

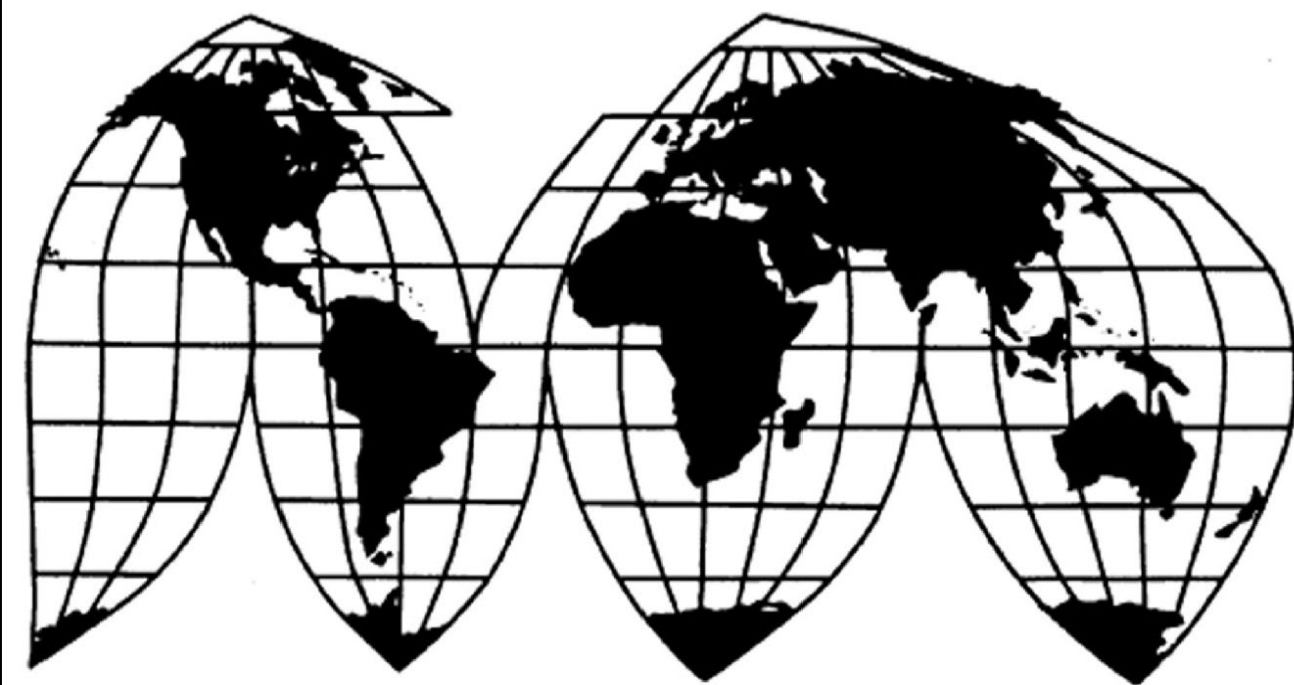
Chlorinated Isocyanurates from China

Investigation No. 701-TA-501 (Second Review)

Publication 5677

November 2025

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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CONTENTS

	Page
Determination	1
Views of the Commission	3
Information obtained in this review	1.1
Background	1.1
The original investigations	1.1
The first five-year review	1.2
Previous and related investigations.....	1.3
Commerce's five-year review	1.4
The product.....	1.4
Commerce's scope.....	1.4
U.S. tariff treatment.....	1.5
Description and uses.....	1.6
Manufacturing process	1.8
The industry in the United States	1.8
U.S. producers.....	1.8
Recent developments	1.9
U.S. producers' trade and financial data	1.11
Definitions of the domestic like product and domestic industry	1.12
U.S. importers	1.13
U.S. imports.....	1.13
Apparent U.S. consumption and market shares.....	1.14
The industry in China	1.16
Producers in China	1.16
Recent developments	1.16
Exports	1.16
Third-country trade actions	1.17
The global market	1.17

Appendixes

A. <i>Federal Register</i> notices	A.1
B. Responses to the notice of institution	B.1
C. Summary data compiled in prior proceedings	C.1
D. Purchaser questionnaire responses	D.1

Note.—Information that would reveal confidential operations of individual firms may not be published. Such information is identified by brackets ([]) in confidential reports and is deleted and replaced with asterisks (***) in public reports. Zeroes, null values, and undefined calculations are suppressed and shown as em dashes (—) in tables. If using a screen reader, we recommend increasing the verbosity setting.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 701-TA-501 (Second Review)

Chlorinated Isocyanurates 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 countervailing duty order on chlorinated isocyanurates from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

BACKGROUND

The Commission instituted this review on April 1, 2025 (90 FR 14378) and determined on July 7, 2025 that it would conduct an expedited review (90 FR 38994, August 13, 2025).

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

Views of the Commission

Based on the record in 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 countervailing duty order on chlorinated isocyanurates (“chlorinated isos”) from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. Background

Original Investigations. On August 29, 2013, Clearon Corp. (“Clearon”) and Occidental Chemical Corporation (“Oxy”) filed petitions seeking imposition of countervailing duties on imports of chlorinated isos from China and antidumping duties on imports of chlorinated isos from Japan. On November 3, 2014, the Commission determined that an industry in the United States was threatened with material injury by reason of subsidized imports of chlorinated isos from China. The Commission also determined that an industry in the United States was not materially injured or threatened with material injury by reason of dumped imports of chlorinated isos from Japan.^{1 2} On November 13, 2014, the U.S. Department of Commerce (“Commerce”) issued a countervailing duty order on chlorinated isos from China (“the order”).³

First Review. In October 2019, the Commission instituted its first five-year review of the 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

¹ *Chlorinated Isocyanurates from China and Japan*, Inv. Nos. 701-TA-501 and 731-TA-1226 (Final), USITC Pub. 4494 (Nov. 2014) at 3 (“*Original Determination*”); *Chlorinated Isocyanurates From China and Japan*, 79 Fed. Reg. 66404 (Nov. 7, 2014). In the original investigations, the Commission assessed subject imports from China and Japan cumulatively for analyzing material injury by reason of subject imports. *Id.* at 14–17. The Commission, however, declined to exercise its discretion to assess subject imports from China and Japan cumulatively for its threat analyses. *Id.* at 33–35.

² *Original Determination*, USITC Pub. 4494 at 3; *Chlorinated Isocyanurates From China and Japan*, 79 Fed. Reg. 66404 (Nov. 7, 2014). Commissioner Pinkert dissented, finding that an industry in the United States was materially injured by reason of cumulated subject imports of chlorinated isos from China and Japan. *Original Determination*, USITC Pub. 4494 at 3 n.1, 46-50 (Concurring and Dissenting Views of Vice Chairman Dean A. Pinkert).

³ *Chlorinated Isocyanurates From the People's Republic of China: Countervailing Duty Order*, 79 Fed. Reg. 67424 (Nov. 13, 2014).

⁴ *Chlorinated Isocyanurates From China; Institution of Five-Year Review*, 84 Fed. Reg. 52132 (Oct. 1, 2019).

in the United States within a reasonably foreseeable time.⁵ In May 2020, Commerce issued a continuation of the order.⁶

Current Review. The Commission instituted this review on April 1, 2025.⁷ The Commission received a joint response to the notice of institution from Bio-Lab, Inc. (“Bio-Lab”), Innovative Water Care, LLC (“Innovative Water Care”), and Oxy, domestic producers of chlorinated isos (collectively, “domestic interested parties”).⁸ The Commission did not receive a response to the notice of institution from any respondent interested party. On July 7, 2025, the Commission determined that the domestic interested party group response to its notice of institution was adequate and that the respondent interested party group response was inadequate.⁹ Finding no other circumstances that would warrant conducting a full review, the Commission determined that it would conduct an expedited review of the order.¹⁰ The domestic interested parties submitted final comments pursuant to 19 C.F.R. § 207.62(d)(1) regarding the determination that the Commission should reach.¹¹

U.S. industry data are based on information supplied by the domestic interested parties in their response to the notice of institution, which accounts for all known U.S. production of chlorinated isos in granular/powder form and *** percent of chlorinated isos in tablet form in 2024.¹² U.S. import data are based on official Commerce statistics.¹³ Foreign industry data and related information are based on information from the original investigations, first review, information supplied by the domestic interested parties in its response to the notice of

⁵ *Chlorinated Isocyanurates from China*, Inv. No. 701-TA-501 (Review), USITC Pub. 5044 (Apr. 2020) at 1 (“*First Review Determination*”).

⁶ *Chlorinated Isocyanurates From the People's Republic of China: Continuation of Countervailing Duty Order*, 85 Fed. Reg. 27207 (May 7, 2020).

⁷ *Chlorinated Isocyanurates From China; Scheduling of an Expedited Five-Year Review*, 90 Fed. Reg. 14378 (Apr. 1, 2025).

⁸ Domestic Interested Parties Response to the Notice of Institution, EDIS Doc. 850204 (May 1, 2025) (“*Response*”); Domestic Interested Parties Supplemental Response to the Notice of Institution, EDIS Doc. 850970 (May 12, 2025) (“*Suppl. Response*”).

⁹ *Chlorinated Isocyanurates From China; Scheduling of an Expedited Five-Year Review*, 90 Fed. Reg. 38994 (Aug. 13, 2025); Explanation of Commission Determination on Adequacy, EDIS Doc. 856510 (July 10, 2025).

¹⁰ *Chlorinated Isocyanurates From China; Scheduling of an Expedited Five-Year Review*, 90 Fed. Reg. 38994 (Aug. 13, 2025); Explanation of Commission Determination on Adequacy, EDIS Doc. 856510 (July 10, 2025).

¹¹ Domestic Interested Parties Final Comments, EDIS Doc. 681510 (Sept. 9, 2025) (“*Final Comments*”).

¹² CR/PR at 1.9.

