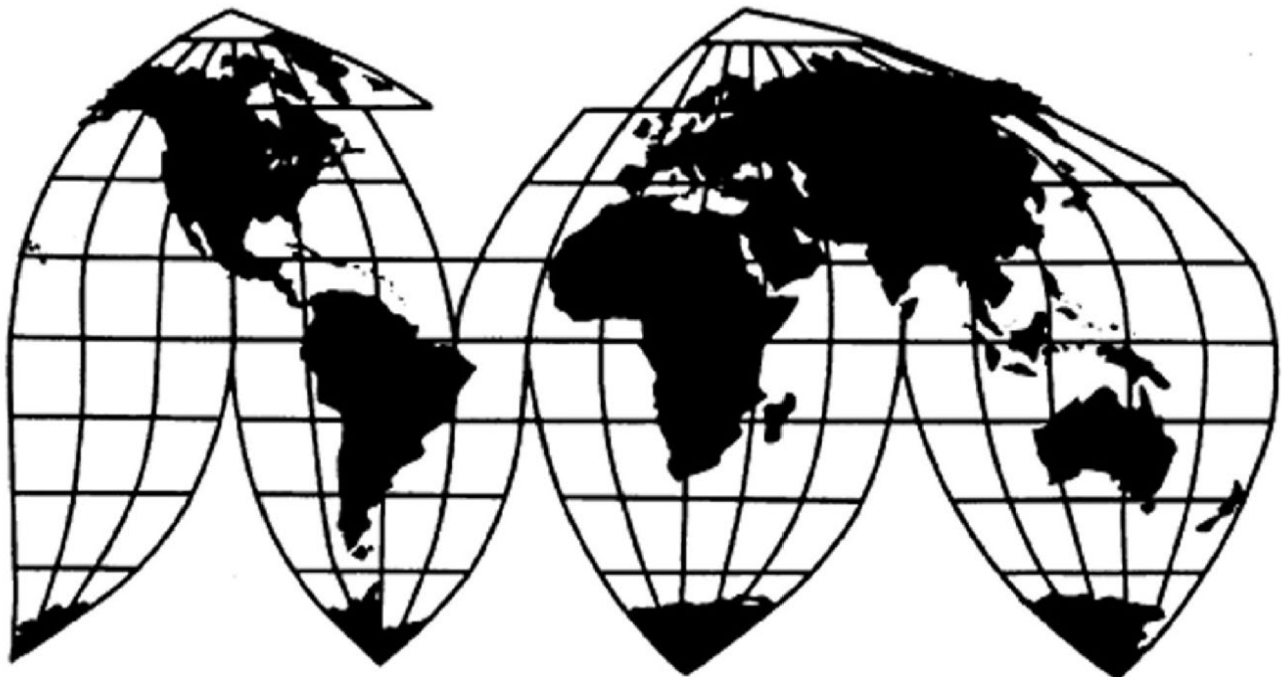
Persulfates from China

Investigation No. 731-TA-749 (Fifth Review)

Publication 5586

February 2025

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-749 (Fifth Review)

Persulfates 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 persulfates 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.²

BACKGROUND

The Commission instituted this review on July 1, 2024 (89 FR 54533) and determined on October 4, 2024, that it would conduct an expedited review (89 FR 87598, November 4, 2024).

¹ The record is defined in § 207.2(f) of the Commission’s Rules of Practice and Procedure (19 C.F.R. § 207.2(f)).

² Commissioner Rhonda K. Schmidlein did not participate.

Views of the Commission

Based on the record in this five-year review, 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 persulfates 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 Investigation. In July 1996, FMC Corporation (“FMC”) filed an antidumping duty petition covering imports of persulfates from China.¹ In June 1997, the Commission issued its final determination finding that the domestic persulfates industry was materially injured by reason of subject imports.² Subsequently, the Department of Commerce (“Commerce”) issued an antidumping duty order on subject imports.³

First Review. In June 2002, the Commission instituted its first five-year review of the antidumping duty order.⁴ After conducting an expedited review, the Commission determined that revocation of the order would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.⁵ In December 2002, Commerce issued a continuation of the order.⁶

Second Review. In November 2007, the Commission instituted its second five-year review.⁷ After conducting an expedited review, the Commission determined that revocation of the order would be likely to lead to continuation or recurrence of material injury to an industry

¹ *Persulfates from China*, Inv. No. 731-TA-749 (Final), USITC Pub. 3044 at I-1 (June 1997) (“Original Determination”).

² Original Determination, USITC Pub. 3044 at 19.

³ *Notice of Antidumping Duty Order and Amended Final Determination of Sales at Less Than Fair Value: Persulfates from the People’s Republic of China*, 62 Fed. Reg. 36259 (July 7, 1997), as amended by *Notice of Amended Antidumping Duty Order: Persulfates from the People’s Republic of China*, 62 Fed. Reg. 39212 (July 22, 1997).

⁴ *Persulfates from China*, 67 Fed. Reg. 38333 (June 3, 2002).

⁵ *Persulfates from China*, Inv. No. 731-TA-749 (Review), USITC Pub. 3555 at 1 (Oct. 2002) (“First Review Determination”).

⁶ *Notice of Continuation of Antidumping Duty Order: Persulfates from the People’s Republic of China*, 67 Fed. Reg. 78415 (Dec. 24, 2002).

⁷ *Persulfates from China*, 72 Fed. Reg. 61907 (Nov. 1, 2007).

in the United States within a reasonably foreseeable time.⁸ In April 2008, Commerce issued a continuation of the order.⁹

Third Review. In March 2013, the Commission instituted its third five-year review.¹⁰ After conducting a full review, the Commission determined that revocation of the order would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹¹ In March 2014, Commerce issued a continuation of the order.¹²

Fourth Review. In February 2019, the Commission instituted its fourth five-year review.¹³ After conducting an expedited review, the Commission determined that revocation of the order 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 In August 2019, Commerce issued a continuation of the order.¹⁵

Current Review. The Commission instituted this fifth five-year review on July 1, 2024.¹⁶ The Commission received a single response to the notice of institution filed by Evonik Corporation (“Evonik”), a domestic producer of persulfates.¹⁷ It did not receive a response to

⁸ *Persulfates from China*, Inv. No. 731-TA-749 (Second Review), USITC Pub. 3988 at 1 (Mar. 2008) (“Second Review Determination”).

⁹ *Persulfates from the People’s Republic of China: Continuation of Antidumping Duty Order*, 73 Fed. Reg. 21318 (Apr. 21, 2008).

¹⁰ *Persulfates from China; Institution of a Five-Year Review Concerning the Antidumping Duty Order on Persulfates from China*, 78 Fed. Reg. 13891 (Mar. 1, 2013), as corrected by *Persulfates from China; Correction to Notice of Institution*, 78 Fed. Reg. 14591 (Mar. 6, 2013).

¹¹ *Persulfates from China*, Inv. No. 731-TA-749 (Third Review), USITC Pub. 4456 at 1 (Mar. 2014) (“Third Review Determination”). The Commission concluded that although it received no response from any respondent interested party, a full review was warranted in light of several potential changes in the conditions of competition. *See id.* at 3-4.

¹² *Persulfates from the People’s Republic of China: Continuation of Antidumping Duty Order*, 79 Fed. Reg. 17506 (Mar. 28, 2014).

¹³ *Persulfates from China; Institution of a Five-Year Review Concerning the Antidumping Duty Order on Persulfates from China*, 84 Fed. Reg. 2252 (Feb. 6, 2019).

¹⁴ *Persulfates from China*, Inv. No. 731-TA-749 (Fourth Review), USITC Pub. 4946 at 3 (Aug. 2019) (“Fourth Review Determination”).

¹⁵ *Persulfates from the People’s Republic of China: Continuation of Antidumping Duty Order*, 84 Fed. Reg. 45123 (Aug. 28, 2019).

¹⁶ *Persulfates from China; Institution of a Five-Year Review*, 89 Fed. Reg. 54435 (July 1, 2024).

¹⁷ Evonik’s response to the Notice of Institution, EDIS Doc. 827592 (July 30, 2024) (“Evonik’s NOI Response”). The petitioner in the original investigation was FMC Corporation. *Id.* at 1 n.1. In 2014, FMC Global Peroxygens, a division of FMC Corporation, was acquired by One Equity Partners (a private
(Continued...)

the notice of institution from any respondent interested party.¹⁸ The Commission determined that the domestic interested party group response was adequate and that the respondent interested party group response was inadequate.¹⁹ Finding no other circumstances that would warrant conducting a full review, the Commission determined on October 4, 2024, that it would conduct an expedited review.²⁰ Evonik filed comments on December 20, 2024, pursuant to 19 C.F.R. § 207.62(d) arguing that the Commission should reach affirmative determinations in this expedited review.²¹

In this review, U.S. industry data are based on the information provided in the response to the notice of institution by Evonik, which estimated that it accounted for 100 percent of domestic production of persulfates in 2024.²² U.S. import data and related information are based on Commerce’s official import statistics.²³ Foreign industry data and related information are based on information from the original investigation and prior reviews, as well as information submitted by Evonik in this current review and publicly available information compiled by the Commission.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

investment firm) and became an independent company, PeroxyChem LLC. *Id.* In February 2020, Evonik completed its acquisition of PeroxyChem LLC. *Id.* Evonik also filed comments on the adequacy of the response. Domestic Industry’s Comments on Adequacy, EDIS Doc. 831478 (Sept. 5, 2024) (“Evonik’s Adequacy Comments”). *See also* CR/PR at I-8 n.45.

¹⁸ *Persulfates from China; Scheduling of an Expedited Five-Year Review*, 89 Fed. Reg. 87598 (Nov. 4, 2024) (“Notice of Scheduling of Expedited Review”); Explanation of Commission’s Determination on Adequacy Vote, EDIS Doc. 840585 at 1 (Jan. 7, 2025).

¹⁹ Commissioners’ Adequacy Votes, EDIS Doc. 834095 (Oct. 4, 2024).

²⁰ *Persulfates from China; Scheduling of an Expedited Five-Year Review*, 89 Fed. Reg. 87598 (Nov. 4, 2024) (“Notice of Scheduling of Expedited Review”).

²¹ Evonik’s Final Comments, EDIS Doc. 839723 (Dec. 20, 2024).

²² Confidential Report, Memorandum INV-WW-112, EDIS Doc. 832948 at I-8 (Sept. 23, 2024) (“CR”), Public Report, *Persulfates from China*, Inv. No. 731-TA-749 (Fifth Review) at I-8 (“PR”); *see also* Evonik’s NOI Response at 2.

²³ CR/PR at I-12, Table I-4.

²⁴ *See* CR/PR at I-10—I-12, I-15—I-16, Tables I-4, I-6 & I-7.

²⁵ 19 U.S.C. § 1677(4)(A).

