

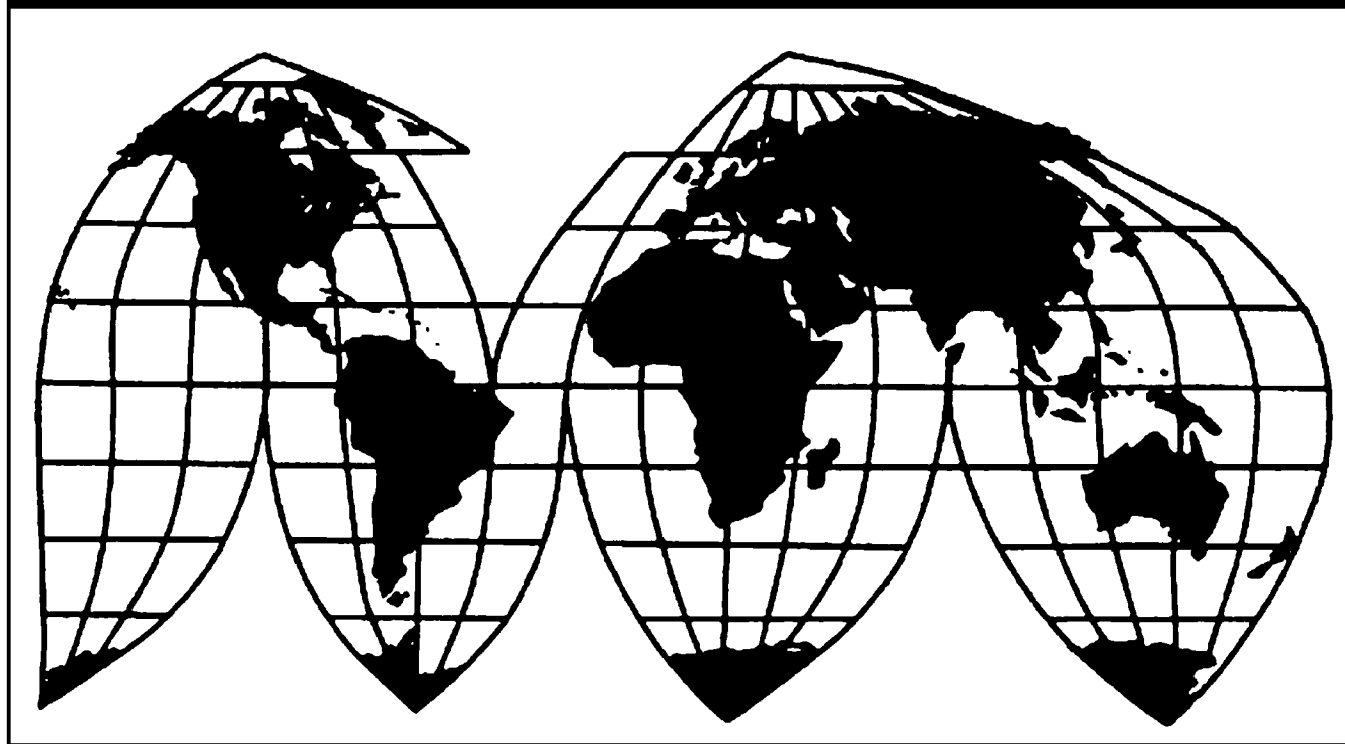
Calcium Hypochlorite from China

Investigation Nos. 701-TA-510 and 731-TA-1245 (Review)

Publication 5065

June 2020

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

Jason E. Kearns, Chairman
Randolph J. Stayin, Vice Chairman
David S. Johanson
Rhonda K. Schmidlein
Amy A. Karpel

Catherine DeFilippo
Director of Operations

Staff assigned

Tyler Berard, Investigator
Hee Jung Kim, Industry Analyst
Pamela Davis, Economist
Ravi Soopramanien, Attorney
Keysha Martinez, Supervisory Investigator

Address all communications to
Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Calcium Hypochlorite from China

Investigation Nos. 701-TA-510 and 731-TA-1245 (Review)