¹³ CR/PR at 1.13 and Table 1.6.

institution, and publicly available information gathered by the Commission.¹⁴ Additionally, two U.S. purchasers of chlorinated isos, ***, responded to the Commission's adequacy phase purchaser questionnaire.¹⁵

Chlorinated isos from Spain and China were also subject to antidumping duty orders during the POR.¹⁶ Commerce issued antidumping duty orders in June 2004.¹⁷ In December 2022, after conducting third reviews, the Commission determined that revocation of the orders would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time;¹⁸ Commerce issued a continuation of the orders in February 2023.¹⁹

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."²⁰ The Tariff Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."²¹ The Commission's practice in five-year reviews is to examine the domestic like product definition from the original

¹⁴ CR/PR at 1.16–1.17; Response at Exh. 1.

¹⁵ CR/PR at D.3. The Commission sent purchaser questionnaires to three firms identified by the domestic interested parties as U.S. purchasers of chlorinated isos. *Id.*

¹⁶ CR/PR at Table 1.2.

¹⁷ See *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083 (Final), USITC Pub. 3782 (June 2005); *Chlorinated Isocyanurates from Spain: Notice of Antidumping Duty Order*, [70 Fed. Reg. 36562](#) (June 24, 2005); *Notice of Antidumping Duty Order: Chlorinated Isocyanurates from the People's Republic of China*, [70 Fed. Reg. 36561](#) (June 24, 2005).

¹⁸ *Chlorinated Isocyanurates from China and Spain* (Third Review), USITC Pub. 5391 (December 2022).

¹⁹ *Chlorinated Isocyanurates From the People's Republic of China and Spain: Continuation of Antidumping Duty Orders*, 88 Fed. Reg. 10871 (Feb. 22, 2023).

²⁰ 19 U.S.C. § 1677(4)(A).

²¹ 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).

investigation and consider whether the record indicates any reason to revisit the prior findings.²²

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

The products covered by the *Order* are chlorinated isocyanurates. Chlorinated isocyanurates are derivatives of cyanuric acid, described as chlorinated s-triazine triones. There are three primary chemical compositions of chlorinated isocyanurates: (1) Trichloroisocyanuric acid (TCCA) ($\text{Cl}_3(\text{NCO})_3$), (2) sodium dichloroisocyanurate (dihydrate) ($\text{NaCl}_2(\text{NCO})_3 \times 2\text{H}_2\text{O}$), and (3) sodium dichloroisocyanurate (anhydrous) ($\text{NaCl}_2(\text{NCO})_3$). Chlorinated isocyanurates are available in powder, granular and solid (e.g., tablet or stick) forms.²³

The scope in this review is unchanged from the original investigation.

Chlorinated isos are chemical compounds primarily used as sanitizing agents for swimming pools, spas, and industrial water treatments and as disinfecting and bleaching agents for detergents, bleaches, and cleansers. The active ingredient for sanitizing purposes is chlorine, which acts as a biocide, killing algae and other microbes. There are three primary chemical compositions of chlorinated isos, with different amounts of available chlorine, within the scope of the order: (1) trichloroisocyanuric acid (“trichlor”), which has 90 percent available chlorine; (2) sodium dichloroisocyanurate (“dichlor”) in anhydrous form, which has 63 percent available chlorine; and (3) dichlor in dihydrate form, which has 56 percent available chlorine. Trichlor is usually sold in tablet or stick form and is often used in water treatment applications, whereas dichlor is usually sold in granular form and is often used in detergents, bleaches, and cleansers and for shock treatments for swimming pools.²⁴

²² 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).

²³ *Chlorinated Isocyanurates From People's Republic of China: Final Results of the Expedited Second Sunset Review of the Countervailing Duty Order*, 90 Fed. Reg. 36423 (Aug. 4, 2025) and accompanying Issues and Decision Memorandum at 2.

²⁴ CR/PR at 1.6–1.7.

Prior proceedings. In the original investigations and first review, the Commission defined a single domestic like product coextensive with the scope of the investigations.²⁵

Current Review. In this review, the record contains no information indicating that the pertinent characteristics and uses of domestically produced chlorinated isos have changed since the prior proceedings so as to warrant revisiting the Commission's definition of the domestic like product.²⁶ Domestic interested parties agree with the definition of the domestic like product from the prior proceedings.²⁷ We consequently continue to define the domestic like product as all chlorinated isos coextensive with the scope.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."²⁸ 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.

Original Investigations. In the original investigations, the Commission assessed whether firms that solely "tablet" chlorinated isos (*i.e.*, produce tablets from the powdered form of the product) were engaged in sufficient production-related activities to be considered part of the domestic industry. It found that the capital investment of tableters was substantial; tableters' work involved some expertise with hazardous materials; tableters employed a significant number of personnel in their U.S. operations; the value added to the finished product by tableting operations was not insubstantial; tableters sourced granular chlorinated isos from domestic and subject sources; and tableters reported other significant costs as part of their

²⁵ *Original Determinations*, USITC Pub. 4494 at 10–11; *First Review*, USITC Pub. 5044 at 7.

²⁶ CR/PR at 1.6–1.9.

²⁷ Response at 18.

²⁸ 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.

tableting operations.²⁹ Accordingly, the Commission found that tableters were engaged in sufficient production-related activities to be considered part of the domestic industry.³⁰

First Review. In the first review, the Commission continued to include U.S. firms that were solely engaged in tableting in the definition of the domestic industry and defined the domestic industry as all U.S. producers of chlorinated isos, including tableters.³¹

Current Review. In the current review, the record contains no information indicating that the nature of tableting operations has changed since the prior proceedings so as to warrant revisiting this issue. Moreover, domestic interested parties indicate that they agree with the Commission's domestic industry definition in the prior proceedings.³² We continue to include U.S. firms that are solely engaged in tableting in the definition of the domestic

²⁹ *Original Determination*, USITC Pub. 4494 at 8–10.

³⁰ *Original Determination*, USITC Pub. 4494 at 8. Commissioner Johanson did not find that tableters were part of the domestic industry. *See Id.* at 42–45 (separate opinion).

In the original investigations the Commission further found that appropriate circumstances did not exist to exclude any related parties from the domestic industry under 19 U.S.C. § 1677(4)(B). *Original Determinations*, USITC Pub. 4494 at 12. Specifically, the Commission did not exclude *** from the domestic industry, because it supported the petitions, it had a low ratio of subject imports to domestic production, and its principal interest was in domestic production. It also did not exclude a tableter of chlorinated isos from the domestic industry because of its low ratio of subject imports to domestic production, and because its strong financial performance did not appear to be correlated with periods when it imported subject merchandise during the period of investigation. *Id.* at 11–12; *Confidential Original Determination*, EDIS Doc. 852447 at 16–18.

³¹ *First Review*, USITC Pub. 5044 at 9. There were no known related party issues in the first review. *Id.* at 9 n.26.

³² Response at 18. There are no known related party issues in this review. *Id.*

industry.^{33 34} Accordingly, we define the domestic industry as consisting of all U.S. producers of chlorinated isos, including tableters.

III. Revocation of the Countervailing 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

³³ Commissioner David S. Johanson adopts the domestic industry definition that he elaborated in the 2014 original investigations (USITC Pub. 4494 at 10 n.50, and 42-45 (Separate Views)) and in the 2020 first (expedited) review of this order (USITC Pub 5044 at 9 nn.26 & 28), *i.e.*, that the independent tableters do not engage in sufficient production related activity to be included in the domestic industry. Commissioner Johanson also made this same domestic industry finding in the 2016 second (full) reviews of the antidumping orders on imports of chlorinated isocyanurates from China and Spain (USITC Pub. 4646 (2nd Rev.), at 9 n.35, and 37 (Separate Views)) and, in 2022, he joined with the unanimous Commission in the third (full) review of the antidumping orders on imports from China and Spain in arriving at this same conclusion concerning independent tableters (USITC Pub. 5391 (3rd Rev.), at 20-22). Nevertheless, as pointed out *infra* by the Commission in footnote 34, the record of these reviews contains no information regarding independent tableters' operations, so his exclusion of the tableters does not require consideration of different data in subsequent analyses and findings on the continuation or recurrence of material injury.

³⁴ In the proceedings for the separate antidumping duty orders on chlorinated isos from China and Spain, the Commission has reached differing conclusions on this issue, depending on the record in the particular investigation. In the China and Spain original investigations, the Commission was evenly split on the issue; in the first (expedited) review, it did not include the tableters in the domestic industry (with two Commissioners reaching the opposite conclusion); in the second (full) review, the Commission included the tableters (Commissioner Johanson reaching the opposite conclusion); and in the third (full) review, the Commission did not include the tableters. *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083 (Final), USITC Pub. 3782 (June 2005) at 12 and 14; *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083 (Review), USITC Pub. 4184 (September 2010) at 5-6; *Chlorinated Isocyanurates from China and Spain*, Inv. Nos. 731-TA-1082-1083 (Second Review), USITC Pub. 4646 (Nov. 2016) at 10-11; *Chlorinated Isocyanurates from China and Spain* (Third Review), USITC Pub. 5391 (December 2022) at 18-19.

In this expedited review, there is no new information on the record that would warrant a different definition of the domestic industry than that reached by the Commission in the original investigations. For purposes of this review, the domestic interested parties agree with that definition. In any event, as the record contains no information regarding independent tableters' operations, this issue does not impact our analysis and findings.

determination that revocation of the antidumping or countervailing duty order “would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time.”³⁵ 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.”³⁶ Thus, the likelihood standard is prospective in nature.³⁷ 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.³⁸

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.”³⁹ 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.”⁴⁰

³⁵ 19 U.S.C. § 1675a(a).

³⁶ 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.

³⁷ 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.

³⁸ 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’”).

³⁹ 19 U.S.C. § 1675a(a)(5).

⁴⁰ 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.”⁴¹ 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).⁴² 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.⁴³

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.⁴⁴ 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.⁴⁵

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

⁴¹ 19 U.S.C. § 1675a(a)(1).

⁴² 19 U.S.C. § 1675a(a)(1).

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

⁴⁴ 19 U.S.C. § 1675a(a)(2).