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 scope of the order in this five-year review as follows:

The merchandise subject to the *Order* is persulfates, including ammonium, potassium, and sodium persulfates. The chemical formulas for these persulfates are, respectively, $(\text{NH}_4)_2\text{S}_2\text{O}_8$, $\text{K}_2\text{S}_2\text{O}_8$, and $\text{Na}_2\text{S}_2\text{O}_8$. Potassium persulfates are currently classifiable under subheading 2833.40.10 of the Harmonized Tariff Schedule of the United States (HTSUS). Sodium persulfates are classifiable under HTSUS subheading 2833.40.20. Ammonium and other persulfates are classifiable under HTSUS subheadings 2833.40.50 and 2833.40.60.

Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of the *Order* is dispositive.^{28 29}

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. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int’l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *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 *Persulfates from the People’s Republic of China: Final Results of the Expedited Fifth Sunset Review of the Antidumping Duty Order*, 89 Fed. Reg. 88724 (Nov. 8, 2024) (“Commerce’s Fifth Review Final Results”), citing accompanying Issues and Decision Memorandum for the Final Results of the Expedited Fifth Sunset Review of the Antidumping Duty Order on Persulfates from the People’s Republic of China (Nov. 4, 2024) (“IDM”) at 2. See also CR/PR at I-5.

²⁹ The scope definition has not changed since the original investigation. See *Notice of Antidumping Duty Order and Amended Final Determination of Sales at Less Than Fair Value: Persulfates from the People’s Republic of China*, 62 Fed. Reg. 36259 (July 7, 1997); *Notice of Continuation of Antidumping Duty Order: Persulfates from the People’s Republic of China*, 67 Fed. Reg. 78415 (Dec. 24, 2002); *Persulfates from the People’s Republic of China: Continuation of Antidumping Duty Order*, 73 Fed. (Continued...)

The imported products subject to this review are peroxydisulfate salts, commonly known as persulfates. The three salts covered by the scope – ammonium, potassium, and sodium persulfates – are dry, colorless, crystalline solids.³⁰ Persulfates have two major applications: (1) as initiators in the process of polymerization; and (2) as oxidants in printed circuit board etching, textile processing, pulp and paper production, and cleaning and plating. They are also used in the production of rubber, structural materials (e.g., concrete), coatings, adhesives, and inks and pigments; soil stabilization; oil and gas recovery; mining; and photography.³¹

In the original investigation, the Commission found a single domestic like product consisting of ammonium, potassium, and sodium persulfates, corresponding to the scope.³² In the prior four reviews, the Commission found that there was no new information to warrant revisiting this definition. Accordingly, the Commission continued to define a single domestic like product consisting of ammonium, potassium, and sodium persulfates, coextensive with the scope.³³

In this review, the record contains no information indicating that the pertinent characteristics and uses of domestically produced persulfates have changed since the prior proceedings so as to warrant revisiting the Commission's definition of the domestic like product.³⁴ Evonik agrees with the definition of the domestic like product from the prior proceedings.³⁵ We consequently continue to define the domestic like product as ammonium, potassium, and sodium persulfates, coextensive with the scope.

Reg. 21318 (Apr. 21, 2008); *Persulfates from the People's Republic of China: Continuation of Antidumping Duty Order*, 79 Fed. Reg. 17506 (Mar. 28, 2014); *Persulfates from the People's Republic of China: Continuation of Antidumping Duty Order*, 84 Fed. Reg. 45123 (Aug. 28, 2019); and IDM at 2.

³⁰ CR/PR at I-6.

³¹ CR/PR at I-6.

³² Original Determination, USITC Pub. 3044 at 5. The Commission found that ammonium, potassium, and sodium persulfates were not separate like products. It found similarities in physical characteristics and general interchangeability for all three products. The Commission also found that the three products had identical channels of distribution, common manufacturing facilities, production processes and production employees, and producer perceptions. *See id.*

³³ First Review Determination, USITC Pub. 3555 at 5; Second Review Determination, USITC Pub. 3988 at 5; Third Review Determination, USITC Pub. 4456 at 6; Fourth Review Determination, USITC Pub. 4946 at 6.

³⁴ CR/PR at I-5--I-7.

³⁵ Evonik's NOI Response at 30; Evonik's Final Comments at 4.

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.”³⁶ In defining the domestic industry, the Commission’s general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

In the original investigation and prior four reviews, the Commission defined the domestic industry as all U.S. producers of ammonium, potassium, and sodium persulfates.³⁷ Evonik agrees with the Commission’s domestic industry definition made in the prior proceedings.³⁸ There are no related parties issues in this review.³⁹ Accordingly, consistent with our definition of the domestic like product, we define the domestic industry to include the only known domestic producer of ammonium, potassium, and sodium persulfates, Evonik.

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

³⁶ 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.

³⁷ Original Determination, USITC Pub. 3044 at 6; First Review Determination, USITC Pub. 3555 at 5; Second Review Determination, USITC Pub. 3988 at 5; Third Review Determination, USITC Pub. 4456 at 6; Fourth Review Determination, USITC Pub. 4946 at 7. In the original investigation, FMC had imported small amounts of subject merchandise from China. The Commission found that appropriate circumstances did not exist to exclude the firm from the domestic industry under the related parties provision because FMC’s interests clearly laid with domestic production, not importation. Original Determination, USITC Pub. 3044 at 6.

³⁸ Evonik’s NOI Response at 30; Evonik’s Final Comments at 4.

³⁹ Evonik’s NOI Response at 26-27; *see also* Evonik’s Final Comments at 4.

to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”⁴⁰ 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 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.”⁴¹ Thus, the likelihood standard is prospective in nature.⁴² The U.S. Court of International Trade 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.⁴³

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.”⁴⁴ 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.”⁴⁵

⁴⁰ 19 U.S.C. § 1675a(a).

⁴¹ 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.

⁴² 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.

⁴³ 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’”).

⁴⁴ 19 U.S.C. § 1675a(a)(5).

⁴⁵ 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.*

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.”⁴⁶ It directs the Commission to take into account its prior injury 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).⁴⁷ 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.⁴⁸

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.⁴⁹ 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.⁵⁰

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

⁴⁶ 19 U.S.C. § 1675a(a)(1).

⁴⁷ 19 U.S.C. § 1675a(a)(1). Commerce has not made any duty absorption findings with respect to the order under review. See Commerce’s Fifth Review Final Results, 89 Fed. Reg. at 88725 (Appendix: list of issues addressed in IDM), IDM at 1.

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

⁴⁹ 19 U.S.C. § 1675a(a)(2).

⁵⁰ 19 U.S.C. § 1675a(a)(2)(A–D).

United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.⁵¹

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 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.⁵² 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 order under review and whether the industry is vulnerable to material injury upon revocation.⁵³

As discussed above, no respondent party participated in this expedited review. The record, therefore, contains limited new information with respect to the persulfates industry in China. There also is limited information on the persulfates market in the United States during the period of review. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation and the prior reviews and the limited new information on the record in this 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

⁵¹ 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.

⁵² 19 U.S.C. § 1675a(a)(4).

⁵³ 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.

“within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁵⁴ The following conditions of competition inform our determinations.

1. Demand Conditions

In the original investigation, the Commission found that U.S. demand for persulfates increased irregularly over the period of investigation (“POI”).⁵⁵ The Commission observed that U.S. demand for persulfates was cyclical and closely tied to economic conditions in the housing, automotive, and packaged goods markets, among others. In the first five-year review, it found that demand increased substantially since the original POI.⁵⁶ In the second five-year review, the Commission found that apparent U.S. consumption was greater than levels experienced during the original investigation, but that it had declined since the first review.⁵⁷

In the third five-year review, the Commission observed that U.S. demand for persulfates, which continued to be cyclical and derived from demand for its various downstream products, had shifted in several of the product’s end-use applications.⁵⁸ Specifically, the Commission noted that, since the second five-year review, demand for persulfates in the environmental remediation and oil and gas recovery markets had grown, while demand for persulfates in recreational water products and printed circuit board applications had largely disappeared.⁵⁹ It found that apparent U.S. consumption fluctuated during the period of review (“POR”).⁶⁰ Apparent U.S. consumption at the end of the third POR was roughly equal to that in 2006, the end of the second POR.⁶¹

In the fourth five-year review, the Commission observed that U.S. demand for persulfates, which continued to be cyclical and derived from demand for its various downstream products, was generally stable but shifted for one of the product’s end-use applications.⁶² Specifically, it noted that demand for persulfates in the oil and gas recovery

⁵⁴ 19 U.S.C. § 1675a(a)(4).

⁵⁵ Original Determination, USITC Pub. 3044 at 7-9.

⁵⁶ First Review Determination, USITC Pub. 3555 at 7.

⁵⁷ Second Review Determination, USITC Pub. 3988 at 8.

⁵⁸ Third Review Determination, USITC Pub. 4456 at 10-11.

⁵⁹ Third Review Determination, USITC Pub. 4456 at 11.

⁶⁰ Third Review Determination, USITC Pub. 4456 at 11.

⁶¹ Third Review Confidential Staff Report, Persulfates from China, Memorandum INV-MM-011, EDIS Doc. 672366 at I-6, Table I-1 (Feb. 6, 2014) (“Third Review Conf. Staff Report”).

⁶² Fourth Review Determination, USITC Pub. 4946 at 11.

market declined in tandem with declining U.S. oil prices.⁶³ The Commission observed that apparent U.S. consumption in 2018 was slightly greater than apparent U.S. consumption in 2012, the end of the third POR.⁶⁴

In the current review, Evonik states that U.S. demand for persulfates remains cyclical and driven by demand for downstream products and end-use applications.⁶⁵ According to Evonik, U.S. demand for persulfates has been flat, with some varying trends during the current POR. It claims that demand fell in 2021 after the COVID-19 pandemic but recovered in 2022 before experiencing some declining trends again in 2023. Evonik expects demand to remain relatively flat in 2024.⁶⁶

Apparent U.S. consumption was *** pounds in 2023, down from *** pounds in 2018.⁶⁷

2. Supply Conditions

In the original investigation, the Commission found that FMC was the sole domestic producer and dominant supplier of persulfates in the U.S. market.⁶⁸ FMC's market share increased overall during the POI.⁶⁹ Nonsubject imports accounted for the next largest share of apparent U.S. consumption.⁷⁰ Subject imports accounted for the smallest share of apparent U.S. consumption, although their market share increased nearly threefold over the POI.⁷¹ The Commission observed that the increase in subject imports' U.S. market share over

⁶³ Fourth Review Determination, USITC Pub. 4946 at 11.

⁶⁴ Fourth Review Confidential Staff Report, Memorandum INV-RR-036, EDIS Doc. 830974 at I-22, Table I-4 (Apr. 25, 2019) ("Fourth Review Conf. Staff Report").

⁶⁵ Evonik's NOI Response at 28. These include plastics and rubbers, surface preparation, polymerization applications, hair care products, ink and pigments, film processing, printed circuit board etchants, pulp and paper products, de-sizing and bleaching of textiles, recreational water treatment, environmental remediation, and oil and gas recovery. *Id.*

⁶⁶ Evonik's NOI Response at 29.

⁶⁷ CR/PR at I-14, Table I-5.