Publication 5065



June 2020

CONTENTS

	Page
Determinations	1
Views of the Commission.....	3
Information obtained in these reviews	I-1
Background	I-1
Responses to the Commission’s notice of institution.....	I-2
Individual responses	I-2
Party comments on adequacy	I-2
The original investigations	I-2
Previous and related investigations.....	I-3
Commerce’s five-year reviews.....	I-4
The product.....	I-5
Commerce’s scope.....	I-5
U.S. tariff treatment.....	I-6
Description and uses.....	I-6
Manufacturing process	I-8
The industry in the United States	I-8
U.S. producers.....	I-8
Recent developments	I-9
U.S. producers’ trade and financial data	I-10
Definitions of the domestic like product and domestic industry	I-11
U.S. imports and apparent U.S. consumption	I-11
U.S. importers	I-11
U.S. imports	I-12
Apparent U.S. consumption and market shares.....	I-13
The industry in China	I-14
Antidumping or countervailing duty orders in third-country markets.....	I-15
The global market	I-16

Appendixes

A.	<i>Federal Register</i> notices.....	A-1
B.	Company-specific data.....	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Note: Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets or by parallel lines in confidential reports and is deleted and replaced with asterisks in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-510 and 731-TA-1245 (Review)

Calcium Hypochlorite from China

DETERMINATIONS

On the basis of the record¹ developed in the subject five-year reviews, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that revocation of the antidumping and countervailing duty orders on calcium hypochlorite from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.²

BACKGROUND

The Commission instituted these reviews on December 2, 2019 (84 FR 66002) and determined on March 6, 2020 that it would conduct expedited reviews (85 FR 29740, May 18, 2020).

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

² Commissioner Jason E. Kearns not participating.

Views of the Commission

Based on the record in these five-year reviews, we determine under section 751(c) of the Tariff Act of 1930, as amended (“the Tariff Act”), that revocation of the antidumping and countervailing duty orders on calcium hypochlorite (“calhypo”) 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.¹

I. Background

Original Investigations. On December 18, 2013, Arch Chemicals, Inc. (“Arch”) filed antidumping and countervailing duty petitions concerning imports of calhypo from China.² The Commission made final affirmative determinations in January 2015 that the domestic industry was materially injured by reason of dumped and subsidized imports of calhypo from China.³ Commerce imposed antidumping and countervailing duty orders on calhypo from China on January 30, 2015.⁴

First reviews. The Commission instituted these reviews on December 2, 2019.⁵ The Commission received one response to the notice of institution, filed by Innovative Water Care, LLC d/b/a Sigura (“IWC”), a domestic producer of calhypo.⁶ It did not receive a response from any respondent interested party. On March 6, 2020, the Commission found that the domestic interested party group response was adequate and the respondent interested party group

¹ Commissioner Kearns did not participate in these reviews.

² *Calcium Hypochlorite from China*, Inv. Nos. 701-TA-510 and 731-TA-1245 (Final), USITC Pub. 4515 (Jan. 2015) (“*Original Investigations*”) at 1.

³ *Calcium Hypochlorite from China*, 80 Fed. Reg. 4312 (Jan. 27, 2015).

⁴ *Calcium Hypochlorite from the People's Republic of China: Countervailing Duty Order*, 80 Fed. Reg. 5082 (Jan. 30, 2015); and *Calcium Hypochlorite from the People's Republic of China: Antidumping Duty Order*, 80 Fed. Reg. 5085 (Jan. 30, 2015).

⁵ *Calcium Hypochlorite from China: Institution of Five-Year Reviews*, 84 Fed. Reg. 66002 (Dec. 2, 2019).

⁶ IWC’s Response to the Notice of Institution, EDIS Docs. 698179 and 698180 (Jan. 2, 2020), and IWC’s Supplement to its Response to the Notice of Institution, EDIS Docs. 700201 and 700202 (Jan. 24, 2020). IWC also filed comments on the determinations the Commission should reach pursuant to Commission rule 207.62(d). IWC’s Comments on Adequacy, EDIS Doc. 702472 (Feb. 13, 2020).

response was inadequate. Finding that no other circumstances warranted conducting full reviews, the Commission determined to conduct expedited reviews.⁷

In these reviews, U.S. industry data are based on IWC's response to the notice of institution. IWC estimates that it accounted for *** percent of domestic production of calhyppo in 2018.⁸ U.S. import data and related information are based on U.S. Department of Commerce ("Commerce") official import statistics.⁹ Foreign industry data and related information are based on information that IWC provided in its response to the notice of institution and questionnaire responses from the prior proceedings, as well as publicly available information gathered by staff.¹⁰

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."¹¹ 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."¹² The Commission's practice in five-year reviews is to examine the domestic like product definition from the original investigation and consider whether the record indicates any reason to revisit the prior findings.¹³

⁷ *Calcium Hypochlorite from China; Scheduling of Expedited Five-Year Reviews*, 85 Fed. Reg. 29740 (May 18, 2020); see also Explanation of Commission Determinations on Adequacy, EDIS Doc. 707518 (Apr. 10, 2020).