⁴⁵ 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.⁴⁶

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.⁴⁷ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry. As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the orders under review and whether the industry is vulnerable to material injury upon revocation.⁴⁸

No respondent interested party participated in this expedited review. The record, therefore, contains limited new information with respect to the chlorinated isos industry in China. There also is limited information on the chlorinated isos market in the United States during the 2019–2024 period of review (“POR”). Accordingly, for our determination, we rely as appropriate on the facts available from the prior proceedings, and the limited new information on the record in this second five-year 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

⁴⁶ 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.

⁴⁷ 19 U.S.C. § 1675a(a)(4).

⁴⁸ 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.”⁴⁹ The following conditions of competition inform our determination.

1. Demand Conditions

Original Investigations. In the original investigations, the Commission found that approximately 85 to 90 percent of chlorinated isos in the U.S. market were used to sanitize residential pools, with the remainder being used in industrial water treatment applications and as ingredients in detergents and cleansers.⁵⁰ The Commission found that demand in the U.S. chlorinated isos market was seasonal and tied to swimming pool use, with most retail sales being made in the second and third quarters of the year.⁵¹ The Commission also found that demand for chlorinated isos was affected by new housing construction, although a rebound in the U.S. housing market during the January 2011–June 2014 period of investigation (“POI”) did not result in a significant increase in new residential swimming pool construction.⁵² The Commission found that demand for chlorinated isos was weak from 2013 to 2014 due to poor weather conditions resulting in low pool usage in the United States. Purchasers, U.S. producers, and importers cited poor weather conditions, competition from saltwater pools, and depressed levels of new swimming pool construction, among other factors, as reasons for declining demand for chlorinated isos during the POI.⁵³ Apparent U.S. consumption of chlorinated isos rose from *** pounds in 2011 to *** pounds in 2012, and then declined to ***

⁴⁹ 19 U.S.C. § 1675a(a)(4).

⁵⁰ *Original Determination*, USITC Pub. 4494 at 21.

⁵¹ *Original Determination*, USITC Pub. 4494 at 21–22. The Commission found that shipments of chlorinated isos increased in the first quarter of each year and peaked in the second quarter. *Id.*

⁵² *Original Determination*, USITC Pub. 4494 at 22. New swimming pools were increasingly equipped with salt chlorine generators and did not use chlorinated isos. *Id.*

⁵³ *Original Determination*, USITC Pub. 4494 at 22.

pounds in 2013.⁵⁴ It was *** pounds during January to June 2013 and *** pounds during January to June 2014.⁵⁵

First Review. In the first review, the Commission found that U.S. demand for chlorinated isos continued to be seasonal and tied to overall economic activity; most chlorinated isos in the U.S. market continues to be used in residential pool sanitizers.⁵⁶ Domestic Producers indicated that demand continued to be affected by weather conditions, competition from saltwater pools, and new swimming pool construction.⁵⁷ Apparent U.S. consumption was *** pounds in 2018, higher than in any year of the original investigations.⁵⁸

Current Review. In the current review, demand for chlorinated isos continues to depend upon the downstream end uses in which chlorinated isos are used, which include sanitizing pools and spas and industrial water treatment applications. U.S. demand continues to be seasonal and driven by overall economic activity.⁵⁹

Purchaser *** indicated that demand for chlorinated isos ***.⁶⁰ Purchasers *** anticipate that demand will ***.⁶¹

Apparent U.S. consumption was *** pounds in 2024, higher than in 2013, the last year of the original investigations, but lower than in 2018, during the previous review.⁶²

⁵⁴ *Original Determination*, USITC Pub. 4494 at 22; *Confidential Original Determination*, EDIS Doc. 852447 at 32. In calculating apparent U.S. consumption, the Commission made several adjustments to the U.S. producers' U.S. shipment data to avoid double counting of chlorinated isos that were produced in granular form and tableted directly, and to properly value granulated chlorinated isos that were tableted domestically from imported powder. *Original Determination*, USITC Pub. 4494 at 21. In order to avoid double counting, the Commission relied upon U.S. importers' U.S. imports for calculating apparent U.S. consumption rather than U.S. importers' U.S. shipments of imports. *Id.* at 21 n.113. The Commission observed that these double-counting issues did not arise in the first review because no independent tableter provided data to the Commission. *First Review*, USITC Pub. 5044 at 16 n.49. They similarly do not arise here for the same reason.

⁵⁵ *Original Determination*, USITC Pub. 4494 at 22 n.126; *Confidential Original Determination*, EDIS Doc. 852447 at 32 n.126.

⁵⁶ *First Review*, USITC Pub. 5044 at 17.

⁵⁷ *First Review*, USITC Pub. 5044 at 17.

⁵⁸ *First Review*, USITC Pub. 5044 at 17.

⁵⁹ Response at 18; Final Comments at 2.

⁶⁰ CR/PR at D.3.

⁶¹ CR/PR at D.4.

⁶² CR/PR at Table 1.7.

2. Supply Conditions

Original Investigations. In the original investigations, the Commission found that the three domestic producers of granular/powdered chlorinated isos, BioLab, Clearon, and Oxy, also tableted the product themselves or contracted with firms via tolling agreements to form the product into tablets.⁶³ Tableters obtained granular or powdered product from both subject and domestic sources.⁶⁴ After tableting and packaging, the product was sold through mass merchant retailers, pool service companies, “big box” stores, and other retail outlets.⁶⁵

The Commission found that the domestic industry was the largest source of chlorinated isos in the U.S. market over the POI, and that its share of apparent U.S. consumption declined from *** percent in 2011 to *** percent in 2012 before increasing to *** percent in 2013. Cumulated subject imports from China and Japan were the second largest source of chlorinated isos in the U.S. market during the POI; their cumulated share of apparent U.S. consumption increased from 2011 to 2012, before declining in 2013.⁶⁶ The market share of subject imports from China increased from *** percent in 2011 to *** percent in 2012, before declining to *** percent in 2013.⁶⁷ The share of apparent U.S. consumption represented by imports from nonsubject sources was *** percent in 2011, *** percent in 2012, and *** percent in 2013,⁶⁸ with Mexico and Italy being the largest sources of nonsubject imports.⁶⁹

First Review. In the first review, Domestic Producers were the largest source of chlorinated isos in the U.S. market in 2018. Domestic Producers accounted for *** percent of apparent U.S. consumption in 2018, and their market share was higher than at any time in the original investigations.⁷⁰ Subject imports were the smallest source of apparent U.S.

⁶³ *Original Determination*, USITC Pub. 4494 at 22.

⁶⁴ *Original Determination*, USITC Pub. 4494 at 22–23. The Commission observed that integrated producers (those that produced both granular or powdered product and tablets) and stand-alone tableters competed for sales of tablets. *Id.* at 23.

⁶⁵ *Original Determination*, USITC Pub. 4494 at 23.

⁶⁶ *Original Determination*, USITC Pub. 4494 at 23; Confidential Original Determination, EDIS Doc. 852447 at 33.

⁶⁷ *Original Determination*, USITC Pub. 4494 at 35; Confidential Original Determination, EDIS Doc. 852447 at 52. The market share of subject imports from Japan increased from *** percent to *** percent during the POI. CR/PR at Table C-1.

⁶⁸ *Original Determination*, USITC Pub. 4494 at 23; Confidential Original Determination, EDIS Doc. 852447 at 34.

⁶⁹ *Original Determination*, USITC Pub. 4494 at 23 n.134.

⁷⁰ *First Review*, USITC Pub. 5044 at 18; CR/PR at Table 1.7.

consumption. Although nonsubject imports were the second largest source, they supplied a small percentage of apparent U.S. consumption.⁷¹

Current Review. In the current review, the domestic industry was the largest source of chlorinated isos in the U.S. market in 2024, accounting for *** percent of apparent U.S. consumption.⁷² There have been several developments in the domestic industry since the original investigations. Bio-Lab's Lake Charles, Louisiana plant temporarily closed following damage by Hurricane Laura in August 2020 and resumed operations in 2022, and its Conyers, Georgia, plant closed following a factory fire.⁷³ Innovative Water Care and Solenis merged in 2021 into Solenis LLC/Innovative Water Care, LLC in 2021, and acquired Diversity Holdings in 2023. Additionally, OxyChem declared force majeure at two plants after Hurricane Ida damaged its Luling, Louisiana, plant.⁷⁴ Lastly, a freeze in the U.S. Gulf Coast in February 2021 reduced the domestic industry's chlorine production.⁷⁵

Subject imports were the smallest source of chlorinated isos in the U.S. market in 2024, accounting for *** percent of apparent U.S. consumption that year.⁷⁶

Nonsubject imports were the second largest source of chlorinated isos in the U.S. market in 2024, accounting for *** percent of apparent U.S. consumption that year.⁷⁷ The largest sources of nonsubject imports in 2024 were Japan and Spain.⁷⁸

3. Substitutability and Other Conditions

Original Investigations. In the original investigations, the Commission found that there was at least a moderate degree of substitutability between the domestic like product and the subject merchandise, and that price was an important factor in purchasing decisions among

⁷¹ *First Review*, USITC Pub. 5044 at 18–19. In 2018, subject imports accounted for *** percent of apparent U.S. consumption and nonsubject imports accounted for *** percent. CR/PR at 1.7.

⁷² CR/PR at Table 1.7.

⁷³ CR/PR at Table 1.4.

⁷⁴ CR/PR at Table 1.4.

⁷⁵ CR/PR at Table 1.4.

⁷⁶ CR/PR at Table 1.7.

⁷⁷ CR/PR at Table 1.7.

⁷⁸ CR/PR at Table 1.6.

other factors.⁷⁹ Raw materials accounted for between *** and *** percent of the cost of goods sold for U.S. production of granular/powdered chlorinated isos during the POI.⁸⁰

First Review. The Commission continued to find there was at least a moderate degree of substitutability between subject imports and the domestic like product and found that price remained an important factor in purchasing decisions for chlorinated isos. The Commission also noted that subject imports were subject to an additional 15 percent *ad valorem* duty under section 301 of the Trade Act of 1974, 19 U.S.C. § 2411 (“section 301 tariffs”).⁸¹

Current Review. The record contains no new information to indicate that the degree of substitutability between subject imports and the domestic like product or the importance of price in purchasing decisions has changed since the prior proceedings.⁸² Accordingly, we again find that there is at least a moderate degree of substitutability between subject imports and the domestic like product, and that price remains an important factor in purchasing decisions for chlorinated isos.