⁶⁸ Confidential Views of the Commission in Persulfates from China, Inv. No. 731-TA-749 (Final), EDIS Doc. 507361 at 8, 10 n.31 ("Confidential Final Views"); Original Determination, USITC Pub. 3044 at 6.

⁶⁹ Original Determination, USITC Pub. 3044 at 9.

⁷⁰ Original Determination Confidential Staff Report, Memorandum INV-U-046, EDIS Doc. 507224 at Table IV-2 (June 3, 1997) ("Original Inv. Conf. Staff Report"). Nonsubject imports' market share declined over the POI. *Id.*; see also Original Determination, USITC Pub. 3044 at IV-1.

⁷¹ Confidential Final Views at 15 n.55; see also Original Determination, USITC Pub. 3044 at 13 n.55, IV-1.

the POI was tied to the European Union's ("EU's") 1995 imposition of an antidumping duty order on persulfates from China.⁷²

In the first five-year review, FMC remained the sole domestic producer.⁷³ The Commission found that both subject and nonsubject imports declined, and that the imposition of the antidumping duty order had a restraining effect on subject imports.⁷⁴ In the second five-year review, FMC continued to be the sole domestic producer. The Commission found that its market share declined as the volume of nonsubject imports increased.⁷⁵ The volume of subject imports declined during the second POR.⁷⁶

In the third five-year review, FMC remained the sole domestic producer. It supplied the largest share of the U.S. market for persulfates during the POR.⁷⁷ The Commission observed that nonsubject imports were the second largest source of persulfates, although their market share decreased overall during the period of review.⁷⁸ It found that subject imports accounted for only a very small share of the U.S. market during this period.⁷⁹

In the fourth five-year review, PeroxyChem was the sole domestic producer.⁸⁰ It supplied the largest share of the U.S. market for persulfates in 2018.⁸¹ Nonsubject imports were the second largest source of persulfates that year.⁸² The Commission found that subject imports accounted for only a very small share of the U.S. market during in 2018.⁸³

⁷² Original Determination, USITC Pub. 3044 at 13-14.

⁷³ First Review Determination, USITC Pub. 3555 at 5.

⁷⁴ Confidential Views of the Commission in Persulfates from China, Inv. No. 731-TA-749 (First Review), EDIS Doc. 672368 at 12-13; First Review Determination, USITC Pub. 3555 at 10-12.

⁷⁵ Confidential Views of the Commission in Persulfates from China, Inv. No. 731-TA-749 (Second Review), EDIS Doc. 296352 at 12; Second Review Determination, USITC Pub. 3988 at 9.

⁷⁶ Second Review Confidential Staff Report, Memorandum INV-FF-020, EDIS Doc. 672365 at Table I-6 (Mar. 3, 2008); Second Review Determination, USITC Pub. 3988 at Table I-6.

⁷⁷ Third Review Determination, USITC Pub. 4456 at 11-12.

⁷⁸ Third Review Determination, USITC Pub. 4456 at 12.

⁷⁹ Third Review Determination, USITC Pub. 4456 at 12.

⁸⁰ Fourth Review Determination, USITC Pub. 4946 at 7. As previously discussed, PeroxyChem is the successor firm to FMC.

⁸¹ Fourth Review Determination, USITC Pub. 4946 at 12.

⁸² Fourth Review Determination, USITC Pub. 4946 at 12; Fourth Review Conf. Staff Report at Table I-5.

⁸³ Fourth Review Determination, USITC Pub. 4946 at 12; Fourth Review Conf. Staff Report, at Table I-5.

In this review, Evonik is the sole domestic producer of persulfates, having acquired PeroxyChem for \$640 million in February 2020.⁸⁴ It supplied the largest share of the U.S. market for persulfates in 2023, accounting for *** percent of apparent U.S. consumption that year.⁸⁵ Subject imports continued to account for the smallest share of apparent U.S. consumption, *** percent, in 2023.⁸⁶ Nonsubject imports were the second largest source of persulfates that year, accounting for *** percent of apparent U.S. consumption.⁸⁷ The largest sources of nonsubject imports during the POR were India and Germany.⁸⁸

3. Substitutability and Other Conditions

In the original investigation and first and second five-year reviews, the Commission found subject imports and the domestic like product to be interchangeable.⁸⁹ In the third and fourth five-year reviews, the Commission found a moderate-to-high degree of substitutability between the domestic like product and subject imports.⁹⁰ In each of the prior proceedings, the Commission found that price was an important factor in purchasing decisions.⁹¹

The record in this review contains no new information to indicate that the substitutability between the domestic like product and subject imports or the importance of price has changed since the prior proceedings. Evonik argues that subject imports and domestically produced persulfates are highly substitutable, and that price remains paramount in purchasing decisions.⁹² Accordingly, we again find a moderate-to-high degree of substitutability between the domestic like product and subject imports and that price remains an important factor in purchasing decisions.

⁸⁴ CR/PR at I-8; Evonik's NOI Response at 2.

⁸⁵ CR/PR at I-14, Table I-5.

⁸⁶ CR/PR at Table I-5.

⁸⁷ CR/PR at Table I-5.

⁸⁸ CR/PR at Table I-12, I-4.

⁸⁹ Original Determination, USITC Pub. 3044 at 16; First Review Determination, USITC Pub. 3555 at 8; Second Review Determination, USITC Pub. 3988 at 9.

⁹⁰ Third Review Determination, USITC Pub. 4456 at 12; Fourth Review Determination, USITC Pub. 4946 at 17. In arriving at this finding, the Commission observed in the third review that all responding domestic producers and U.S. importers and the majority of purchasers reported that the domestic like product and imports from other countries were always or frequently interchangeable. Third Review Determination, USITC Pub. 4456 at 12.

⁹¹ Original Determination, USITC Pub. 3044 at 16; First Review Determination, USITC Pub. 3555 at 8; Second Review Determination, USITC Pub. 3988 at 9; Third Review Determination, USITC Pub. 4456 at 12; Fourth Review Determination, USITC Pub. 4946 at 17.

⁹² Evonik's NOI Response at 21.

Effective September 24, 2018, persulfates from China entering under HTS subheadings 2833.40.20 and 2833.40.60 became subject to an additional 10 percent *ad valorem* duty pursuant to Section 301 of the Trade Act of 1974.⁹³ Effective May 10, 2019, the section 301 duty for persulfate was increased to 25 percent.⁹⁴

C. Likely Volume of Subject Imports

1. The Prior Proceedings

In the original investigation, the Commission found the volume and increase in volume of subject imports to be significant. The quantity of shipments of subject imports increased nearly three-fold over the POI. In terms of value, subject import shipments followed the same trend. Subject imports' market share by quantity likewise increased nearly *** during the POI. In terms of value, subject imports' market share more than *** during that period.⁹⁵

In the first and second five-year reviews, the Commission found that subject imports from China maintained a presence in the U.S. market over the relevant PORs.⁹⁶ It further observed that the subject industry in China had significant excess capacity and remained export oriented.⁹⁷ In light of these factors and the increase in the volume and market share of subject

⁹³ CR/PR at I-5; *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 47974 (Sept. 21, 2018); see also *China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 28710 (June 20, 2018) (notice of action); *China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 40823 (Aug. 16, 2018) (notice of action).

⁹⁴ CR/PR at 1-5; *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 47974 (Sept. 21, 2018). See also *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 28710 (June 20, 2018).

⁹⁵ Original Determination, USITC Pub. 3044 at 13-14, 15 & n.55; Confidential Final Views at 14-15 & n.55.

⁹⁶ First Review Determination, USITC Pub. 3555 at 9; Second Review Determination, USITC Pub. 3988 at 10-11.

⁹⁷ First Review Determination, USITC Pub. 3555 at 10; Second Review Determination, USITC Pub. 3988 at 11. In the second review, the Commission also observed that the imposition of antidumping duties on persulfates from China by the EU and India would likely cause subject producers to search for new export markets and that the U.S. market remained attractive to Chinese producers. Second Review Determination, USITC Pub. 3988 at 11.

imports during the original investigation, the Commission concluded that the likely volume of subject imports would be significant if the antidumping duty order were revoked.⁹⁸

In the third five-year review, the Commission observed that under the discipline of the antidumping duty order, there were very limited imports of persulfates from China during the POR. The Commission found, however, that the subject industry in China had the ability and incentive to export significant volumes of persulfates to the United States if the order were revoked. It observed that Chinese producers had significant and increasing production capacity as well as considerable unused capacity, and they continued to be export oriented. The Commission further observed that the United States continued to be an attractive market for subject producers based on the higher U.S. prices compared to their other export markets as well as their continued exports to the U.S. market during the review period. It also found that the EU and Indian antidumping duty orders on persulfates from China served as additional incentives for Chinese producers to export persulfates to the U.S. if the order were revoked. Consequently, the Commission concluded that the volume of subject imports, both in absolute terms and relative to U.S. consumption, would likely be significant if the order were revoked.⁹⁹

In fourth five-year review, the Commission observed that under the discipline of the antidumping duty order, there were very limited imports of persulfates from China during the POR. The Commission found the subject producers had the ability and incentive to export subject merchandise to the U.S. market in significant volumes if the order were revoked. It found that subject producers had substantial production capacity and continued to expand their capacity, possessed substantial excess capacity, and were highly export oriented. Furthermore, the Commission found that the United States remained an attractive market for subject producers, given their continued presence in the U.S. market, the size of the U.S. market, and the relatively higher prices available there. It observed that the EU's antidumping duty measure on persulfates from China served as an added incentive for Chinese producers to export persulfates to the U.S. market if the order were revoked. The Commission concluded that the volume of subject imports, both in absolute terms and relative to U.S. consumption, would likely be significant if the order were revoked.¹⁰⁰

⁹⁸ See First Review Determination, USITC Pub. 3555 at 10; Second Review Determination, USITC Pub. 3988 at 11.

⁹⁹ Third Review Determination, USITC Pub. 4456 at 14-16.

¹⁰⁰ Confidential Commission Views, Persulfates from China – Fourth Review, EDIS Doc. 830975 at 20-22 (Aug. 15, 2019) (“Fourth Review Conf. Commission Views”); Fourth Review Determination, USITC Pub. 4946 at 15-16.

2. The Current Review

Under the discipline of the antidumping duty order, subject imports remained present in the U.S. market throughout the POR, although at lower levels than prior to the imposition of the order.¹⁰¹ The volume of subject imports fluctuated during the POR; it increased sharply in 2021 and remained at levels in 2022 and 2023 that were much higher than that at the beginning of the POR.¹⁰² The volume of subject imports increased from 10,000 pounds in 2019 to 44,000 pounds in 2020 and 2.5 million pounds in 2021, before declining to 794,000 pounds in 2022 and 666,000 pounds in 2023, equivalent to *** percent of apparent U.S. consumption that year.¹⁰³

The record in this expedited review contains limited information on the subject industry in China. However, the information available indicates that subject producers have the ability and incentive to export subject merchandise to the U.S. market in significant volumes within a reasonably foreseeable time if the order were revoked. Although no subject producer responded to the Commission's notice of institution in this review, Evonik has identified twenty-five possible producers of persulfates in China.¹⁰⁴

The information available indicates that subject producers increased their already substantial production capacity during the POR.¹⁰⁵ Based on information from company websites submitted by Evonik, Hebei Yatai Electrochemistry Co., Ltd. increased its persulfates capacity by 23,000 metric tons (50.7 million pounds) since the last five-year review.¹⁰⁶ Fujiam Hongguan Chemical Co., Ltd. increased its persulfates production by 17,000 metric tons (37.4 million pounds) since the last five-year review.¹⁰⁷ Similarly, Fujian Zhanhua Chemical Co., Ltd. is currently engaged in an ongoing construction project to expand its persulfates production capacity from 112,000 metric tons (246.9 million pounds) to 137,000 metric tons (302.0 million

¹⁰¹ CR/PR at Tables I-4 & I-5 (subject import volume was *** pounds in 1996, and 666,000 pounds in 2023).