⁸ Confidential Report, Memorandum INV-SS-016 (Feb. 21, 2020) ("CR") at I-2 and Table I-1; Public Report, *Calcium Hypochlorite from China*, Inv. Nos. 701-TA-510 and 731-TA-1245 (Review), USITC Pub. 5065 (June 2020) ("PR") at I-2 and Table I-1.

⁹ CR/PR at Table I-4.

¹⁰ These include Global Trade Atlas data, which appear in the record in EDIS Doc. 701184 (Feb. 3, 2020). See generally CR/PR at Tables I-6 and I-7.

¹¹ 19 U.S.C. § 1677(4)(A).

¹² 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).

¹³ See, e.g., *Internal Combustion Industrial Forklift Trucks from Japan*, Inv. No. 731-TA-377 (Second Review), USITC Pub. 3831 (Dec. 2005) at 8-9; *Crawfish Tail Meat from China*, Inv. No. 731-TA-

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

Calcium hypochlorite, regardless of form (*e.g.*, powder, tablet (compressed), crystalline (granular), or in liquid solution), whether or not blended with other materials, containing at least 10 percent available chlorine measured by actual weight. The scope also includes bleaching powder and hemibasic calcium hypochlorite.

Calcium hypochlorite has the general chemical formulation $\text{Ca}(\text{OCl})_2$, but may also be sold in a more dilute form as bleaching powder with the chemical formulation, $\text{Ca}(\text{OCl})_2 \cdot \text{CaCl}_2 \cdot \text{Ca}(\text{OH})_2 \cdot 2\text{H}_2\text{O}$ or hemibasic calcium hypochlorite with the chemical formula of $2\text{Ca}(\text{OCl})_2 \cdot \text{Ca}(\text{OH})_2$ or $\text{Ca}(\text{OCl})_2 \cdot 0.5\text{Ca}(\text{OH})_2$. Calcium hypochlorite has a Chemical Abstract Service (CAS) registry number of 7778-54-3, and a U.S. Environmental Protection Agency (EPA) Pesticide Code (PC) Number of 014701. The subject calcium hypochlorite has an International Maritime Dangerous Goods (IMDG) code of Class 5.1 UN 1748, 2880, or 2208 or Class 5.1/8 UN 3485, 3486, or 3487.

Calcium hypochlorite is currently classifiable under the subheading 2828.10.0000 of the Harmonized Tariff Schedule of the United States (HTSUS). The subheading covers commercial calcium hypochlorite and other calcium hypochlorite. When tableted or blended with other materials, calcium hypochlorite may be entered under other tariff classifications, such as 3808.94.5000 and 3808.99.9500, which cover disinfectants and similar products. While the HTSUS subheadings, the CAS registry number, the U.S. EPA PC number, and the IMDG codes are provided for convenience and customs purposes, the written description of the scope of this order is dispositive.¹⁴

Calhypo is a chemical compound used primarily as a sanitizing agent for swimming pools, spas, and municipal water treatment systems. It is typically sold as a white solid in

752 (Review), USITC Pub. 3614 (July 2003) at 4; *Steel Concrete Reinforcing Bar from Turkey*, Inv. No. 731-TA-745 (Review), USITC Pub. 3577 (Feb. 2003) at 4.

¹⁴ *Calcium Hypochlorite from the People's Republic of China: Final Results of the Expedited First Sunset Review of the Antidumping Duty Order*, 85 Fed. Reg. 19439, 19440 (Apr. 7, 2020); and *Calcium Hypochlorite from the People's Republic of China: Final Results of the Expedited First Sunset Review of the Countervailing Duty Order*, 85 Fed. Reg. 19443 (Apr. 7, 2020).

powder, crystalline, or tablet form. The active ingredient is chlorine, which acts as a biocide, killing algae and other microbes. Calhypo can be sold as a pure product, with available chlorine concentrations of 65-80 percent, or as a product blended with other ingredients. Blended products typically include algaecides and/or flocculants to clarify water and are most commonly sold with available chlorine content of 45-60 percent.¹⁵

In the original investigations, the Commission defined a single domestic like product consisting of calhypo, coextensive with Commerce's scope.¹⁶ In these reviews, the record contains no information suggesting that the characteristics and uses of domestically produced calhypo have changed since the prior proceedings in a way that would warrant revisiting the definition of the domestic like product.¹⁷ IWC agrees with the Commission's definition of the domestic like product from the prior proceedings.¹⁸ Based on the analysis in the original investigations, the record in these reviews, and the lack of any contrary argument, we again define a single domestic like product consisting of all calhypo, coextensive with Commerce's scope of the orders under review.