As noted above in the first review, chlorinated isos originating in China imported under HTS statistical reporting number 2933.69.6015 became subject to a Section 301 duty of 15 percent effective September 1, 2019, and the duty was reduced to 7.5 percent effective February 14, 2020.⁸³ Effective February 4, 2025, chlorinated isos originating in China became subject to an additional 10 percent *ad valorem* duty under the International Emergency Economic Powers Act (“IEEPA”), and on March 4, 2025, that additional duty increased to 20 percent *ad valorem*.⁸⁴ Effective April 5, 2025, chlorinated isos originating in China became subject to an additional 10 percent *ad valorem* reciprocal duty under IEEPA.⁸⁵ The reciprocal duty rose to 84 percent *ad valorem* effective April 9, 2025, rose again to 125 percent effective April 10, 2025, and was reduced to 10 percent effective April 14, 2025.⁸⁶ In sum, the Section 301 and IEEPA tariffs on chlorinated isos from China currently total 37.5 percent.⁸⁷

⁷⁹ *Original Determination*, USITC Pub. 4494 at 24, 26. Prices for urea and natural gas, inputs to chlorinated isos production, fluctuated for most of the POI before declining in interim 2014. *Id.* at 24; *Confidential Original Determination*, EDIS Doc. 852447 at 35.

⁸⁰ *Original Determination*, USITC Pub. 4494 at 24; *Confidential Original Determination*, EDIS Doc. 852447 at 35.

⁸¹ *First Review*, USITC Pub. 5044 at 20.

⁸² Response at 18.

⁸³ CR/PR at 1.5

⁸⁴ CR/PR at 1.5

⁸⁵ CR/PR at 1.5.

⁸⁶ CR/PR at 1.5–1.6.

⁸⁷ See CR/PR at Table 1.3.

C. Likely Volume of Subject Imports

Original Investigations. In the original investigations, the Commission found that the volume of cumulated subject imports fluctuated during the POI but maintained a significant presence in the U.S. market.⁸⁸ The volume and market share of subject imports from China was *** pounds and *** percent in 2011, *** pounds and *** percent in 2012, and *** pounds and *** percent in 2013, respectively.⁸⁹

In its threat analysis, the Commission found that subject imports from China significantly increased their presence in the U.S. market when demand improved during the POI.⁹⁰ Apparent U.S. consumption increased from *** pounds in 2011 to *** pounds in 2012, an increase of *** percent. During this same period, the volume and market share of subject imports from China increased by *** percent and *** percentage points, respectively.⁹¹ Although the volume of subject imports from China declined in 2013, that year featured anomalously low demand due, in part, to poor weather conditions and an unseasonably cold swimming season.⁹² The Commission found that demand for chlorinated isos would likely return to levels more closely approximating those of 2011 and 2012 in the imminent future.⁹³

The Commission found that the chlorinated isos industry in China was capable of supplying increased volumes of subject merchandise to the U.S. market. Record data indicated that the industry in China was export oriented, particularly to the U.S. market, possessed significant excess capacity, and had sizeable and growing inventories of chlorinated isos. Additionally, the European Union (“EU”) had maintained antidumping duties on imports of trichlor from China since 2005.⁹⁴ Accordingly, the Commission found that imports of subject merchandise from China were likely to increase significantly in the imminent future in response to a likely increase in U.S. demand, just as they did in 2012 when demand improved.⁹⁵

First Review. In the first review, the information available indicated that subject imports had maintained a presence at low levels in the U.S. market.⁹⁶ Although there was no

⁸⁸ *Original Determination*, USITC Pub. 4494 at 24–25.

⁸⁹ *Original Determination*, USITC Pub. 4494 at 35; Confidential *Original Determination*, EDIS Doc. 852447 at 52.

⁹⁰ *Original Determination*, USITC Pub. 4494 at 35.

⁹¹ *Original Determination*, USITC Pub. 4494 at 35; Confidential *Original Determination*, EDIS Doc. 852447 at 53.

⁹² *Original Determination*, USITC Pub. 4494 at 35.

⁹³ *Original Determination*, USITC Pub. 4494 at 35–36.

⁹⁴ *Original Determination*, USITC Pub. 4494 at 36.

⁹⁵ *Original Determination*, USITC Pub. 4494 at 37.

⁹⁶ *First Review*, USITC Pub. 5044 at 23.

information on the record concerning production capacity in China, available data suggested that subject producers continued to manufacture chlorinated isos and were highly export oriented.⁹⁷ The Commission found that China was the largest exporter of heterocyclic compounds (excluding melamine) containing an unfused triazine ring in structure (a category that included chlorinated isos and merchandise outside the scope of the review) from 2014 to 2018 and that the United States was China's largest export market during this period.⁹⁸ It also found that the EU's continued antidumping duty order on trichlor from China increased the attractiveness of the U.S market if the order were revoked.⁹⁹ Accordingly, the Commission found that, based on the information available, the volume of subject imports would likely be significant in the reasonably foreseeable future if the order were revoked.¹⁰⁰

Current Review. The record in this review contains limited information on the chlorinated isos industry in China. The available information indicates that subject producers have the ability and incentive to export significant volumes of subject merchandise to the U.S. market if the order were revoked. Even under the disciplining effects of this order and the existing antidumping duty order, subject imports of chlorinated isos increased rapidly during part of the current POR.¹⁰¹ Their volume increased from 41,000 pounds in 2019 to 7.3 million pounds in 2020, 84.8 million pounds in 2021, and 97.0 million pounds in 2022, before decreasing to 424,000 pounds in 2023, and 20,000 pounds in 2024.¹⁰² Subject imports in 2022 exceeded their level during any year of the original investigation.¹⁰³

Although the Commission did not receive information from subject producers in China, domestic interested parties identified 50 possible producers of chlorinated isos in China.¹⁰⁴ Domestic interested parties also provided information showing that these Chinese producers have 805,000 metric tons (approximately 1.8 billion pounds) of chlorinated isos capacity, ***.¹⁰⁵ Domestic interested parties state that Chinese producers exported a significant amount of

⁹⁷ *First Review*, USITC Pub. 5044 at 23.

⁹⁸ *First Review*, USITC Pub. 5044 at 23–24.

⁹⁹ *First Review*, USITC Pub. 5044 at 24.

¹⁰⁰ *First Review*, USITC Pub. 5044 at 24.

¹⁰¹ CR/PR at Table 1.6.

¹⁰² CR/PR at Table 1.6. These data may be understated as import volumes do not include chlorinated isos imported under HTS statistical reporting numbers 3805.50.4000 and 3808.99.9501 that cover disinfectants. *Id.* at note.

¹⁰³ See CR/PR at Table C-1 (original investigations).

¹⁰⁴ CR/PR at 1.16; Response at Exh. 1.

¹⁰⁵ Response at 15 and Exh. 5.

chlorinated isos during the POR and remain export oriented.¹⁰⁶ GTA data indicate that Chinese producers exported 1.3 billion pounds of merchandise under the relevant HS subheading, which includes both subject and out-of-scope merchandise.¹⁰⁷ China was, by far, the largest global exporter of products under HS subheading 2933.69.¹⁰⁸

Record evidence also indicates that the U.S. market remains attractive to subject producers. Subject imports increased rapidly from 7.3 million pounds in 2020 to 97.0 million pounds in 2022 when Bio-Lab's Lake Charles plant was destroyed by Hurricane Laura, indicating that subject foreign producers continue to have customers and distribution networks in the United States.¹⁰⁹ According to the GTA data discussed above, in 2024 the United States was the second largest destination market for Chinese exports of merchandise under HS subheading 2933.69.¹¹⁰ In addition, the EU maintains antidumping duties on imports of trichlor originating in China that would likely incentivize subject producers to increase exports to the United States if the U.S. order were revoked.¹¹¹

Given the rapid increase in subject imports during part of the POR, the subject industry's substantial production capacity and exports of chlorinated isos and related products, and the relative attractiveness of the U.S. market to subject foreign producers, we find that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the order were revoked.¹¹²

D. Likely Price Effects

Original Investigations. In the original investigations, the Commission found that subject imports and the domestic like product were at least moderately substitutable and that price was an important factor in purchasing decisions, among other factors.¹¹³

¹⁰⁶ Response at 15 and Exh. 2–4.

¹⁰⁷ CR/PR at Table 1.8.

¹⁰⁸ CR/PR at Table 1.9.

¹⁰⁹ CR/PR at Table 1.6; Petitioners' Final Comments at 7.

¹¹⁰ CR/PR at Table 1.8.

¹¹¹ CR/PR at 1.17.

¹¹² Although subject imports from China are subject to additional duties under section 301 and IEEPA, and the existing antidumping duty order, given the Chinese industry's large capacity and exports, the continued presence of, and for part of the POR an increase in, subject imports from China in the U.S. market despite the section 301 and antidumping duties, and the attractiveness of the U.S. market, we find that these additional duties would not likely prevent subject imports from China 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 potential for product shifting. *Id.* at 1.16.

¹¹³ *Original Determination*, USITC Pub. 4494 at 26.

In its threat analysis, the Commission found a pattern of mixed underselling by subject imports from China during the POI.¹¹⁴ Subject imports from China undersold the domestic like product in *** of *** quarterly price comparisons.¹¹⁵ The Commission found that mixed underselling was likely in the imminent future. Accordingly, the Commission found that large and increasing volumes of subject imports from China would likely depress or suppress prices for the domestic like product in the imminent future.¹¹⁶

First Review. In the first review, the Commission found that subject imports and the domestic like product were generally interchangeable and that price was an important factor in purchasing decisions.¹¹⁷ Because of the expedited nature of the review, the record contained no pricing comparisons, but the domestic producers' U.S. shipment average unit values ("AUVs") were substantially higher than the AUVs for exports of subject merchandise.¹¹⁸ The Commission found that importers of subject merchandise, absent the discipline of the order, could readily offer lower prices in the U.S. market than domestic producers and are likely to do so in order to increase sales and market share.¹¹⁹ Accordingly, the Commission concluded that the subject imports would likely undersell the domestic like product to gain market share and would likely have significant effects on the price of the domestic like product if the order were revoked.¹²⁰

Current Review. As discussed above, we continue to find that there is at least a moderate degree of substitutability between subject imports and the domestic like product, and that price remains an important factor in purchasing decisions for chlorinated isos.