¹⁰² Evonik asserts that even with the surge in subject imports to approximately 2.5 million pounds in 2021, imports during the current review period were still well below pre-order levels. Evonik's NOI Response at 8.

¹⁰³ CR/PR at Tables I-4 & I-5.

¹⁰⁴ Evonik's NOI Response at 27, Exh. 3; *see also* CR/PR at I-15.

¹⁰⁵ Evonik's NOI Response at 9-14.

¹⁰⁶ CR/PR at I-16, Table I-6; *see also* Evonik's NOI Response at 10 & Exh. 4 (citing company websites for Hebei Yatai Electrochemistry Co., Ltd.; Fujiam Hongguan Chemical Co., Ltd.; and Fujian Zhanhua Chemical Co., Ltd.).

¹⁰⁷ CR/PR at I-16, Table I-6; *cf.* Evonik's NOI Response at 11 & Exh. 4.

pounds) – an increase of 25,000 metric tons (55.1 million pounds).¹⁰⁸ According to information from the websites of these and ten other subject producers identified by Evonik, the 13 subject producers collectively possessed a capacity of 455,600 metric tons in 2023, up over 10 percent from the 405,600 metric ton capacity possessed by the subject industry in 2018.¹⁰⁹ Evonik argues that, based on its estimate that subject producers had a capacity utilization rate of 45.5 percent, these subject producers possessed excess capacity of approximately 248,302 metric tons (574.4 million pounds) in 2023, equivalent to over ten times apparent U.S. consumption that year.¹¹⁰

The information available also indicates that subject producers in China are significant exporters. Global Trade Atlas (“GTA”) data show that Chinese exports of persulfates under HS subheading 2833.40, which includes both subject merchandise and out-of-scope products, were 80.1 million pounds in 2023, and that China was the world’s largest exporter of such merchandise in every year of the POR.¹¹¹ According to information submitted by Evonik, numerous subject producers tout their global sales and overseas marketing networks on their company websites.¹¹²

¹⁰⁸ Evonik’s NOI Response at 10 & Exh. 4; *see also* CR/PR at I-16, Table I-6.

¹⁰⁹ Evonik’s NOI Response at 11-13 & Exhs. 4-5. Evonik’s estimate of the foreign producer’s capacity (455,600 metric tons (or 1.0 trillion pounds) in 2023 was *** than apparent U.S. consumption in 2023 (***) in 2023. *Id.*; CR/PR at I-14, Table I-15.

¹¹⁰ Evonik’s NOI Response at 14 & Exhibit 2. To estimate the subject producers’ capacity utilization rate, Evonik relies on 2018 data from the EU’s last sunset review of its antidumping duty order on persulfates from China, from 2020. *Id.* at 13-14 & Exh. 5.

¹¹¹ CR/PR at Table I-8.

¹¹² Evonik’s NOI Response at 11-12 & Exh. 4. For example, ABC Chemicals (Shanghai) Co., Ltd. states that it is “an internationally renowned” persulfates manufacturer and sells “well in China and the global market”; and the company strives to “provide a more attractive choice for global users, and enable them to maintain a leading position in their respective markets.” *Id.* Hebei Jiheng Group Co., Ltd. states that “{t}he company has the right of import and exported to more than 30 countries and regions such as European {U}nion, Southeast Asia, South of America etc. enjoying great reputation.” Similarly, Hengshui Jiamu Chemical Co., Ltd. states that it “exported to more than 30 countries and regions such as European {U}nion, Southeast Asi, South of America etc. enjoying great reputation.”; and “{o}ur purpose as a leading B2B eCommerce marketplace is to assist our clients in making a profitable business and enhance the quality of supply chain management. Our aim including making online B2B trade and import business effortless and streamlined for exporters and importers in India and across the globe. We provide a robust platform that encompasses an international B2B marketplace that has numerous active sellers and buyers from all over the world.” *Id.* Shaanxi Baohua Technologies Co., Ltd. States that “the company’s sales are also exported to more than 20 countries and regions.” *Id.* Similarly, Stars Chemical (Yong’an) Co., Ltd. States that it is “China’s important manufacturer and exporter of persulphates” *Id.*

Furthermore, the information available indicates that the United States remains an attractive export market for subject producers. Subject imports maintained a presence in the U.S. market throughout the period of review, accounting for *** percent of apparent U.S. consumption in 2023, indicating that subject producers have maintained customers and distribution networks in the United States.¹¹³ According to information from the Trade Data Monitor submitted by Evonik, the average unit values of Chinese exports of persulfates to the United States were higher than those of exports to other major third country markets in 2023 and January-May 2024, which would give subject producers an economic incentive to shift exports to the United States after revocation.¹¹⁴ EU antidumping duties on persulfates from China would also serve to make the U.S. market relatively more attractive to subject producers if the order were revoked.¹¹⁵

Given the foregoing, including the significant and increasing volume of subject imports in the original investigation, the continued presence of subject imports during the period of review and the demonstrated ability of subject imports to increase rapidly, as they did in 2021, the subject industry's large capacity, excess capacity, and exports, and the attractiveness of the U.S. market to subject producers, we conclude that the volume of subject imports, both in absolute terms and relative to U.S. consumption, would likely be significant if the order were revoked.¹¹⁶

¹¹³ CR/PR at I-14, Table I-5.

¹¹⁴ Evonik's NOI Response at 15-16 & Exh. 6. In 2023, the average unit value ("AUV") of Chinese exports to the United States was \$0.68 per pound and the AUV of Chinese exports to other major third country markets was \$0.48 per pound. *Id.* In January-May 2024, the AUV of Chinese exports to the United States was \$0.68 per pound and the AUV of Chinese exports to other major third country markets was \$0.41 per pound. *Id.*

¹¹⁵ CR/PR at I-17; Evonik's NOI Response at 17 & Exh. 7.

¹¹⁶ Although subject imports from China are currently subject to a 25 percent *ad valorem* duty under section 301, the record does not indicate that this duty would prevent subject imports from entering the U.S. market at significant levels if the order were revoked. After imposition of the section 301 duties, subject imports increased from 10,000 pounds in 2019 to 2.5 million pounds in 2021, before declining to 794,000 pounds in 2022 and 660,000 pounds in 2023, levels that remained well above those in 2019. CR/PR at Table I-4. Given the Chinese industry's large capacity and exports, the increased presence of subject imports in the U.S. market despite the imposition of the section 301 duties, and the attractiveness of the U.S. market, we find that the section 301 duties would not likely prevent subject imports from increasing to significant levels if the order were revoked.

The record of this expedited review contains no information on inventories of subject merchandise or the ability of subject producers to product shift.

D. Likely Price Effects

1. The Prior Proceedings

In the original investigation, the Commission found that subject imports undersold the domestic like product in 56 of 57 (or 98.2 percent of) pricing comparisons by margins as high as 50.4 percent. Given the high degree of interchangeability between subject imports and the domestic like product and the clear importance of price to purchasers, the Commission found that subject imports had significantly undersold the domestic like product.¹¹⁷ It also found that, due to the large presence of low-priced subject imports, FMC was unable to increase prices to offset its significant increases in operating costs in 1995 and 1996. The Commission thus concluded that subject imports suppressed domestic prices to a significant degree.¹¹⁸

In the first and second five-year reviews, the Commission found that the revocation of the antidumping duty order would likely lead to significant price effects, including significant underselling and significant price suppression or depression.¹¹⁹ Given the price sensitivity of the U.S. persulfates market, the interchangeability of subject imports and the domestic like product, and the persistent underselling by subject imports in the original investigation, the Commission found in both reviews that significant volumes of subject imports would likely undersell the domestic like product to a significant degree to gain market share.¹²⁰ It further found that this likely underselling, in turn, would likely lead to significant depressing or suppressing effects on prices of the domestic like product.¹²¹

In the third five-year review, the Commission found a moderate-to-high degree of substitutability between the domestic like product and subject imports and reiterated the importance of price in purchasing decisions. In light of these considerations, and the likely significant volume of subject imports from China, the Commission found that subject producers in China would likely price their product aggressively to gain market share upon

¹¹⁷ Original Determination, USITC Pub. 3044 at 15-16. The Commission also found numerous confirmed lost sales and lost revenue allegations. *Id.*

¹¹⁸ Original Determination, USITC Pub. 3044 at 16.

¹¹⁹ First Review Determination, USITC Pub. 3555 at 11; Second Review Determination, USITC Pub. 3988 at 13.

¹²⁰ First Review Determination, USITC Pub. 3555 at 11; Second Review Determination, USITC Pub. 3988 at 13.

¹²¹ First Review Determination, USITC Pub. 3555 at 11; Second Review Determination, USITC Pub. 3988 at 13.

revocation of the order. It found that the likely low prices of subject imports would likely result in significant underselling of the domestic like product by subject imports and other adverse effects, such as the loss of market share or significant price depression and/or suppression.¹²²

In the fourth five-year review, the Commission found that the significant increase in subject imports that was likely after revocation would likely undersell the domestic like product, as during the original investigation.¹²³ Given the moderate-to-high degree of substitutability between the domestic like product and subject imports and the importance of price in purchasing decisions, the Commission found that increased volumes of low-priced subject imports would likely force the domestic industry to lower prices, forego price increases, or lose market share. It therefore concluded that subject imports would likely have adverse price effects if the order were revoked.¹²⁴

2. The Current Review

As discussed above in section III.B.3, we continue to find a moderate-to-high degree of substitutability between the domestic like product and subject imports and that price is an important factor in purchasing decisions.

The record in this expedited review does not contain new product-specific pricing information. Based on the available information, including the moderate-to-high degree of substitutability between subject imports and the domestic like product, the importance of price in purchasing decisions, and the attractiveness of the U.S. market to subject producers, we find that if the order were revoked, subject imports would likely undersell the domestic like product to gain market share, as occurred in the original investigation. Absent the discipline of the order, the significant volume of low-priced subject imports would likely take sales and market share from domestic producers and/or force the domestic industry to cut prices or forego needed price increases, thereby depressing or suppressing prices for the domestic like product. Consequently, we find that subject imports would likely have significant price effects on the domestic industry if the order were revoked.