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."¹⁹ 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.

¹⁵ CR/PR at I-6.

¹⁶ *Original Investigations*, USITC Pub. 4515 at 6. In the preliminary phase, a respondent argued that the Commission should include with calhypo in the definition of the like product several products not within the scope of the investigations, including chlorinated isocyanurates and sodium hypochlorite. The Commission, however, found a clear dividing line between calhypo and the other products, particularly given the differences in chemical composition, chlorine content, and manufacturing facilities and employees. *Calcium Hypochlorite from China*, Inv. Nos. 701-TA-510 and 731-TA-1245 (Preliminary), USITC Pub. 4452 (Feb. 2014) at 4-9.

¹⁷ See generally CR/PR at I-6 – I-8.

¹⁸ IWC's Response to the Notice of Institution at 7.

¹⁹ 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.

In the original investigations, the Commission defined the domestic industry to include all domestic producers of calhyppo. In its final determinations, the Commission determined that domestic firms that did not produce calhyppo but solely converted it to tablet form did not engage in sufficient production-related activities and therefore should not be included in the domestic industry definition.²⁰ There were no related party issues in the final phase of the original investigations.²¹

IWC agrees with the Commission's definition of the domestic industry from the prior proceedings.²² There are no related party issues nor any new information to suggest revisiting the definition is warranted in these reviews.²³ Accordingly, we define the domestic industry to include all domestic producers of calhyppo.

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

A. Legal Standards

In a five-year review conducted under section 751(c) of the Tariff Act, Commerce will revoke an antidumping or countervailing duty order unless: (1) it makes a determination that dumping or subsidization is likely to continue or recur and (2) the Commission makes a determination that revocation of the antidumping or countervailing duty order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."²⁴ 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

²⁰ Since Arch was an integrated producer and tableter of calhyppo, the domestic industry definition encompassed all of Arch's operations involved in producing the domestic like product, including those pertaining to tableting. *Original Investigations*, USITC Pub. 4515 at 7-9.

²¹ In its preliminary determinations, the Commission considered whether *** qualified as a related party because it imported subject merchandise during the POI. It found that appropriate circumstances did not exist to exclude *** from the domestic industry since *** interests were mainly in domestic production rather than importation. Confidential Original Determination, EDIS Doc. 699479 (Jan. 22, 2015, filed on Jan. 16, 2020) at 8 n.23.

²² IWC's Response to the Notice of Institution at 7.

²³ IWC's Response to the Notice of Institution at Att. 1.

²⁴ 19 U.S.C. § 1675a(a).

elimination of its restraining effects on volumes and prices of imports.”²⁵ Thus, the likelihood standard is prospective in nature.²⁶ 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.²⁷

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.”²⁸ 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.”²⁹

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

²⁵ 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.

²⁶ 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.

²⁷ 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’”).

²⁸ 19 U.S.C. § 1675a(a)(5).

²⁹ 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.*

investigation is terminated.”³⁰ 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).³¹ 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.³²

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.³³ 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.³⁴

In evaluating the likely price effects of subject imports if an order under review is revoked and/or a suspended investigation is terminated, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared to the domestic like product and whether the subject imports are likely to enter the United States at prices that otherwise would have a significant depressing or suppressing effect on the price of the domestic like product.³⁵

³⁰ 19 U.S.C. § 1675a(a)(1).

³¹ 19 U.S.C. § 1675a(a)(1). Commerce has not issued any duty absorption findings with respect to calhypo from China. See 85 Fed. Reg. 19439-40, 19443-44 (Apr. 7, 2020).

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

³³ 19 U.S.C. § 1675a(a)(2).

³⁴ 19 U.S.C. § 1675a(a)(2)(A-D).

³⁵ 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.

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.³⁶ 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.³⁷

No respondent interested party participated in these expedited reviews. The record, therefore, contains limited new information with respect to the calhypo industry in China. There also is limited information on the calhypo market in the United States during the 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 these first five-year reviews.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”³⁸ The following conditions of competition inform our determinations.

³⁶ 19 U.S.C. § 1675a(a)(4).

³⁷ 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.

³⁸ 19 U.S.C. § 1675a(a)(4).