The record in this expedited review does not contain new product-specific pricing information. However, the domestic producers' U.S. shipment AUVs were substantially higher than subject import AUVs in 2024.¹²¹ Based on the information available, including mixed underselling by subject imports in the original investigations, at least a moderate degree of

¹¹⁴ *Original Determination*, USITC Pub. 4494 at 37.

¹¹⁵ *Original Determination*, USITC Pub. 4494 at 37; *Confidential Original Determination*, EDIS Doc. 852447 at 56.

¹¹⁶ *Original Determination*, USITC Pub. 4494 at 37. The Commission also found underselling by subject imports from China would increase demand for such imports and that, if domestic producers did not lower prices or abstain from price increases, they would risk losing sales to subject imports. *Id.*

¹¹⁷ *First Review*, USITC Pub. 5044 at 25.

¹¹⁸ *First Review*, USITC Pub. 5044 at 25.

¹¹⁹ *First Review*, USITC Pub. 5044 at 25-26.

¹²⁰ *First Review*, USITC Pub. 5044 at 26.

¹²¹ In 2024, domestic producer's U.S. shipment AUVs were \$*** per pound for granular product and \$*** per pound for tablets while subject imports' AUVs were \$1.39 per pound. We recognize that these AUV comparisons do not reflect the additional costs of importing. CR/PR at Tables 1.5 and 1.6.

substitutability between subject imports and the domestic like product, and the importance of price in purchasing decisions, we find that if the order were revoked subject imports would likely undersell the domestic like product to gain market share. 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 reduce 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 if the order were revoked.

E. Likely Impact

Original Investigations. In the original investigations, the Commission found, in its material injury analysis, that the deterioration of most of the domestic industry's trade, employment, and financial indicators corresponded with declines in apparent U.S. consumption over the POI. It found no correlation between these declines and subject import volumes; the domestic industry's condition deteriorated in periods when subject imports increased and in periods when they declined. In light of this lack of correlation, the Commission did not find that the cumulated subject imports caused these declines. Accordingly, the Commission found that the cumulated subject imports had not had a significant impact on the domestic industry.¹²²

In its threat analysis, however, the Commission reiterated that subject imports from China were likely to enter the United States in increasing volumes as demand recovered and would take sales that would otherwise have gone to the domestic industry. It found that this likely increase in subject imports from China would likely affect the domestic industry's production, capacity utilization, shipments, and employment, with the subject imports' lower prices negatively affecting revenues, profits, and overall financial performance. Accordingly, the Commission determined that the domestic industry was threatened with material injury by reason of subject imports from China.¹²³

First Review. In the first review, the Commission concluded that the limited record was insufficient to make a finding as to whether the domestic industry was vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.¹²⁴ However, based on the information on the record, it found that, should the order be revoked, the likely significant volume and price effects of the subject imports would likely cause

¹²² *Original Determination*, USITC Pub. 4494 at 32.

¹²³ *Original Determination*, USITC Pub. 4494 at 38.

¹²⁴ *First Review*, USITC Pub. 5044 at 28.

significant declines in the production, shipments, sales, market share, and revenues of the domestic industry.¹²⁵ The Commission found that these declines would likely have a direct adverse impact on the domestic industry's employment and financial performance.¹²⁶

Current Review. The record in this expedited review contains limited information concerning the domestic industry's performance since the last review. The information available indicates that the domestic industry's output indicators for its tableting operations were lower in 2024 compared to the original investigations,¹²⁷ while its output indicators for its powdered and granular operations were mixed when comparing 2024 to the original investigations and the first review. For its tableting operations, the domestic industry's capacity in 2024 of *** pounds, production of *** pounds, and U.S. shipments of *** pounds were lower than in the original investigations in 2013, while its capacity utilization of *** percent was slightly lower. For its powdered and granular operations, the domestic industry's capacity in 2024 of *** pounds was higher than in 2013 and 2018, its production of *** pounds was higher than in 2013 but lower than in 2018, and its capacity utilization of *** percent was the same as in 2024 but lower than that in 2018.¹²⁸ The domestic industry's U.S. shipments of *** pounds in 2024 were lower than in 2013 and 2018.¹²⁹ The industry's share of apparent U.S. consumption was higher in 2024, at *** percent, than it was in 2013, but lower than it was in 2018.¹³⁰

The domestic industry's financial performance for total chlorinated isos operations was improved in 2024 compared to both 2013 and 2018. The domestic industry's reported net sales revenue of \$***, gross profit of \$***, operating income of \$***, and operating-income-to-net-sales ratio (*** percent) all showed improvements in 2024 compared to the original investigations and first review.¹³¹

We find that the information available in this expedited review is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury if the order were revoked.

¹²⁵ *First Review*, USITC Pub. 5044 at 29.

¹²⁶ *First Review*, USITC Pub. 5044 at 29.

¹²⁷ Tabletters' data for 2018 from the first review and 2013 from the original investigations are not directly comparable due to a different set of tabletters whose data were included.

¹²⁸ CR/PR at Table 1.5.

¹²⁹ CR/PR at Table 1.5.

¹³⁰ CR/PR at Table 1.7.

¹³¹ CR/PR at Table 1.5.

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

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports. The information available indicates that nonsubject imports have increased their presence in the U.S. market since the original investigations, increasing their share of apparent U.S. consumption from *** percent in 2013 to *** percent in 2024.¹³² Given the rapid increase in subject imports that occurred during part of the POR, the record provides no indication that the presence of nonsubject imports would likely prevent subject imports from significantly increasing their presence in the U.S. market after revocation. In light of the at least moderate degree of substitutability between subject imports and the domestic like product and the importance of price to purchasers, the significant volume of low-priced subject imports that we have found likely after revocation would likely take market share from the domestic industry, as well as from nonsubject imports. Consequently, we find that any future effects of nonsubject imports would not preclude the likely effects attributable to subject imports.

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

IV. Conclusion

For the above reasons, we determine that revocation of the countervailing duty order on chlorinated isos 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.

¹³² CR/PR at Table 1.7. The volume of nonsubject imports was 20.8 million pounds in 2019, 40.7 million pounds in 2020, 54.1 million pounds in 2021, 54.6 million pounds in 2022, 44.6 million pounds in 2023, and 53.2 million pounds in 2024. *Id.* at Table 1.6.

Information obtained in this review

Background

On April 1, 2025, 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 countervailing duty order on chlorinated isocyanurates (“chlorinated isos”) 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 1.1 presents information relating to the background and schedule of this proceeding:

Table 1.1 Chlorinated isos: Information relating to the background and schedule of this proceeding

Effective date	Action
April 1, 2025	Notice of initiation by Commerce (90 FR 14354, April 1, 2025)
April 1, 2025	Notice of institution by Commission (90 FR 14378, April 1, 2025)
July 7, 2025	Commission’s vote on adequacy
August 4, 2025	Commerce’s results of its expedited review (90 FR 36423, August 4, 2025)
November 19, 2025	Commission’s determination and views

Note: Due to the lapse in appropriations and ensuing cessation of Commission operations, the Commission tolled its schedule for this proceeding.

¹ 19 U.S.C. 1675(c).

² 90 FR 14378, April 1, 2025. 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 countervailing duty order. 90 FR 14354, April 1, 2025. 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. Information regarding responses to the notice of institution is presented in app. B. Summary data compiled in the original investigations 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 investigations

The original investigations resulted from petitions filed on August 29, 2013, with Commerce and the Commission by Clearon Corp. (“Clearon”), South Charleston, West Virginia, and Occidental Chemical Corporation (“Oxy”), Dallas, Texas.⁵ On September 22, 2014, Commerce determined that the government of China was providing countervailable subsidies to the producers and exporters of chlorinated isos from China.⁶ The Commission determined on November 3, 2014 that the domestic industry was threatened with material injury by reason of subsidized imports of chlorinated isos from China.⁷ On November 13, 2014, Commerce issued its countervailing duty order on chlorinated isos from China with final net subsidy rates ranging from 1.55 to 20.06 percent.⁸

The first five-year review

On January 6, 2020, the Commission determined that it would conduct an expedited review of the countervailing duty order on chlorinated isos from China.⁹ On February 4, 2020, Commerce determined that revocation of the countervailing duty order on chlorinated isos from China would be likely to lead to continuation or recurrence of subsidization.¹⁰ On April 20, 2020, the Commission determined that material injury would be likely to continue or recur within a reasonably foreseeable time.¹¹ Following an affirmative determination in the five-year

⁵ The original investigations resulted from petitions alleging material injury or threat of material injury by reason of subsidized imports of chlorinated isos from China and less-than-fair-value (“LTFV”) imports of chlorinated isos from Japan. Chlorinated Isocyanurates from China and Japan, Inv. Nos. 701-TA-501 and 731-TA-1226 (Final), USITC Publication 4494, November 2014 (“Original publication”), p. 1.1.

⁶ 79 FR 56560, September 22, 2014.

⁷ The Commission additionally determined that it would not have found material injury by reason of subject imports of chlorinated isos from China but for the suspension of liquidation of entries on the subject imports. With respect to the petition concerning Japan, the Commission determined that the domestic industry was not materially injured or threatened with material injury, and the establishment of an industry in the United States was not materially retarded by reason of LTFV imports of chlorinated isos from Japan. Vice Chairman Pinkert dissented, instead finding that an industry in the United States was materially injured by reason of imports from China and Japan of chlorinated isos. 79 FR 66404, November 7, 2014.

⁸ 79 FR 67424, November 13, 2014.

⁹ 85 FR 14704, March 13, 2020.

¹⁰ 85 FR 6142, February 4, 2020.