¹²² Third Review Determination, USITC Pub. 4456 at 17-18.

¹²³ Fourth Review Determination, USITC Pub. 4946 at 13, 17.

¹²⁴ Fourth Review Determination, USITC Pub. 4946 at 17.

E. Likely Impact ¹²⁵

1. The Prior Proceedings

In the original investigation, the Commission observed that the domestic industry's production, shipments, and net sales rose along with domestic consumption, but that its gross profit and operating income declined steadily during the POI.¹²⁶ The Commission found that the sharp increase in low-priced subject imports, which captured sales from large customers, prevented the domestic industry from offsetting rising costs with price increases, which resulted in the domestic industry's financial decline.¹²⁷

In the first and second five-year reviews, the Commission found that revocation of the order would likely lead to a significant increase in the volume of subject imports and that the subject imports would likely undersell the domestic like product and depress and/or suppress domestic prices to a significant degree. It found that the likely significant volume of low-priced subject imports, when combined with the likely adverse price effects of those imports, would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. The Commission found in both reviews that these declines would likely have a direct adverse impact on the industry's profitability. Accordingly, the Commission concluded that subject imports from China would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time if the order were revoked.¹²⁸

In the third five-year review, the Commission found that most indicators of the domestic industry's performance were stable or showed overall improvement during the POR. Specifically, the industry's production, capacity utilization, and U.S. shipments increased overall between 2007 and 2012. Its market share remained high, and the quantity and value of the domestic industry's net sales increased from 2007 to 2012. Additionally, the

¹²⁵ In its expedited fifth review of the antidumping duty order, Commerce determined that revocation of the antidumping duty order would likely result in the continuation or recurrence of dumping with margins of up to 119.02 percent for China. Commerce's Fifth Review Final Results, 89 Fed. Reg. at 88725, and accompanying IDM at 7.

¹²⁶ Original Determination, USITC Pub. 3044 at 12-13.

¹²⁷ Original Determination, USITC Pub. 3044 at 14.

¹²⁸ First Review Determination, USITC Pub. 3555 at 12; Second Review Determination, USITC Pub. 3988 at 14-15. Due to the limited evidence on the record of the expedited first and second five-year reviews, the Commission did not make a determination as to whether the domestic industry was vulnerable to material injury if the order were revoked. *See id.*

domestic industry was profitable throughout the POR.¹²⁹ In light of these performance indicia, the Commission found that the domestic industry was not in a vulnerable condition.¹³⁰ The Commission observed, however, that the industry's improved performance occurred during a time when subject imports were essentially absent from the U.S. market under the discipline of the order and found that revocation would likely lead to significant increases in the volume of subject imports that would significantly undersell the domestic like product, causing the domestic industry to either forego sales and cede market share or lower or restrain prices. It found that under either circumstance, the industry's revenues and financial performance would likely decline.¹³¹

Additionally, in the third review, the Commission considered the role of nonsubject imports. The Commission found that the presence of nonsubject imports did not prevent the domestic industry from achieving improved performance during the POR. It therefore concluded that nonsubject imports would not break the causal link between subject imports and the likely continuation or recurrence of material injury to the domestic industry in the event of revocation.¹³²

In the fourth five-year review, the Commission found that the limited information on the domestic industry's condition was insufficient to make a finding on whether it was vulnerable to material injury if the order were revoked.¹³³ It found that revocation of the order would likely lead to a significant volume of subject imports and that these imports would likely undersell the domestic like product to a significant degree, resulting in significant price depression or suppression and/or a loss of market share for the domestic industry. Further, the Commission found that the increased subject import competition that would likely occur after revocation of the order would likely have a significant impact on the domestic industry.¹³⁴

The Commission also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute likely injury from other factors to the subject imports.¹³⁵ It observed that nonsubject imports had increased their

¹²⁹ Third Review Determination, USITC Pub. 4456 at 20-21.

¹³⁰ Third Review Determination, USITC Pub. 4456 at 21.

¹³¹ Third Review Determination, USITC Pub. 4456 at 21.

¹³² Third Review Determination, USITC Pub. 4456 at 21.

¹³³ Fourth Review Determination, USITC Pub. 4946 at 19.

¹³⁴ Fourth Review Conf. Commission Views at 28; Fourth Review Determination, USITC Pub. 4946 at 19.

¹³⁵ Fourth Review Determination, USITC Pub. 4946 at 19.

presence in the U.S. market since the third review.¹³⁶ Nevertheless, the Commission found that because the domestic industry supplied the majority of the U.S. market, and subject imports would likely directly compete with the domestic like product upon revocation, the likely increase in subject imports would likely take market share from the domestic industry as well as from nonsubject imports. Consequently, the Commission found that subject imports would likely have adverse effects distinct from any caused by the nonsubject imports.¹³⁷

2. The Current Review

The record in this five-year review contains limited information concerning the domestic industry's performance since the last review.

The information available indicates that the domestic industry generally performed better in 2023 than in 1996, the last year examined in the original investigation, but generally worse than in the last years examined in the third and fourth reviews. In 2023, the domestic industry's production capacity was *** pounds and its production was *** pounds, which were higher than in 1996 but lower than in 2012 and 2018; its capacity utilization rate, at *** percent, was lower than in any of the prior proceedings.¹³⁸ Its U.S. shipments were lower than in any of the prior proceedings, at *** pounds, but its share of apparent U.S. consumption, at *** percent, was higher.¹³⁹ The AUV of the domestic industry's U.S. shipments, \$*** per pound, was higher than that in all the other proceedings except for the third review.¹⁴⁰ Its net sales revenue was \$***, its gross profit was \$***, and its operating income was \$***, equivalent to *** percent of net sales – all higher than in 1996 but lower than in 2012 and

¹³⁶ Fourth Review Conf. Commission Views at 28-29; Fourth Review Determination, USITC Pub. 4946 at 19.

¹³⁷ Fourth Review Determination, USITC Pub. 4946 at 19.

¹³⁸ CR/PR at Table I-3. The domestic industry's capacity was *** pounds in both 1996 and 2001, *** pounds in 2006, *** pounds in 2012, and *** pounds in 2018. *Id.* Its production was *** pounds in 1996, *** pounds in 2001, *** pounds in 2006, *** pounds in 2012, and *** pounds in 2018. *Id.* Its capacity utilization rate was *** percent in 1996, *** percent in 2001, *** percent in 2006, *** percent in 2012, and *** percent in 2018. *Id.*

¹³⁹ CR/PR at Table I-3. The industry's U.S. shipments were *** pounds in 1996, *** pounds in 2001, *** pounds in 2006, *** pounds in 2012, and *** pounds in 2018. *Id.* The domestic industry's share of apparent U.S. consumption was *** percent in 1996, *** percent in 2001, *** percent in 2006, *** percent in 2012, and *** percent in 2018. *Id.* at I-13—I-14, Table I-5.

¹⁴⁰ The AUV of the domestic industry's U.S. shipments was \$*** per pound in 1996, \$*** per pound in 2001, \$*** per pound in 2006, \$*** in 2012, and \$*** per pound in 2018. CR/PR at Table I-3.

2018.¹⁴¹ This limited information is insufficient for us to make a finding on whether the domestic industry is vulnerable to the likely continuation or recurrence of material injury in the event of revocation of the order.

Based on the information available in this review, we find that revocation of the order would likely result in a significant increase in subject import volume that would likely undersell the domestic like product to a significant degree. Given the moderate-to-high degree of substitutability between the domestic like product and subject imports and the importance of price to purchasers, significant volumes of low-priced subject imports would likely significantly undersell the domestic like product and capture sales and market share from the domestic industry and/or significantly depress or suppress prices for the domestic like product. The likely significant volume of imports and their significant price effects would likely have a significant adverse impact on the domestic industry's production, shipments, sales, market share, and revenues, which in turn would have a direct adverse impact on the domestic industry's profitability and employment, as well as its ability to raise capital and make and maintain necessary capital investments.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute likely injury from other factors to the subject imports. In 2023, the volume of nonsubject imports was *** percent lower than in 2018, and they accounted for *** percent of apparent U.S. consumption in 2023.¹⁴² The record provides no indication that the presence of nonsubject imports would prevent subject imports from entering the U.S. market in significant quantities or adversely affecting domestic prices after revocation of the order. Given the moderate-to-high degree of substitutability between subject imports and the domestic like product and the importance of price to purchasing decisions, the presence of nonsubject imports in the U.S. market would likely not prevent the significant increase in low-priced subject imports that is likely after revocation from taking market share from the domestic industry, as well as from nonsubject imports, or from forcing domestic producers to lower their prices or forgo price increases in order to retain market

¹⁴¹ CR/PR at Table I-3. The domestic industry's net sales revenue was \$*** in 1996, \$*** in 2012, and \$*** in 2018. *Id.* Its gross profit was \$*** in 1996, \$*** in 2012, and \$*** in 2018. *Id.* The industry's operating income was \$*** in 1996, \$*** in 2012, and \$*** in 2018. *Id.* Its ratio of operating income to net sales was *** percent in 1996, *** percent in 2012, and *** percent in 2018. *Id.* Data for these indicators in 2001 and 2006 are unavailable. *See id.*

¹⁴² CR/PR at Table I-5. Nonsubject imports were *** pounds in 2012, 15.0 million pounds in 2018, and 7.6 million pounds in 2023. *Id.* Nonsubject imports' share of apparent U.S. consumption increased from *** percent in 2012 to *** percent in 2018, but decreased to *** percent in 2023. *Id.*

share. Consequently, we find that any future effects of nonsubject imports would be distinct from the likely effects attributable to subject imports and that nonsubject imports would not prevent subject imports from having a significant impact on the domestic industry.

We recognize that apparent U.S. consumption was *** percent lower in 2023 than in 2018.¹⁴³ Evonik claims that U.S. demand for persulfates was flat overall during the POR, declining in 2021 due to the COVID-19 pandemic, recovering in 2022, and then declining again in 2023, and is expected to remain relatively flat in 2024.¹⁴⁴ To the extent that demand remains flat or declines, the significant volume of low-priced subject imports that is likely after revocation would exacerbate the effects of weak or declining demand on the domestic industry.

Accordingly, we find that revocation of the antidumping duty order on persulfates from China would likely have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the reasons above, we determine that revocation of the antidumping duty order on persulfates 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.

¹⁴³ CR/PR at I-14, Table I-5.

¹⁴⁴ Evonik's NOI Response at 29.

Information obtained in this review

Background

On July 1, 2024, the U.S. International Trade Commission (“Commission”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),¹ that it had instituted a review to determine whether revocation of the antidumping duty order on persulfates from China would be likely to lead to continuation or recurrence of material injury.² All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.^{3 4} Table I-1 presents information relating to the background and schedule of this proceeding:

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

Effective date	Action
July 1, 2024	Notice of initiation by Commerce (89 FR 54435, July 1, 2024)
July 1, 2024	Notice of institution by Commission (89 FR 54533, July 1, 2024)
October 4, 2024	Commission’s vote on adequacy
November 8, 2024	Commerce’s results of its expedited review (89 FR 88724, November 8, 2024)
February 10, 2025	Commission’s determination and views

¹ 19 U.S.C. 1675(c).