1. Demand Conditions

In the original investigations, the Commission found that calhypo was principally used to purify water in swimming pools. The Commission found that the market for calhypo for use in swimming pools was seasonal, and could also be affected by weather conditions.³⁹ Information in the limited record of these reviews indicates that the drivers of U.S. demand are unchanged from the prior proceedings.

Apparent U.S. consumption of calhypo (by quantity) was relatively steady during the original period of investigation (“POI”), and increased irregularly from *** pounds in 2011 to *** pounds in 2013 – an increase of *** percent.⁴⁰ IWC argues that since the imposition of the orders on calhypo, demand for the product has increased slightly.⁴¹ Data collected in these reviews indicate that apparent U.S. consumption in 2018 was *** pounds.⁴²

2. Supply Conditions

In the original investigations, the Commission found that the domestic industry was relatively concentrated, consisting of only two domestic producers.⁴³ The record showed that the domestic industry supplied between *** and *** percent of apparent U.S. consumption from 2011 to 2013. In contrast, subject imports supplied between *** and *** percent of apparent U.S. consumption and nonsubject imports supplied between *** and *** percent of apparent U.S. consumption.⁴⁴

³⁹ *Original Investigations*, USITC Pub. 4515 at 13.

⁴⁰ Confidential Original Determination at 18-19. Apparent U.S. consumption was *** pounds in January to June 2013 (“interim 2013”) and *** pounds in January to June 2014 (“interim 2014”). *Id.* at 19. Thus, apparent U.S. consumption was *** percent lower in interim 2014 than in interim 2013.

⁴¹ IWC’s Final Comments, EDIS Docs. 710860 and 710861 (May 22, 2020) at 2.

⁴² CR/PR at Table I-5. While this figure is lower than the levels observed in the original investigations, it does not include U.S. shipments by Westlake Chemical Company (“Westlake”) which, according to IWC, had production capacity of *** pounds in 2017 and accounted for an estimated *** percent of total U.S. production in 2018. IWC based Westlake’s 2017 production capacity data on an industry publication, which it used as a proxy for Westlake’s 2018 production. CR/PR at Table I-1 Note 1; and IWC’s Response to the Notice of Institution at Att. 6. In its response to the notice of institution, IWC also submitted an industry report containing calhypo market data. Using secondary sources and Customs data, the report estimated that U.S. consumption in 2017 was *** metric tons (approximately *** pounds, using a conversion factor of 2205 pounds per metric ton). See the Global Calhypo Market Report, appended as att. 5 of IWC’s Response to the Notice of Institution at 49.

⁴³ *Original Investigations*, USITC Pub. 4515 at 13-14.

⁴⁴ Confidential Original Determination at 19-20. In interim 2013, the domestic industry supplied *** percent of apparent U.S. consumption, subject imports supplied *** percent, and nonsubject

The available information in these reviews indicates that the domestic industry remains concentrated, and that both domestic producers were acquired by new owners during the POR.⁴⁵ IWC supplied *** percent of apparent U.S. consumption in 2018, whereas nonsubject imports supplied *** percent.⁴⁶ There have been no reported imports of calhypo from China since 2015.⁴⁷

3. Substitutability and Other Conditions

In the original investigations, the Commission found a high degree of substitutability between domestically produced and subject calhypo, and found that price, quality, and availability were important purchasing factors. The Commission also found that raw material and other associated costs for calhypo generally increased during the POI.⁴⁸

The limited record in these reviews contains no information to indicate any change since the prior proceedings in the substitutability between U.S. produced and imported calhypo from China and the importance of price, quality, and availability in purchasing decisions.⁴⁹ We thus find a high degree of substitutability between domestically produced and subject calhypo, and that price, quality, and availability are important purchasing factors.⁵⁰

imports supplied *** percent; in interim 2014, the domestic industry supplied *** percent of apparent U.S. consumption, subject imports supplied *** percent, and nonsubject imports supplied *** percent. *Id.*

⁴⁵ CR/PR at Table I-2. IWC acquired Arch in February 2019, and Westlake acquired Axiall Corporation (“Axiall”) in August 2016. *Id.*

⁴⁶ As noted above, apparent U.S. consumption used for these percentages does not include U.S. shipments by Westlake which, according to IWC, accounted for an estimated *** percent of total U.S. production in 2018. CR/PR at Table I-1 Note 1.

⁴⁷ CR/PR at Table I-5. According to IWC, nonsubject imports of calhypo during these reviews were from Japan and India. IWC’s Response to the Notice of Institution at 3. Neither country is subject to antidumping or countervailing duty orders. CR/PR at I-3 – I-4.