¹¹ 85 FR 23060, April 24, 2020.

review by Commerce and the Commission, effective May 7, 2020, Commerce issued a continuation of the countervailing duty order on imports of chlorinated isos from China.¹²

Previous and related investigations

The Commission has conducted several previous import relief investigations on chlorinated isos or similar merchandise, as presented in table 1.2.

Table 1.2 Chlorinated isos: Previous and related Commission proceedings and current status

Date	Product	Number	Country	ITC original determination	Current status
1983	Cyanuric acid and its chlorinated derivatives	731-TA-136	Japan	Affirmative	Order revoked, 1995
2004	Chlorinated isos	731-TA-1082	China	Affirmative	Order continued after third review, 2023
2004	Chlorinated isos	731-TA-1083	Spain	Affirmative	Order continued after third review, 2023

Source: U.S. International Trade Commission publications and Federal Register notices.

Note: “Date” refers to the year in which the investigation was instituted by the Commission.

Note: Cyanuric acid is a raw material used in the production of chlorinated isos.

¹² 85 FR 27207, May 7, 2020.

Commerce's five-year review

Commerce announced that it would conduct an expedited review with respect to the order on imports of chlorinated isos from China with the intent of issuing the final results of this review based on the facts available not later than July 30, 2025.¹³ 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 countervailing duty order on imports of chlorinated isos from China are noted in the sections titled "The original investigation" and "U.S. imports," if applicable.

The product

Commerce's scope

Commerce has defined the scope as follows:

The products covered by the Order are chlorinated isocyanurates. Chlorinated isocyanurates are derivatives of cyanuric acid, described as chlorinated s-triazine triones. There are three primary chemical compositions of chlorinated isocyanurates: (1) Trichloroisocyanuric acid (TCCA) ($\text{Cl}_3(\text{NCO})_3$), (2) sodium dichloroisocyanurate (dihydrate) ($\text{NaCl}_2(\text{NCO})_3 \times 2\text{H}_2\text{O}$), and (3) sodium dichloroisocyanurate (anhydrous) ($\text{NaCl}_2(\text{NCO})_3$). Chlorinated isocyanurates are available in powder, granular and solid (e.g., tablet or stick) forms.¹⁴

¹³ Letter from Alex Villanueva, Senior Director, Office I, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, May 22, 2025.

¹⁴ 85 FR 27207, May 7, 2020.

U.S. tariff treatment

Chlorinated isos are imported under Harmonized Tariff Schedule of the United States (“HTS”) statistical reporting number 2933.69.6015, which covers sodium dichloroisocyanurates (anhydrous and dihydrate forms) and trichloroisocyanuric acid. The general rate of duty is 3.5 percent ad valorem for HTS statistical reporting number 2933.69.6015.¹⁵ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Effective September 1, 2019, chlorinated isos originating in China were subject to an additional 15 percent ad valorem duty under section 301 of the Trade Act of 1974. Effective February 14, 2020, the section 301 duty for chlorinated isos reduced to 7.5 percent.¹⁶

Effective February 4, 2025, chlorinated isos originating in China were subject to an additional 10 percent ad valorem duty under the International Emergency Economic Powers Act (“IEEPA”), and on March 4, 2025, that additional duty increased to 20 percent ad valorem.¹⁷

Effective April 5, 2025, chlorinated isos originating in China were subject to an additional 10 percent ad valorem reciprocal duty under IEEPA.¹⁸ The reciprocal duty rose to 84 percent ad valorem effective April 9, 2025, and rose again to 125 percent effective April 10, 2025.¹⁹

¹⁵ The subject merchandise in this proceeding may also be imported under HTS statistical reporting numbers 2933.69.6021, 2933.69.6050, 3808.59.4000, and 3808.99.9501, and subheading 3808.94.50. The tariff classifications for 2933.69.6021 and 2933.69.6050 represent basket categories that include chlorinated isocyanurates and other compounds that include an unfused triazine ring. The tariff classifications 3808.59.4000, 3808.94.50, and 3808.99.9501 cover disinfectants that include chlorinated isocyanurates. USITC, HTS (2025) Revision 13, Publication 5627, May 2025, pp. 29.129, 38.6, and 38.11.

¹⁶ 84 FR 43304, August 20, 2019, 84 FR 45821, August 30, 2019; 85 FR 3741, January 22, 2020. See also HTS heading 9903.88.15 and U.S. notes 20(r) and 20(s) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2025) Revision 13, Publication 5627, May 2025, 20 (s), p. 99.III.106.

¹⁷ 90 FR 9121, February 7, 2025; 90 FR 11426, March 6, 2025; 90 FR 11463, March 7, 2025. See also HTS heading 9903.88.15 and U.S. note 20(s) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2025) Revision 13, Publication 5627, May 2025, p. 99.III.106 (s).

¹⁸ 90 FR 9121, February 7, 2025; 90 FR 11426, March 6, 2025; 90 FR 11463, March 7, 2025. See also HTS heading 9903.01.20 and U.S. note 2(s) and HTS heading 9903.01.24 and U.S. note 2(u) to subchapter 3 of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2025) Revision 13, Publication 5627, May 2025, p. 99.III.106 (s).

¹⁹ 90 FR 9121, February 7, 2025; 90 FR 11426, March 6, 2025; 90 FR 11463, March 7, 2025. See also HTS heading 9903.88.15 and U.S. note 20(s) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2025) Revision 13, Publication 5627, May 2025, p. 99.III.106 (s).

However, effective May 14, 2025, the duty rate for reciprocal tariffs on products originating in China/Hong Kong/Macau was reduced to 10 percent (see table 1.3).²⁰

Table 1.3 Chlorinated isos: Additional tariff treatment for China

Additional tariff	Rate (percent)
Section 301	7.5
IEEPA (fentanyl) – effective March 4, 2025	20.0
IEEPA (reciprocal) – effective May 14, 2025, for China	10.0
Total additional ad valorem rate	37.5

Source: Federal Register notices and other sources cited in this section (U.S. tariff treatment).

Note: Duty rates in the table reflect the duty rates as of the writing of this report. See the text above for historical changes to the additional tariffs.

Description and uses²¹

Chlorinated isos are chemical compounds primarily used as sanitizing agents for swimming pools, spas, and industrial water, and as disinfecting and bleaching agents for detergents, bleaches, and cleansers. These products are generally sold to consumers as solids, usually in granular, tablet, or stick form. The active ingredient for sanitizing is chlorine, which acts as a biocide, killing algae and other microbes. There are three main forms of chlorinated isos: trichloroisocyanuric acid (“trichlor”) and sodium dichloroisocyanurate (“dichlor”) in its dihydrate and anhydrous forms. Trichlor and dichlor have different percentages of chlorine available for sanitizing and different rates of release of chlorine in water. The rate of release is also affected by the physical form, with the granular form releasing chlorine more rapidly than tablet or stick forms. Trichlor has a higher chlorine content (90 percent), but a lower rate of release, and is used more often in water treatment applications. Dihydrate and anhydrous dichlor contain less available chlorine (56 and 63 percent, respectively), but the chlorine is released relatively quickly, making them more widely used in detergents, bleaches, and cleansers and as “shock” treatments to instill chlorine in swimming pools quickly and temporarily to counteract microbes.

²⁰ 90 FR 15041, April 7, 2025; 90 FR 15509, April 14, 2025; 90 FR 15625, April 15, 2025; 90 FR 21831, May 21, 2025. See also HTS headings 9903.01.25 and 9903.01.63 and U.S. note 2(v) to subchapter III of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2025) Revision 13, Publication 5627, May 2025, p. 99.III.106 (s).

²¹ Unless otherwise noted, this information is based on Chlorinated Isocyanurates from China and Spain (Third Review), USITC Publication 5391, December 2022 (“China/Spain third review publication”), pp. 1.17 to 1.18; Chlorinated Isocyanurates from China (Review), USITC Publication 5044, April 2020 (“First review publication”), pp. 1.6 to 1.7.

The difference in rate of release generally determines whether dichlor or trichlor is best suited for a given application. Trichlor's relatively slow release allows consumers to maintain a chlorine level within safety guidelines (less than four parts per million) with weekly tablet applications. Dichlor's rapid release of chlorine is appropriate for "shock" swimming pool treatments as well as uses in detergents, bleaches, and cleansers.

Some of the trichlor tablets produced in the United States and China contain active ingredients other than chlorine that provide functions other than sanitizing and are called "blended" tablets. The ingredients in these tablets include aluminum sulfate, which acts as an algaecide, and copper sulfate, which acts as a water clarifier. Swimming pool and spa applications account for 85 to 90 percent of the U.S. chlorinated isos market. Industrial applications (e.g., industrial water treatment) and use in cleansers and detergents account for most of the remaining 10 to 15 percent of the market.²² For U.S. and foreign producers, the pool and spa sector consists mostly of (1) converting and repackaging distributors, which buy not only tablets and stick forms of the product but also granular product that they convert to tablets and package for sale to commercial users (e.g., hotels and public pools) and retailers (e.g., pool retail stores, pool service companies, mass merchants, and grocery and hardware stores); (2) non-converting and repackaging distributors that sell to the same types of commercial users and retailers; and (3) large retailers to whom producers sell directly. To supplement their needs, U.S. producers and distributors may also buy product from each other. The industrial sector consists largely of manufacturers of cleansers, bleaches, and detergents, and a few distributors that serve the market independently.

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

²² Unless otherwise noted, this information is based on Chlorinated Isocyanurates from China and Spain (Third Review), USITC Publication 5391, December 2022 ("China/Spain third review publication"), pp. 1.17 to 1.18; Chlorinated Isocyanurates from China (Review), USITC Publication 5044, April 2020 ("First review publication"), pp. 1.6 to 1.7.

Manufacturing process²³

The raw materials for the production of both trichlor and dichlor are urea, caustic soda, and chlorine gas. U.S. chlorinated isos producers use urea to make cyanuric acid, which after refining and purification, is neutralized with caustic soda to become sodium cyanurate, the basic feedstock for both trichlor and dichlor. The feedstock then goes through dedicated production lines to produce either trichlor or dichlor. To produce trichlor, chlorine gas is introduced into the feedstock and carefully controlled, resulting in a granular solid that is either packaged and sold in 2,205-pound sacks or 300-pound drums, or formed into tablets or sticks in industrial presses and packaged in 10- to 50-pound pails. The bulk of trichlor is ultimately consumed as tablets.