² 89 FR 54533, July 1, 2024. 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. 89 FR 54435, July 1, 2024. 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.

The original investigation

The original investigation resulted from a petition filed on July 11, 1996 with Commerce and the Commission by FMC Corporation, Chicago, Illinois.⁵ On May 19, 1997, Commerce determined that imports of persulfates from China were being sold at less than fair value (“LTFV”).⁶ The Commission determined on June 25, 1997 that the domestic industry was materially injured by reason of LTFV imports of persulfates from China.⁷ On July 7, 1997, Commerce issued its antidumping duty order with final weighted-average dumping margins ranging from 32.22 to 119.02 percent.⁸

The first five-year review

On September 6, 2002, the Commission determined that it would conduct an expedited review of the antidumping duty order on persulfates from China.⁹ On October 4, 2002, Commerce determined that revocation of the antidumping order on persulfates from China would be likely to lead to continuation or recurrence of dumping.¹⁰ On October 31, 2002, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.¹¹ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective December 24, 2002, Commerce issued a continuation of the antidumping duty order on imports of persulfates from China.¹²

The second five-year review

On February 4, 2008, the Commission determined that it would conduct an expedited review of the antidumping duty orders on persulfates from China.¹³ On March 5, 2008, Commerce determined that revocation of the antidumping order on persulfates from China would be likely to lead to continuation or recurrence of dumping.¹⁴ On March 31, 2008, the

⁵ Persulfates from China, Inv. Nos. 731-TA-749 (Final), USITC Publication 3044, June 1997 (“Original publication”), p. I-1.

⁶ 62 FR 27222, May 19, 1997.

⁷ 62 FR 35526, July 1, 1997.

⁸ 62 FR 36259, July 7, 1997, as amended by 62 FR 39212, July 22, 1997.

⁹ 67 FR 59863, September 24, 2002.

¹⁰ 67 FR 62226, October 4, 2002.

¹¹ 67 FR 66001, October 29, 2002.

¹² 67 FR 78415, December 24, 2002.

¹³ 73 FR 8903, February 15, 2008.

¹⁴ 73 FR 11868, March 5, 2008.

Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.¹⁵ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective April 21, 2008, Commerce issued a continuation of the antidumping duty order on imports of persulfates from China.¹⁶

The third five-year review

On June 4, 2013, the Commission determined that it would conduct a full review of the antidumping duty orders on persulfates from China.¹⁷ On July 8, 2013, Commerce determined that revocation of the antidumping order on persulfates from China would be likely to lead to continuation or recurrence of dumping.¹⁸ On March 10, 2014, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.¹⁹ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective March 28, 2014, Commerce issued a continuation of the antidumping duty order on imports of persulfates from China.²⁰

The fourth five-year review

On May 7, 2019, the Commission determined that it would conduct an expedited review of the antidumping duty orders on persulfates from China.²¹ On June 11, 2019, Commerce determined that revocation of the antidumping order on persulfates from China would be likely to lead to continuation or recurrence of dumping.²² On August 15, 2019, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.²³ Following affirmative determinations in the five-year reviews by Commerce and the Commission, effective August 28, 2019, Commerce issued a continuation of the antidumping duty order on imports of persulfates from China.²⁴

¹⁵ 73 FR 18561, April 4, 2008.

¹⁶ 73 FR 21318, April 21, 2008.

¹⁷ 78 FR 35314, June 12, 2013.

¹⁸ 78 FR 40695, July 8, 2013.

¹⁹ 79 FR 14536, March 14, 2014.

²⁰ 79 FR 17506, March 28, 2014.

²¹ 84 FR 32217, July 5, 2019.

²² 84 FR 27087, June 11, 2019.

²³ 84 FR 43615, August 21, 2019.

²⁴ 84 FR 45123, August 28, 2019.

Previous and related investigations

Persulfates have not been the subject of any prior related antidumping or countervailing duty investigations in the United States.

Commerce's five-year review

Commerce announced that it would conduct expedited review with respect to the order on imports of persulfates from China with the intent of issuing the final results of this review based on the facts available not later than October 29, 2024.²⁵ Commerce publishes its Issues and Decision Memoranda and its final results concurrently, accessible upon publication at <https://access.trade.gov/public/FRNoticesListLayout.aspx> and subsequently on the Commission's Electronic Document Information System ("EDIS"). 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 reviews, 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 persulfates from China are noted in the sections titled "The original investigation" and "U.S. imports," if applicable.

²⁵ Letter from Jill E. Pollack, Senior Director, Office VII, Office of AD/CVD Operations, U.S. Department of Commerce to Nannette Christ, Director of Investigations, August 21, 2024.

The product

Commerce's scope

Commerce has defined the scope as follows:

The products covered by the order are persulfates, including ammonium, potassium, and sodium persulfates. The chemical formulas for these persulfates are, respectively, (NH₄)₂S₂O₈, K₂S₂O₈, and Na₂S₂O₈. Potassium persulfates are currently classifiable under subheading 2833.40.10 of the Harmonized Tariff Schedule of the United States (HTSUS). Sodium persulfates are classifiable under HTSUS subheading 2833.40.20. Ammonium and other persulfates are classifiable under HTSUS subheadings 2833.40.50 and 2833.40.60. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of the order is dispositive.²⁶

U.S. tariff treatment

Persulfates are imported under Harmonized Tariff Schedule of the United States ("HTS") subheadings 2833.40.20 and 2833.40.60 (HTS statistical reporting numbers 2833.40.2000 (sodium persulfate), 2833.40.6010 (potassium persulfate), and 2833.40.6020 (ammonium persulfate)).²⁷ The general rate of duty is 3.7 and 3.1 percent ad valorem for HTS subheadings 2833.40.20 and 2833.40.60 respectively.²⁸ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Effective September 24, 2018, persulfates originating in China are subject to an additional 10 percent ad valorem duty under section 301 of the Trade Act of 1974. Effective May 10, 2019, the section 301 duty for persulfate was increased to 25 percent.²⁹

²⁶ 84 FR 45123, August 28, 2019.

²⁷ Persulfates are also imported under HTS statistical reporting number 2833.40.6050 which may contain products outside the scope of this review.

²⁸ USITC, HTS (2024) Basic Revision 4, Publication 5521, June 2024, pp. 28-21.

²⁹ 83 FR 47974, September 21, 2018; 84 FR 20459, May 9, 2019. See also HTS heading 9903.88.03 and U.S. notes 20(e) and 20(g) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2024) Basic Revision 4, Publication 5521, June 2024, pp. 99-III-34.

Description and uses³⁰

The imported products subject to this review are peroxydisulfate salts, commonly referred to as persulfates.³¹ The three salts³² included in this review are sodium peroxydisulfate ($\text{Na}_2\text{S}_2\text{O}_8$),³³ potassium peroxydisulfate ($\text{K}_2\text{S}_2\text{O}_8$),³⁴ and ammonium peroxydisulfate ($\{\text{NH}_4\}_2\text{S}_2\text{O}_8$).³⁵ All three salts are dry, colorless, crystalline solids that are indistinguishable when subject to visual or tactile exam; however, ammonium peroxydisulfate may be identified by an unpleasant odor. Depending on purity the three salts are marketed as different grades, but the chemistry of the products remain unchanged across grades. The active oxidizing agent for each salt is the peroxydisulfate anion ($\{\text{S}_2\text{O}_8\}^{2-}$). It is the solubility and side interactions of the cation— sodium (Na^+), potassium (K^+), or ammonium (NH_4^+)— that informs the choice of the particular salt for a given application. For example, ammonium peroxydisulfate is highly soluble in water, but the ammonium cation may lead to unwanted interactions in some applications.

A major application of peroxydisulfate salts is as initiators³⁶ to produce a variety of polymers. As strong oxidizing agents, they are used during printed circuit board etching,³⁷ textile processing, pulp and paper production, cleaning, and plating. Other uses are found in the production of rubber, structural materials (e.g., concrete), coatings, adhesives, and inks and pigments; soil stabilization; oil and gas recovery; mining; and photography. Anti-caking agents can be added to the product if the end-user desires.³⁸

Both domestic and imported persulfates are believed to be sold in substantial quantities

³⁰ Unless otherwise noted, this information is based on Persulfates from China, Investigation Nos. 731-TA-749 (Fourth Review), USITC Publication 4964, August 2019 (“Fourth review publication”), pp. I-6-I-7.

³¹ For the purposes of this review, the term “persulfates” refers to the three salts under Commerce’s scope as they are the most commercially relevant. The term “persulfate” refers, in general, to the salts of both peroxysulfuric (Caro’s) acid or peroxydisulfuric (Marshall’s) acid. The term “peroxosulfate” is used synonymously with “persulfate” or in place of “peroxysulfate” in some sources, though it is not the preferred International Union of Pure and Applied Chemistry (IUPAC) nomenclature.

³² A salt is an ionic compound composed of two oppositely charged ions. The compounds in this review contain the same negatively charged peroxydisulfate anion ($\{\text{S}_2\text{O}_8\}^{2-}$) and vary by the positively charged species, the sodium (Na^+), potassium (K^+), or ammonium ($\{\text{NH}_4\}^+$) cations.

³³ CAS number 7775-27-1.

³⁴ CAS number 7727-21-1.

³⁵ CAS number 7727-54-0.

³⁶ Through the formation of sulfate radicals ($\{\text{SO}_4\}^{\cdot-}$).

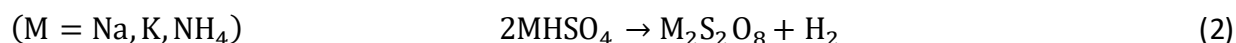
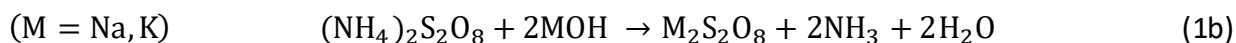
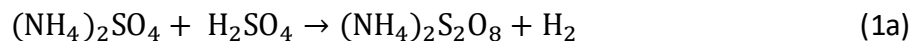
³⁷ Etching here is defined as producing patterns or designs on a solid substrate by a chemical.

³⁸ Rhein PerChemie GmbH, “Market,” <https://www.rheinperchemie.com/markets>, retrieved July 31, 2024; Rhein PerChemie GmbH, “Ammonium Persulfate,” <https://www.rheinperchemie.com/products/ammonium-persulfate>, retrieved July 31, 2024.

to end users and distributors. In the original investigation and subsequent reviews, the Commission determined that persulfates produced in the United States and China were interchangeable, commodity-like products.

Manufacturing process³⁹

The peroxydisulfate salts are produced commercially using an electrochemical cell process.⁴⁰ Ammonium sulfate ($(\text{NH}_4)_2\text{SO}_4$) is first reacted with sulfuric acid (H_2SO_4) between platinum electrodes to produce ammonium peroxydisulfate (equation 1 below). The ammonium peroxydisulfate is then crystallized into a wet cake and either packaged, after drying in a fluid bed dryer, or used in downstream processing. Sodium and potassium peroxydisulfate are manufactured by reacting the ammonium peroxydisulfate with either sodium hydroxide (NaOH) or potassium hydroxide (KOH), respectively (equation 2 below). The ammonia produced by these reactions is removed and recycled back into the process to form new ammonium sulfate.