⁴⁸ *Original Investigations*, USITC Pub. 4515 at 14-16. The Commission found that the principal raw materials used to produce calhypo are chlorine and lime, and that electricity is a major input involved in the production of calhypo. During the POI, the prices of both chlorine and lime increased by approximately 11 percent. *Id.* at 15. Raw materials accounted for approximately *** percent of domestic producers’ cost of goods sold (“COGS”) from 2011 to 2013. Confidential Original Determination at 21.

⁴⁹ CR/PR at I-5 – I-9.

⁵⁰ The limited record of these reviews does not include data on raw material and other associated costs for calhypo.

Calhypo from China has been subject to an additional 25 percent tariff under Section 301 of the Trade Act of 1974 since May 2019.⁵¹

C. Likely Volume of Subject Imports

1. The Original Investigations

In the original investigations, the Commission found that the volume of subject imports increased by 39.7 percent from 2011 to 2013, from 9.5 million pounds to 13.2 million pounds, whereas apparent U.S. consumption increased by *** percent during this period. Subject imports' share of apparent U.S. consumption increased from *** percent in 2011 to *** percent in 2013 – an increase of *** percentage points.⁵² The Commission found that these gains came at the expense of the domestic industry, which lost *** percentage points of market share during this period. The Commission found the volume of subject imports to be significant both in absolute terms and relative to consumption in the United States.⁵³

2. The Current Reviews

During the POR, subject imports had a limited presence in the U.S. market; subject import volume was 4.1 million pounds in 2014, 29,000 pounds in 2015, and zero for the remainder of the POR.⁵⁴ While the limited volume of subject imports during the POR indicates that the orders had a disciplining effect, several factors support the conclusion that subject producers in China have the ability and incentive to increase exports to the United States to significant levels within a reasonably foreseeable time if the orders were revoked.⁵⁵

⁵¹ Specifically, subject calhypo entering the U.S. under HTS subheading 2828.10.00 is subject to the Section 301 duties. *See Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 Fed. Reg. 47974, 47982 (USTR Sep. 21, 2018), as amended by *Notice of Modification of Section 301 Action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 84 Fed. Reg. 20459, 20460 (USTR May 9, 2019).

⁵² Confidential Original Determination at 21-22.

⁵³ *Original Investigations*, USITC Pub. 4515 at 15-16. Commissioners Pinkert, Williamson, and Schmidlein also found the increase in the volume of subject imports to be significant both in absolute terms and relative to consumption in the United States. *Id.* at 16 n.94.

⁵⁴ CR/PR at Table I-4.

⁵⁵ The record contains only limited data concerning the calhypo industry in China because no producer or exporter of subject merchandise participated in these reviews. Accordingly, precise data as to capacity and production trends of the subject industry is not available.

The record indicates that the industry in China continues to be the world's largest producer of calhypo.⁵⁶ The available information indicates that production of calhypo in China increased from *** metric tons ("MT") in 2012 to *** MT in 2017 – an increase of *** percent, and that calhypo production capacity increased from *** MT in 2012 to *** MT in 2017 – an increase of *** percent.⁵⁷ The level of Chinese production in these reviews, accordingly, reflects a substantial increase from the original investigations.⁵⁸ Chinese production capacity in 2017, based on the available data, was *** the size of apparent U.S. consumption in 2018, and Chinese unused production capacity alone was ***.⁵⁹

The record also indicates that the industry in China is export oriented. Available Global Trade Atlas ("GTA") data indicate that China's annual exports of calhypo and other calcium hypochlorites, which ranged from 229.5 million pounds to 303.4 million pounds and from \$95.6 million to \$123.9 million, were the world's largest by value in each year of the POR.⁶⁰ Moreover, these data indicate that Chinese calhypo producers shipped substantial quantities of calhypo to markets worldwide.⁶¹

Finally, shipments of subject calhypo entered the U.S. market in 2014 and 2015, although Commerce was unable to determine, in the course of its new shipper review, whether

⁵⁶ See the production-related data tables in the Global Calcium Hypochlorite Market 2017 Industry Research Report ("Global Calhypo Market Report") at 30 and 40-41, appended as Att. 5 of IWC's Response to the Notice of Institution. We note that the data in this report, based on ***, may include out-of-scope products. See table source notes, *id.*, at 30, and 41, and the discussion of methodology and data sources at 160-65.