To produce dichlor, a smaller amount of chlorine gas is introduced into the feedstock, resulting in an acid that is neutralized with caustic soda to produce the dichlor salt. This product can be further dried at higher temperatures to produce the anhydrous forms. Dichlor is generally sold and used in granular form and is packaged in sacks or drums. For the most part, production is continuous, and the equipment and production workers used in the production of chlorinated isos are specific to that purpose. Several byproducts result from the production process, including ammonia gas, nitrogen, and chlorine-containing compounds, but virtually all are waste products and must be subjected to further treatment prior to disposal to comply with government environmental regulation, or are used as a source of energy in the production process. The exception is a relatively small quantity of excess cyanuric acid, which is either sold or traded.

The industry in the United States

U.S. producers

During the final phase of the original investigations, the Commission received U.S. producer questionnaires from three firms, which accounted for all production of chlorinated isos in granular/powder form in the United States during 2013.²⁴ In addition, eight tabletters (two of which are also granular/powder producers) provided questionnaire responses.²⁵

²³ Unless otherwise noted, this information is based on China/Spain third review publication, pp. 1.14 to 1.18, and First review publication, pp. 1.6 to 1.7.

²⁴ Original publication, p. 3.1.

²⁵ Original publication, p. 3.1.

During the first five-year review, the domestic interested parties provided a list of three known U.S. producers of chlorinated isos in granular/powder form and seven known and currently operating U.S. producers of chlorinated isos in tablet form. The three responding firms, Bio-Lab, Inc. (“BioLab”), Innovative Water Care, LLC (“IWC”), and Occidental Chemical Corporation (OxyChem), accounted for *** production of chlorinated isos in granular/powder form in the United States during 2018.²⁶ Two of the three responding firms in the first five-year review also reported data for their tableting operations during 2018. These two firms did not indicate their share of U.S. tableting operations in 2018, but together they accounted for *** percent of U.S. tableting operations in 2013.²⁷

In response to the Commission’s notice of institution in this current review, domestic interested parties provided a list of three known and currently operating U.S. producers of chlorinated isos in granular/powder form²⁸ and six known and currently operating U.S. tableters of chlorinated isos (two of which are also granular/powder producers).²⁹ The three firms providing U.S. industry data in response to the Commission’s notice of institution accounted for all known production of chlorinated isos in granular/powder form and *** percent of tablet production of chlorinated isos in the United States during 2024.³⁰

Recent developments

Table 1.4 presents events in the U.S. industry since the Commission’s last five-year review.³¹

²⁶ Chlorinated Isocyanurates from China (Review), Confidential Report, INV-RR-132, December 19, 2019 (“First review confidential report”), pp. 1.2 and 1.8.

²⁷ First review confidential report, table I.3.

²⁸ The same three producers that participated in the final phase investigations and the first review investigation are participating in the current five-year review. Clearon, from the previous investigations, is now known as IWC. Domestic interested parties’ response to the notice of institution, May 1, 2025, p. 16.

²⁹ Domestic interested parties’ supplemental response to the notice of institution, May 12, 2025, p. 2 and att. 1.

³⁰ Domestic interested parties’ response to the notice of institution, May 1, 2025, p. 16; Domestic interested parties’ supplemental response to the notice of institution, May 12, 2025, att. 1.

³¹ For recent developments, if any, in tariff treatment, please see “U.S. tariff treatment” section.

Table 1.4 Chlorinated isos: Developments in the U.S. industry

Item	Firm	Event
Plant closure (temporary)	BioLab	On August 7, 2020, Bio-Lab's Lake Charles, Louisiana plant was damaged by Hurricane Laura and closed. The facility resumed operations in 2022.
Plant closure	BioLab	On September 29, 2024, BioLab announced it would not reopen its Conyers, Georgia manufacturing plant following a facility fire.
Rebrand	Innovative Water Care	In January 2020, Innovative Water Care, headquartered in Alpharetta, Georgia, changed its name to Sigura.
Acquisition / merger	Solenis / Innovative Water Care	In November 2021, Platinum Equity, which had acquired Innovative Water Care in 2019, acquired Solenis, headquartered in Wilmington, Delaware, and merged Sigura with Solenis, creating Solenis LLC/Innovative Water Care, LLC.
Acquisition	Solenis	September 9, 2022, Solenis completed the acquisition of Clearon, South Charleston, West Virginia (currently known as Innovative Water Care).
Acquisition	Solenis	On July 5, 2023, Solenis acquired Diversey Holdings, Ltd., a leading provider of hygiene, infection prevention and cleaning products and technology.
Prolonged shutdown	OxyChem	On September 1, 2021, OxyChem declared force majeure on water treatment chemicals produced at its plants in Luling, Louisiana, which was damaged during Hurricane Ida, and Sauget, Illinois, which is dependent on cyanuric acid produced in Luling.
Production interruption	Industry-wide	A February 2021 freeze in the U.S. Gulf Coast reduced industry chlorine production.

Source: CSB News Release, [CSB Releases New Safety Video - General News - News | CSB](#), access date 24 June, 2025; The Lufkin Daily News, [Company decides not to rebuild chlorine plant with history of fires, explosions and toxic clouds | Us | lufkindailynews.com](#), May 19, 2025; U.S. Chemical Safety and Hazard Investigation Board (CSB); Louisiana Illuminator, [Chlorine warehouse fire forces Calcasieu residents to shelter in place, I-10 closure • Louisiana Illuminator](#), July 2, 2024; Pool and Spa News, [BioLab Breaks Ground on Critical Plant Rebuild | Pool & Spa News](#), access date May 30, 2025; S&P Global, [OxyChem declares force majeure on chlor-alkali, EDC post-Ida | S&P Global](#), September 1, 2021; Aqua News, [Innovative Water Care Launches Sigura | AQUA Magazine](#), January 14, 2020; Solenis.com, "Solenis Acquired by Platinum Equity, Simultaneously Acquires Sigura Water," November 9, 2021, <https://www.solenis.com/en/resources/news-releases/2021/platinum-equity-solenis-acquisition/>, retrieved June 24, 2025; September 9, 2022, Solenis.com, ["Solenis Completes Acquisition of Clearon Corp."](#) access date June 6, 2025; Solenis.com, "Solenis Completes Acquisition of Diversey for \$4.6 Billion," July 5, 2023, <https://www.solenis.com/en/resources/news-releases/2023/solenis-diversey-purchase/>, retrieved June 24, 2025; Domestic interested parties' supplemental response to the notice of institution, May 12, 2025, p. 4.

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 1.5 presents a compilation of the trade and financial data submitted from all responding U.S. producers in the original investigations and subsequent five-year reviews.

Table 1.5 Chlorinated isos: Trade and financial data submitted by U.S. producers, by period
Granular and powder form

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

Item	Measure	2013	2018	2024
Capacity	Quantity	***	***	***
Production	Quantity	***	***	***
Capacity utilization	Ratio	***	***	***
U.S. shipments	Quantity	***	***	***
U.S. shipments	Value	***	***	***
U.S. shipments	Unit value	***	***	***

Table continued.

Table 1.5 (Continued) Chlorinated isos: Trade and financial data submitted by U.S. producers, by period

Tableting operations

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

Item	Measure	2013	2018	2024
Capacity	Quantity	***	***	***
Production	Quantity	***	***	***
Capacity utilization	Ratio	***	***	***
U.S. shipments	Quantity	***	***	***
U.S. shipments	Value	***	***	***
U.S. shipments	Unit value	***	***	***

Table continued.

Table 1.5 (Continued) Chlorinated isos: Trade and financial data submitted by U.S. producers, by period

Total chlorinated isos operations

Value in 1,000 dollars; ratio in percent

Item	Measure	2013	2018	2024
Net sales	Value	***	***	***
COGS	Value	***	***	***
COGS to net sales	Ratio	***	***	***
Gross profit or (loss)	Value	***	***	***
SG&A expenses	Value	***	***	***
Operating income or (loss)	Value	***	***	***
Operating income or (loss) to net sales	Ratio	***	***	***

Source: Financial data presented covers total operations (granular/powder and tableted) for the domestic interested parties. For the years 2013 and 2018, data are compiled using data submitted in the Commission's original investigations and first five-year review. For the year 2024, data are compiled using data submitted by domestic interested parties. Domestic interested parties' supplemental response to the notice of institution, May 12, 2025, att. 1 and exh. 1.

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.³²

In its original determinations and its expedited first five-year review determination, the Commission defined a single domestic like product consisting of all chlorinated isos, coextensive with Commerce's scope, and it defined the domestic industry as all domestic integrated producers of chlorinated isos, as well as all domestic tableters of chlorinated isos.³³

³² Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

³³ One Commissioner defined the domestic industry differently in the original determinations. Original publication, p. 17.

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from ten firms, which accounted for the majority of total U.S. imports of chlorinated isos from China and Japan between January 2011 to June 2013.³⁴ Import data presented in the original investigations are based on questionnaire responses and supplemented with proprietary Customs data.

Although the Commission did not receive responses from any respondent interested parties in its first five-year review, the domestic interested parties provided a list of 255 firms that may have imported chlorinated isos from China.³⁵ Import data presented in the first review are based on official Commerce statistics.

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 parties provided a list of 81 potential U.S. importers of chlorinated isos.³⁶

U.S. imports

Table 1.6 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 2024 imports by quantity).

³⁴ Original publication, p. 4.1.

³⁵ First review publication, p. 1.11.

³⁶ Domestic interested parties' response to the notice of institution, May 1, 2025, exh. 7.