Information developed in the original investigation indicated that the three peroxydisulfate salts are manufactured in the same plant, using the same or similar equipment and production workers. There are no known significant differences in the peroxydisulfate production processes used in China and the United States, although information collected during the original investigation indicated that, at that time, the Chinese process may have been slightly less automated.

The industry in the United States

U.S. producers

During the final phase of the original investigation, the Commission received U.S. producer questionnaires from one firm, FMC Corporation, the sole domestic producer of persulfates in the United States during 1996 (the original investigation). FMC Corporation also accounted for all known production of production of persulfates in the United States in the first

³⁹ Unless otherwise noted, this information is based on Fourth review publication, pp. 1-7-1-8.

⁴⁰ Peroxides and Peroxide Compounds, Inorganic Peroxides. Kirk-Othmer Encyclopedia of Chemical Technology (2001).

five-year review,⁴¹ second five-year review,⁴² and third five-year review.⁴³ In 2014, One Equity Partners, a private equity firm, acquired the division of FMC Corporation that produced persulfates and renamed the now independent company as PeroxyChem LLC (“PeroxyChem”). PeroxyChem continued to be the sole producer of persulfates in the United States in the fourth review.⁴⁴

In response to the Commission’s notice of institution in this current review, the domestic interested party reported that there is only one known and currently operating U.S. producers of persulfates, Evonik Corporation (“Evonik”), which accounted for 100.0 percent of U.S. production of persulfates in 2023.⁴⁵

Recent developments

Table I-2 presents events in the U.S. industry since the Commission’s last five-year reviews.⁴⁶

Table I-2
Persulfates: Developments in the U.S. industry

Item	Firm	Event
Acquisition	Evonik	February 3, 2020: Evonik closed the acquisition of PeroxyChem for \$640 million after the responsible court in Washington D.C. dismissed the lawsuit filed by the Federal Trade Commission (FTC) to block the acquisition.

Source: Evonik “Evonik successfully closes acquisition of PeroxyChem,” February 3, 2020, <https://corporate.evonik.com/en/media/press-releases/corporate/evonik-successfully-closes-acquisition-of-peroxychem-122808.html>.

⁴¹ Persulfates from China, Investigation No. 731-TA-749 (Review), USITC Publication 3555, October 2002 (“First review publication”), p. I-3.

⁴² Persulfates from China, Investigation No. 731-TA-749 (Second Review), USITC Publication 3988, March 2008 (“Second review publication”), p. I-1.

⁴³ Persulfates from China, Investigation No. 731-TA-749 (Third Review), USITC Publication 4456, March 2014 (“Third review publication”), p. I-16.

⁴⁴ Fourth review publication, pp. I-11-I-12.

⁴⁵ Domestic interested party’s response to the notice of institution, July 30, 2024, pp. I-2. The petitioner in the original investigation, FMC Corporation, became PeroxyChem in 2014. In February 2020, Evonik completed its acquisition of PeroxyChem.

⁴⁶ For recent developments, if any, in tariff treatment, please see “U.S. tariff treatment” section.

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. Table I-3 presents a compilation of the trade and financial data submitted from the responding U.S. producers in the original investigation and subsequent five-year reviews.

Table I-3
Persulfates: 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 in percent

Item	Measure	1996	2001	2006	2012	2018	2023
Capacity	Quantity	***	***	***	***	***	***
Production	Quantity	***	***	***	***	***	***
Capacity utilization	Ratio	***	***	***	***	***	***
U.S. shipments	Quantity	***	***	***	***	***	***
U.S. shipments	Value	***	***	***	***	***	***
U.S. shipments	Unit value	***	***	***	***	***	***
Net sales	Value	***	NA	NA	***	***	***
COGS	Value	***	NA	NA	***	***	***
COGS to net sales	Ratio	***	NA	NA	***	***	***
Gross profit or (loss)	Value	***	NA	NA	***	***	***
SG&A expenses	Value	***	NA	NA	***	***	***
Operating income or (loss)	Value	***	NA	NA	***	***	***
Operating income or (loss) to net sales	Ratio	***	NA	NA	***	***	***

Source: For the years 1996-2018, data are compiled using data submitted in the Commission's original investigation and subsequent five-year reviews. For the year 2023, data are compiled using data submitted by domestic interested party. Domestic interested party's response to the notice of institution, July 31, 2024, exh. 1.

Note: Data that is not available is represented by "NA."

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

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.⁴⁷

In its original determination, its expedited first and second five-year review determinations, its full third five-year review determination, and its expedited fourth five-year review determination, the Commission found a single domestic like product consisting of ammonium, sodium, and potassium persulfates, coextensive with the scope of the order. In its original determination, its expedited first and second five-year review determinations, its full third five-year review determination, and its expedited fourth five-year review determination, the Commission defined the domestic industry as producers of ammonium, sodium, and potassium persulfates.⁴⁸

U.S. importers

During the final phase of the original investigation, the Commission received U.S. importer questionnaires from 17 firms, 11 of which imported persulfates from China, which accounted for approximately 100.3 percent of total U.S. imports of persulfates during 1996.⁴⁹ Import data presented in the original investigation are based on questionnaire responses.

Although the Commission did not receive responses from any respondent interested parties in its first five-year review, the domestic interested party provided a list of six firms that may have imported persulfates from China during 2001.⁵⁰ Import data presented in the first review are based on official Commerce statistics.

Although the Commission did not receive responses from any respondent interested parties in its second five-year review, the domestic interested party provided a list of 26 firms

⁴⁷ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

⁴⁸ 89 FR 54533, July 1, 2024.

⁴⁹ Original publication, p. IV-1.

⁵⁰ First review publication, p. I-7

that may have imported persulfates from China.⁵¹ Import data presented in the first review are based on official Commerce statistics.

During the third five-year review, the Commission received U.S. importer questionnaires from 11 firms, which accounted for all known U.S. imports of persulfates from China and 90.0 percent of nonsubject imports from all other countries during the period of review.⁵² Import data presented in the third review are based on questionnaire responses.

Although the Commission did not receive responses from any respondent interested parties in its fourth five-year review, the domestic interested party provided a list of 25 firms that may have imported persulfates from China.⁵³ Import data presented in the fourth review are based on official Commerce statistics.

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 a list of 26 potential U.S. importers of persulfates.⁵⁴

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 2023 imports by quantity).

⁵¹ Second review publication, p. I-9

⁵² Third review publication, pp. I-17 and IV-1.

⁵³ Fourth review publication, p. I-18.

⁵⁴ Domestic interested party's response to the notice of institution, July 30, 2024, exh. 8.

Table I-4
Persulfates: 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	2019	2020	2021	2022	2023
China	Quantity	10	44	2,464	794	666
India	Quantity	3,120	2,783	3,074	3,601	4,037
Germany	Quantity	6,075	3,673	5,089	4,630	2,021
Turkey	Quantity	2,330	848	1,385	1,430	670
All other sources	Quantity	3,381	2,363	2,255	2,565	893
Nonsubject sources	Quantity	14,906	9,668	11,804	12,226	7,621
All import sources	Quantity	14,916	9,711	14,268	13,020	8,287
China	Value	15	50	3,331	1,192	707
India	Value	2,278	2,027	2,764	3,254	3,942
Germany	Value	8,289	3,937	7,288	8,244	3,726
Turkey	Value	1,363	470	1,022	1,373	947
All other sources	Value	2,681	1,716	1,651	2,395	661
Nonsubject sources	Value	14,612	8,150	12,725	15,266	9,276
All import sources	Value	14,627	8,200	16,056	16,458	9,983
China	Unit value	1.41	1.15	1.35	1.50	1.06
India	Unit value	0.73	0.73	0.90	0.90	0.98
Germany	Unit value	1.36	1.07	1.43	1.78	1.84
Turkey	Unit value	0.59	0.55	0.74	0.96	1.41
All other sources	Unit value	0.79	0.73	0.73	0.93	0.74
Nonsubject sources	Unit value	0.98	0.84	1.08	1.25	1.22
All import sources	Unit value	0.98	0.84	1.13	1.26	1.20

Source: Compiled from official Commerce statistics for HTS statistical reporting numbers 2833.40.2000, 2833.40.6010, 2833.40.6020, and 2833.40.6050, accessed August 19, 2024. These data may be overstated as HTS statistical reporting number 2833.40.6050 may contain products outside the scope of this review. HTS statistical reporting number 2833.40.6050 accounted for 6.4 percent of total imports listed above for the period from 2019 to 2023.

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
Persulfates: Apparent U.S. consumption and market shares, by source and period

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

Source	Measure	1996	2001	2006
U.S. producers	Quantity	***	***	***
China	Quantity	***	3,181	847
Nonsubject sources	Quantity	***	10,051	15,820
All import sources	Quantity	***	13,232	16,667
Apparent U.S. consumption	Quantity	***	***	***
U.S. producers	Value	***	***	***
China	Value	***	1,544	557
Nonsubject sources	Value	***	6,472	8,791
All import sources	Value	***	8,016	9,348
Apparent U.S. consumption	Value	***	***	***
U.S. producers	Share of quantity	***	***	***
China	Share of quantity	***	***	***
Nonsubject sources	Share of quantity	***	***	***
All import sources	Share of quantity	***	***	***
U.S. producers	Share of value	***	***	***
China	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	***	***	***

Table continued.

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

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

Source	Measure	2012	2018	2023
U.S. producers	Quantity	***	***	***
China	Quantity	***	548	666
Nonsubject sources	Quantity	***	14,993	7,621
All import sources	Quantity	***	15,481	8,287
Apparent U.S. consumption	Quantity	***	***	***
U.S. producers	Value	***	***	***
China	Value	***	408	707
Nonsubject sources	Value	***	15,061	9,276
All import sources	Value	***	15,468	9,983
Apparent U.S. consumption	Value	***	***	***
U.S. producers	Share of quantity	***	***	***
China	Share of quantity	***	***	***
Nonsubject sources	Share of quantity	***	***	***
All import sources	Share of quantity	***	***	***
U.S. producers	Share of value	***	***	***
China	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	***	***	***

Source: For the years 1996-2018, data are compiled using data submitted in the Commission's original investigation and five-year reviews. For the year 2023, 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 numbers 2833.40.2000, 2833.40.6010, 2833.40.6020, and 2833.40.6050, accessed August 19, 2024.