⁵⁷ See the production and capacity-related data tables in the Global Calhypo Market Report at 28-30, 40-41. These data only go through 2017. *Id.*

⁵⁸ Data for Chinese production in the original investigations were derived from the only responding Chinese producer of calhypo, Sinopec Jiangnan Salt & Chemical Complex ("JSCC"). See Memorandum INV-MM-130 (Dec. 19, 2014), EDIS Doc. 699476 (filed on Jan. 16, 2020) ("*Original Investigations CR*") at Table VII-1. JSCC estimated that it accounted for *** percent of overall production of calhypo in China in 2012. *Id.* at VII-5. The limited information in these reviews does not contain production and capacity data for the Chinese industry in 2018. In these reviews, IWC identified 27 Chinese producers and nine exporters of calhypo that may currently be engaged in the production or export of calhypo. IWC's Response to the Notice of Institution, at Atts. 2 and 3.

⁵⁹ Derived from CR/PR at Table I-5 and the production and capacity-related data tables in the Global Calhypo Market Report at 28-30, 40-41.

⁶⁰ CR/PR at Tables I-6 and I-7. These data include out-of-scope products included in HTS heading 2828.10.

⁶¹ CR/PR at Table I-6.

the subject shipments were *bona fide* sales.⁶² These shipments indicate that producers in China had continued interests in directing unfairly traded calhypo to the United States notwithstanding the orders. The attractiveness of the U.S. market to subject producers is further demonstrated by the fact that the United States remains one of the world's largest consumers of calhypo.^{63 64}

Based on the above, in particular, the size and export orientation of the subject industry, we find that subject producers would likely increase their exports to the United States if the orders were revoked. Accordingly, based on the available information, we conclude that the volume of subject imports would likely be significant, both in absolute terms and relative to U.S. consumption, should the orders be revoked.⁶⁵

D. Likely Price Effects

1. The Original Investigations

In the original investigations, the Commission found that subject imports undersold the domestic like product, and depressed domestic prices to a significant degree. Subject imports undersold the domestic like product in all six available quarterly price comparisons by margins ranging from 11.7 to 23.2 percent. The record also contained confirmed lost sales and lost revenue allegations, indicating that the domestic industry lost sales to lower priced subject imports, and was forced to lower prices. Additionally, prices declined for three of four domestically produced pricing products. As demand for calhypo was steady during the POI and raw material costs generally increased, the Commission found that these price declines were caused by the increasing quantity of low-priced subject imports, rather than other factors.⁶⁶

⁶² IWC's Final Comments at 2-3, *citing Calcium Hypochlorite from the People's Republic of China: Final Decision to Rescind the New Shipper Review of Haixing Jingmei Chemical Products Sales Co., Ltd.*, 81 Fed. Reg. 83804 (Nov. 22, 2016).

⁶³ See the consumption-related data tables in the Global Calhypo Market Report at 46.

⁶⁴ None of the purchasers responding to the Commission's questionnaires reported that Section 301 tariffs have impacted the conditions of competition for calhypo, or that they anticipate such impact in the future. See CR/PR at App. D.

⁶⁵ Because of the expedited nature of these reviews, the record does not contain information about inventories of the subject merchandise or the capacity of the subject producers for product shifting during the POR.

⁶⁶ *Original Investigations*, USITC Pub. 4515 at 16-18. The Commission requested pricing data on six products. Responding U.S. producers and importers reported pricing data on four of the six products. These data accounted for approximately 24.9 percent of U.S. producers' shipments of calhypo

2. The Current Reviews

As noted above, the limited record in these expedited reviews indicates that subject imports and the domestic like product are generally considered to be highly substitutable and that price continues to be an important factor in purchasing decisions. Due to their expedited nature, these reviews do not contain pricing data. We have found, however, that subject import volumes from China would likely increase to significant levels if the orders were revoked. In light of the likely subject import volumes, and the importance of price in purchasing decisions, subject producers would be likely to resume the aggressive pricing behavior observed in the original investigations, when there was underselling in every price comparison and subject imports were sold at low prices to gain market share. This in turn would likely cause domestic producers to cut prices or forego price increases to avoid losing sales. Accordingly, given the likely significant volume of subject imports, we conclude that the subject imports would likely engage in significant underselling of the domestic like product to gain market share and would likely have significant depressing or suppressing effects on the price of the domestic like product if the orders were revoked.