Table 1.6 Chlorinated isos: 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	2024
China	Quantity	41	7,271	84,837	96,973	424	20
Japan	Quantity	16,632	31,457	28,725	31,017	26,103	26,731
Spain	Quantity	—	8,084	19,771	20,232	16,755	23,171
Mexico	Quantity	130	752	1,858	2,259	1,070	1,714
All other sources	Quantity	4,053	390	3,792	1,104	710	1,567
Nonsubject sources	Quantity	20,815	40,684	54,146	54,612	44,639	53,183
All import sources	Quantity	20,856	47,955	138,983	151,585	45,063	53,203
China	Value	42	7,953	107,246	166,063	584	29
Japan	Value	17,630	31,628	33,612	60,394	53,165	51,263
Spain	Value	—	7,730	21,564	33,289	29,661	35,941
Mexico	Value	141	827	2,369	3,831	1,789	2,552
All other sources	Value	3,670	685	4,288	1,930	806	1,614
Nonsubject sources	Value	21,441	40,870	61,832	99,444	85,420	91,370
All import sources	Value	21,483	48,822	169,078	265,507	86,004	91,399
China	Unit value	1.03	1.09	1.26	1.71	1.38	1.39
Japan	Unit value	1.06	1.01	1.17	1.95	2.04	1.92
Spain	Unit value	—	0.96	1.09	1.65	1.77	1.55
Mexico	Unit value	1.08	1.10	1.28	1.70	1.67	1.49
All other sources	Unit value	0.91	1.76	1.13	1.75	1.14	1.03
Nonsubject sources	Unit value	1.03	1.00	1.14	1.82	1.91	1.72
All import sources	Unit value	1.03	1.02	1.22	1.75	1.91	1.72

Source: Compiled from official Commerce statistics for HTS statistical reporting number 2933.69.6015, accessed May 12, 2025. Import data do not include HTS statistical reporting numbers 2933.69.6021 and 2933.69.6050 that include products outside the scope of the order. In addition, import data do not include HTS statistical reporting numbers 3805.50.4000 and 3808.99.9501, or subheading 3808.94.50, that cover disinfectants which include chlorinated isos.

Note: Zeroes, null values, and undefined calculations are suppressed and shown as “—”. Because of rounding, figure may not add to total shown.

Apparent U.S. consumption and market shares

Table 1.7 presents data on U.S. producers’ U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table 1.7 Chlorinated isos: Apparent U.S. consumption and market shares, by source and period

Quantity in 1,000 pounds; value in 1,000 dollars; shares in percent; NA = not applicable

Source	Measure	2013	2018	2024
U.S. producers	Quantity	***	***	***
China	Quantity	***	9,692	20
Japan	Quantity	***	NA	NA
Subject sources	Quantity	***	9,692	20
Nonsubject sources	Quantity	***	21,266	53,183
All import sources	Quantity	***	30,958	53,203
Apparent U.S. consumption	Quantity	***	***	***
U.S. producers	Value	***	***	***
China	Value	***	9,848	29
Japan	Value	***	NA	NA
Subject sources	Value	***	9,848	29
Nonsubject sources	Value	***	21,233	91,370
All import sources	Value	***	31,081	91,399
Apparent U.S. consumption	Value	***	***	***
U.S. producers	Share of quantity	***	***	***
China	Share of quantity	***	***	***
Japan	Share of quantity	***	NA	NA
Subject sources	Share of quantity	***	***	***
Nonsubject sources	Share of quantity	***	***	***
All import sources	Share of quantity	***	***	***
U.S. producers	Share of value	***	***	***
China	Share of value	***	***	***
Japan	Share of value	***	NA	NA
Subject sources	Share of value	***	***	***
Nonsubject sources	Share of value	***	***	***
All import sources	Share of value	***	***	***

Source: For the years 2013 and 2018, data are compiled using data submitted in the Commission's original investigations and first five-year review. For the year 2024, U.S. producers' U.S. shipments are compiled from the domestic interested parties' response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting number 2933.69.6015, accessed May 12, 2025. Japan is listed as a subject source in the original investigations (2013). Following the Commission's negative final determination concerning Japan in the original investigations, it is not listed as a subject source but is included in nonsubject sources for 2018 and 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. Shares shown as "0.0" represent values greater than zero, but less than "0.05" 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 investigations, the Commission received a foreign producer/exporter questionnaire from one firm, which did not report any exports to the United States during the period in which data were collected.³⁷ Although the Commission did not receive responses from any respondent interested parties in its first five-year review, the domestic interested parties provided a list of 200 possible producers of chlorinated isos in China in that proceeding.³⁸

The Commission did not receive responses from any respondent interested parties in this five-year review. In their response to the Commission's notice of institution, the domestic interested parties provided a list of 50 possible producers of chlorinated isos in China.³⁹

Recent developments

There were no major developments in the chlorinated isos industry in China since the continuation of the orders identified by interested parties in the proceeding and no relevant information from outside sources was found.

Exports

Table 1.8 presents export data for HS 2933.69, a category that includes chlorinated isos and out-of-scope products, from China (by export destination in descending order of quantity for 2024).

³⁷ Original publication, p. 7.3.

³⁸ First review publication, p. 1.15.

³⁹ Domestic interested parties' response to the notice of institution, May 1, 2025, exh. 1.

Table 1.8 Heterocyclic compounds (excluding melamine) containing an unfused triazine ring (whether or not hydrogenated) in the structure: Quantity of exports from China, by destination and period

Quantity in 1,000 pounds

Destination market	2019	2020	2021	2022	2023	2024
Brazil	141,126	138,439	185,325	217,102	137,596	184,981
United States	99,323	105,140	203,677	199,345	95,464	160,451
India	87,842	80,636	91,996	86,068	97,387	127,766
Spain	71,444	86,339	110,475	89,802	85,149	109,669
Mexico	33,865	36,330	46,797	54,242	53,083	51,871
Argentina	36,911	48,764	48,297	44,496	45,824	49,144
Indonesia	40,270	33,793	36,339	45,500	48,787	48,602
Italy	24,424	25,811	34,630	32,603	28,315	33,678
Turkey	19,713	16,710	25,205	20,229	27,268	29,884
Vietnam	14,771	18,758	14,877	17,478	24,959	29,482
All other markets	358,826	422,432	469,114	431,495	426,769	490,738
All markets	928,515	1,013,150	1,266,731	1,238,361	1,070,601	1,316,265

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2933.69, accessed May 20, 2025. These data may be overstated as HS subheading 2933.69 may contain products outside the scope of this review.

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

Third-country trade actions

Antidumping duties on imports of trichlor originating in China have been in place in the European Union (“EU”) since July 2005. These duties were further extended following an expiry review in December 2023, and currently range from 8.1 to 42.6 percent. Additionally, the antidumping duty imposed by the EU on trichlor from any other country amounts to 42.6 percent.⁴⁰

The global market

Table 1.9 presents global export data for HS 2933.69, a category that includes chlorinated isos and out-of-scope products (by source in descending order of quantity for 2024).

⁴⁰ Official Journal of the European Union, December 13, 2023, p. 1.1 (6).

Table 1.9 Heterocyclic compounds (excluding melamine) containing an unfused triazine ring (whether or not hydrogenated) in the structure: Quantity of global exports, by country and period

Quantity in 1,000 pounds

Exporting country	2019	2020	2021	2022	2023	2024
China	928,515	1,013,150	1,266,731	1,238,361	1,070,601	1,316,265
Germany	101,726	103,925	111,170	93,830	91,218	91,819
Spain	39,865	51,878	97,553	78,530	60,272	65,199
Japan	59,875	61,835	57,746	54,068	39,921	43,701
United States	45,959	41,600	35,035	34,404	22,519	38,455
United Kingdom	36,525	32,851	30,006	40,709	36,339	32,061
India	13,810	11,136	20,810	23,976	24,432	22,567
Belgium	15,433	14,188	13,133	13,003	19,476	21,490
France	14,255	16,042	20,344	22,172	14,016	14,836
Netherlands	31,099	26,526	35,474	40,700	14,898	13,350
All Other Markets	318,062	273,682	338,435	189,632	86,217	68,151
All Markets	1,605,122	1,646,812	2,026,436	1,829,387	1,479,908	1,727,893

Source: Global Trade Information Services, Inc., Global Trade Atlas, HS subheading 2933.69, accessed May 20, 2025. These data may be overstated as HS subheading 2933.69 may contain products outside the scope of this review.

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

APPENDIX A

FEDERAL REGISTER NOTICES

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

Citation	Title	Link
90 FR 14354, April 1, 2025	Initiation of Five-Year (Sunset) Reviews	https://www.govinfo.gov/content/pkg/FR-2025-04-01/pdf/2025-05537.pdf
90 FR 14378, April 1, 2025	Chlorinated Isocyanurates From China; Institution of a Five-Year Review	https://www.govinfo.gov/content/pkg/FR-2025-04-01/pdf/2025-05355.pdf

APPENDIX B

RESPONSES TO THE NOTICE OF INSTITUTION

Responses to the Commission’s notice of institution

Individual responses

The Commission received one submission in response to its notice of institution in the subject review. It was filed on behalf of the following entities: Bio-Lab, Inc. (“BioLab”), Innovative Water Care, LLC (“IWC”), and Occidental Chemical Corporation (“OxyChem”), domestic producers of chlorinated isos (collectively referred to herein as “domestic interested parties”).

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 B.1.

Table B.1 Chlorinated isos: Summary of responses to the Commission’s notice of institution

Interested party type	Number	Coverage
U.S. producer	3	100%

Note: The U.S. producer coverage figure presented is the domestic interested parties’ estimate of their share of total U.S. production of chlorinated isos during 2024. Domestic interested parties’ response to the notice of institution, May 1, 2025, p. 16.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct an expedited or full review from the domestic interested parties. They request that the Commission conduct an expedited review of the countervailing duty order on chlorinated isos.¹

¹ Domestic interested parties’ comments on adequacy, June 13, 2025, p. 1.

Company-specific information

Table B.2 Chlorinated isos: Response checklist for U.S. producers

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

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

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1

Chlorinated isos: Summary data concerning the U.S. market, 2011-13, January to June 2013, and January to June 2014

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APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of 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 chlorinated isocyanurates: ***. Purchaser questionnaires were sent to these three firms, and two firms (***) submitted responses to the Commission's request for information.

1. Have there been any significant changes in the supply and demand conditions for chlorinated isocyanurates that have occurred in the United States or in the market for chlorinated isocyanurates in China, since January 1, 2020?

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

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

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