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

The industry in China

Producers in China

During the final phase of the original investigation, the Commission received foreign producer/exporter questionnaires from two firms, ***, which accounted for approximately *** percent of persulfates exports from China to the United States during 1996.⁵⁵

Although the Commission did not receive responses from any respondent interested parties in its first five-year review, the domestic interested party provided a list of 12 possible producers of persulfates in China.⁵⁶

Although the Commission did not receive responses from any respondent interested parties in its second five-year review, the domestic interested party provided a list of 25 possible producers of persulfates in China.⁵⁷

During the third five-year review, the Commission received a *** from one firm, United Initiators (Shanghai) Co., Ltd. The firm provided ***.⁵⁸

Although the Commission did not receive responses from any respondent interested parties in its fourth five-year review, the domestic interested party provided a list of 24 possible producers of persulfates in China.⁵⁹

Although the Commission did not receive responses from any respondent interested parties in this five-year review, the domestic interested party provided a list of 25 possible producers of persulfates in China.⁶⁰

Recent developments

Table I-6 presents events in the Chinese industry since the Commission's last five-year reviews.

⁵⁵ Investigation No. 731-TA-749 (Final): Persulfates from China, Confidential Report, INV-U-046, June 3, 1997 ("Original confidential report"), p. VII-2.

⁵⁶ First review publication, p. I-10.

⁵⁷ Second review publication, p. I-12.

⁵⁸ Investigation No. 731-TA-749 (Final): Persulfates from China, Confidential Report, INV-MM-011, February 6, 2014 ("Third review confidential report"), p. IV-7.

⁵⁹ Fourth review publication, p. I-24.

⁶⁰ Domestic interested party's response to the notice of institution, July 30, 2024, exh. 3.

Table I-6
Persulfates: Developments in the Chinese industry

Item	Firm	Event
Expansion	Hebei Yatai Electrochemistry Co., Ltd	Increased persulfates capacity by 23,000 metric tons since the five-year review.
Expansion	Fujian Hongguan Chemical Co., Ltd.	Increase persulfates production by 17,000 metric tons since the last five-year review.
Expansion	Fujian Zhanhua Chemical Co., Ltd.'s	After the completion of the 3 rd phase of the ongoing construction project, a provincial-level key project in the 14 th Five Year Plan of Fujian Province, the company will achieve annual production capacity of over 125,000 tons of persulfates (capacity of 75,000 tons, 50,000 tons, and 12,000 tons for of ammonium, sodium, and potassium, respectively).

Source: Domestic interested party's response to the notice of institution, p. 10; Fujian Zhanhua Chemical Co., Ltd.'s, "About," accessed August 12, 2024, <https://en.zhgchem.com/AboutStd.html>; https://en.zhgchem.com/NewsStd_778.html.

Exports

Table I-7 presents export data for persulfates (2833.40), a category that includes persulfates and out-of-scope products, from China (by export destination in descending order of quantity for 2023).

Table I-7
Persulfates: Quantity of exports from China, by destination and period

Quantity in 1,000 pounds

Destination market	2018	2019	2020	2021	2022	2023
Taiwan	17,938	18,942	19,165	21,157	22,724	16,929
South Korea	20,613	23,444	22,970	18,756	15,730	12,207
Brazil	6,278	6,074	8,178	7,735	8,277	7,618
Thailand	4,598	3,254	3,306	3,985	3,637	5,071
Russia	3,458	3,751	3,733	4,125	4,475	4,817
Indonesia	3,530	3,318	3,567	3,367	2,890	3,391
Mexico	2,734	2,738	2,037	3,309	2,416	3,009
Turkey	3,202	4,486	2,865	738	3,333	2,822
Japan	2,199	2,205	1,747	2,765	2,498	2,469
South Africa	3,097	1,671	1,259	3,963	7,262	2,288
All other markets	28,704	22,345	20,126	30,712	32,696	19,522
All markets	99,035	93,257	88,953	100,656	105,938	80,143

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2833.40, accessed August 1, 2024. These data may be overstated as HS subheading 2833.40 may contain products outside the scope of these reviews.

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

Third-country trade actions

The European Commission accepted application for expiry on the antidumping measures on peroxosulphates (persulphates), originating in the People's Republic of China review on December 17, 2018. Following the review, the Commission announced on January 18, 2020, that it will continue antidumping measures on peroxosulphates (persulphates), including potassium peroxymonosulphate sulphate, originating in the People's Republic of China for a further 5 years.⁶¹ These orders continued the imposition of antidumping duties of 24.5% against United Initiators Shanghai Co. Ltd and 71.8% for all other companies.⁶²

The global market

Table I-8 presents global export data for 2833.40, a category that includes persulfates and out-of-scope products, (by source in descending order of quantity for 2023). China was the world's leading exporter, as in the previous review, however, its exports decreased by 24.3 percent from 2022 to 2023. Similar drops in exports during the same period were reflected by the second leading global exporter, Germany, with a decrease of 25.0 percent, and the third leading global exporter, the United States, with a decrease of 28.7 percent.

⁶¹ The EU antidumping regulation includes the three peroxydisulfate salts under the scope of this review in addition to potassium peroxydisulfate, which is not. The EU uses different spellings for the considered products (i.e., "persulphate" instead of "persulfate" and "peroxodisulfate" instead of "peroxydisulfate"). Fourth review confidential report, pp. I-27 and fourth review publication, pp. I-7-I-18. HM Revenue & Customs, "Guidance: Peroxosulphates (persulphates) from China (anti-dumping duty 2383), January 20, 2020, <https://www.gov.uk/government/publications/peroxosulphates-persulphates-from-china-anti-dumping-duty-2383/peroxosulphates-persulphates-from-china-anti-dumping-duty-2383>; Regulation no. 2020/39, OJ ref.L13, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2020.013.01.0018.01.ENG&toc=OJ:L:2020:013:TOC.

⁶² ABC Chemicals (Shanghai) Co. Ltd. Antidumping duty was "nil." Revenue & Customs, "Guidance: Peroxosulphates (persulphates) from China (anti-dumping duty 2383), January 20, 2020, <https://www.gov.uk/government/publications/peroxosulphates-persulphates-from-china-anti-dumping-duty-2383/peroxosulphates-persulphates-from-china-anti-dumping-duty-2383>;

Table I-8
Persulfates: Quantity of global exports by exporting country and period

Quantity in 1,000 pounds

Exporting country	2018	2019	2020	2021	2022	2023
China	99,035	93,257	88,953	100,656	105,938	80,143
Germany	58,929	59,777	54,255	61,175	48,259	36,175
United States	41,378	44,617	40,113	41,489	36,889	26,295
Japan	38,567	36,194	35,397	42,270	29,303	22,087
Turkey	9,097	13,004	11,547	20,511	16,086	12,039
India	5,804	7,332	7,613	14,615	12,458	10,642
Belgium	10,060	13,591	10,642	8,418	4,946	6,711
Taiwan	3,031	2,868	3,585	5,555	2,844	2,940
France	3,038	2,445	3,172	4,073	2,989	2,855
Italy	2,421	2,184	2,057	3,054	3,516	2,265
All other exporters	33,079	15,497	6,397	8,459	9,032	6,339
All exporters	304,438	290,767	263,730	310,276	272,261	208,490

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2833.40, accessed August 1, 2024. These data may be overstated as HS subheading 2833.40 may contain products outside the scope of these reviews.

Note: Because of rounding, figures may not add to total shown. German exports are estimated based on other countries' import data as Germany does not report its exports for this HTS subheading to Global Trade Atlas.

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
89 FR 54435, July 1, 2024	Initiation of Five-Year (Sunset) Reviews	https://www.govinfo.gov/content/pkg/FR-2024-07-01/pdf/2024-14459.pdf
89 FR 54533, July 1, 2024	Persulfates From China; Institution of a Five-Year Review	https://www.govinfo.gov/content/pkg/FR-2024-07-01/pdf/2024-14421.pdf

APPENDIX B
RESPONSES TO THE NOTICE OF INSTITUTION

Responses to the Commission’s notice of institution

Individual responses

The Commission received a submission in response to its notice of institution in the subject review. It was filed on behalf of Evonik Corporation (“Evonik”), a domestic producer of persulfates (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 or explain deficiencies in their responses and to provide clarifying details where appropriate. A summary of the number of responses and estimates of coverage for each is shown in table I-2.

Table B-1
Persulfates: Summary of responses to the Commission’s notice of institution

Interested party type	Number	Coverage
U.S. producer	1	100.0%

Note: The U.S. producer coverage figure presented is the domestic interested party’s estimate of its share of total U.S. production of persulfates during 2023. The domestic interested party has based its computation on the assertion that it is the only U.S. producer engaged in the production of persulfates in the United States. Domestic interested party’s response to the notice of institution, July 30, 2024, p. 2.

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 expedited or full reviews from Evonik. Evonik requests that the Commission conduct an expedited review of the antidumping duty order on persulfates.¹

¹ Domestic interested party’s comments on adequacy, September 5, 2024, p. 1.

Company-specific information

Table B-2
Persulfates: Response checklist for U.S. producers

Yes = provided response; not known = information was not known

Item	Evonik
Nature of operation	Yes
Statement of intent to participate	Yes
Statement of likely effects of revoking the order	Yes
U.S. producer list	Yes
U.S. importer/foreign producer list	Yes
List of 3-5 leading purchasers	Yes
List of sources for national/regional prices	Not known
Trade/financial data	Yes
Changes in supply/demand	Yes
Complete response	Yes

APPENDIX C
SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1
Total persulfates: Summary data concerning the U.S. market, 1994-96

* * * * *

Table continued on next page.

Table C-1--Continued

Total persulfates: Summary data concerning the U.S. market, 1994-96

* * * * *

Table C-1

Persulfates: Summary data concerning the U.S. market, 2007-12, January to September 2012, and January to September 2013

(Quantity=1,000 pounds; Value=1,000 dollars; Unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted)

	Report data														
	2007	2008	Calendar year				January to September			2007-12	2007-08	Calendar year			Jan-Sept
			2009	2010	2011	2012	2012	2013			2008-09	2009-10	2010-11	2011-12	2012-13
U.S. consumption quantity:															
Amount.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (fn1):															
China.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. consumption value:															
Amount.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Importers' share (fn1):															
China.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments of imports from:															
China:															
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
All other sources:															
Quantity.....	12,703	10,456	8,817	9,935	12,518	11,152	8,729	11,508	(12.2)	(17.7)	(15.7)	12.7	26.0	(10.9)	31.8
Value.....	9,007	8,668	8,343	8,936	11,936	10,453	8,378	10,055	16.1	(3.8)	(3.7)	7.1	33.6	(12.4)	20.0
Unit value.....	\$0.71	\$0.83	\$0.95	\$0.90	\$0.95	\$0.94	\$0.96	\$0.87	32.2	16.9	14.1	(4.9)	6.0	(1.7)	(9.0)
Ending inventory quantity.....	1,555	1,644	1,224	1,312	1,569	1,220	1,563	1,658	(21.5)	5.7	(25.5)	7.2	19.6	(22.2)	6.1
Total imports:															
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. producers:															
Average capacity quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
U.S. shipments:															
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Export shipments:															
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Net Sales:															
Quantity.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Gross profit of (loss).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***

fn1.--Report data are in percent and period changes are in percentage points.
fn2.--Undefined.

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

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 persulfates: ***. Purchaser questionnaires were sent to these three firms, and none provided responses.