E. Likely Impact

1. The Original Investigations

In the original investigations, the Commission found that declining sales of the domestic like product combined with lower prices caused declines in the domestic industry's revenue from 2011 to 2013, leading to deteriorating financial performance. The Commission accorded reduced weight to declining subject import volume and market share in interim 2014 and corresponding improvements by the domestic industry, finding that these trends were largely the result of the filing of the petitions and reflective of seasonal fluctuations in demand, with U.S. producers' sales being much higher in the first half of the year. In its non-attribution analysis, the Commission found that nonsubject imports, which had only a small presence in the U.S. market during the POI, and U.S. demand for calhypo, which was steady and increased slightly from 2011 to 2013, could not explain the declines in the domestic industry's financial performance during the POI. Accordingly, the Commission concluded that subject imports had a significant adverse impact on the domestic industry.⁶⁷

and 21.3 percent of subject imports in 2013, with lower coverage for subject imports in other years of the POI. *Id.* at 16-17.

⁶⁷ *Original Investigations*, USITC Pub. 4515 at 19-22.

2. The Current Reviews

In these expedited reviews, the information available on the domestic industry's condition is limited.⁶⁸ In 2018, the domestic industry's production capacity was *** pounds, its production was *** pounds, and its capacity utilization was *** percent.⁶⁹ The domestic industry's U.S. shipments were *** pounds, accounting for a *** percent share of apparent U.S. consumption by quantity.⁷⁰ Its net sales revenue was \$***, and its operating income was \$***, equivalent to *** percent of net sales.⁷¹ The limited evidence in these expedited reviews is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury should the orders be revoked.

Based on the information on the record, we find that, should the orders be revoked, the likely significant volume and price effects of the subject imports would likely have a significant adverse impact on the production, shipments, sales, market share, and revenues of the domestic industry. These declines would likely have a direct adverse impact on the domestic industry's profitability and employment levels, ability to raise capital and maintain capital investments, and research and development expenditures.

We have also considered the role of factors other than subject imports, including the presence of nonsubject imports, so as not to attribute likely injury from other factors to the subject imports. Nonsubject imports have continued to maintain a small presence in the U.S. market during these reviews; their share of apparent U.S. consumption by quantity was *** percent in 2018.⁷² In the event of revocation, the small presence of nonsubject imports would not prevent subject imports from China from entering the U.S. market at levels and prices that would cause injury to the domestic injury if the subject orders were revoked.⁷³ Because the domestic industry supplies the majority of the U.S. market and subject imports would likely compete head-to-head with the domestic like product upon revocation, the increase in subject imports would likely take market share from the domestic industry as well as possibly from

⁶⁸ Moreover, domestic industry data submitted in these reviews do not reflect Westlake's trade and financial data. As previously noted, Westlake accounted for an estimated *** percent of total U.S. production in 2018. Its predecessor, Axiall, participated in the original investigations.

⁶⁹ CR/PR at Table I-3.

⁷⁰ CR/PR at Table I-5.

⁷¹ CR/PR at Table I-3.

⁷² CR/PR at Table I-5.

⁷³ IWC argues that imports from Japan are small in volume and high priced, and that imports from India are not of comparable quality to domestically produced calhypo. IWC's Response to the Notice of Institution at 3.

nonsubject imports. Consequently, the subject imports would likely have adverse effects distinct from any that may be caused by nonsubject imports. Accordingly, we conclude that if the orders were to be revoked, subject imports would likely have a significant impact on domestic producers of calhypo within a reasonably foreseeable time.

IV. Conclusion

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

Information obtained in these reviews

Background

On December 2, 2019, 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 reviews to determine whether revocation of the antidumping and countervailing duty orders on calcium hypochlorite (“calhypo”) from China would likely lead to the continuation or recurrence of material injury to a domestic industry.² All interested parties were requested to respond to this notice by submitting certain information requested by the Commission.³ ⁴ The following tabulation presents information relating to the background and schedule of this proceeding:

Effective date	Action
December 1, 2019	Notice of initiation by Commerce (84 FR 65968, December 2, 2019)
December 2, 2019	Notice of institution by Commission (84 FR 66002, December 2, 2019)
March 6, 2020	Commission’s vote on adequacy
April 7, 2020	Commerce’s results of its expedited reviews
June 17, 2020	Commission’s determinations and views

¹ 19 U.S.C. 1675(c).

² 84 FR 66002, December 2, 2019. In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of a five-year review of the subject antidumping and countervailing duty orders. 84 FR 65968, December 2, 2019. Pertinent Federal Register notices are referenced in app. A, and may be found at the Commission’s website (www.usitc.gov).

³ As part of their response to the notice of institution, interested parties were requested to provide company-specific information. That information is presented in app. B. Summary data compiled in prior proceedings 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 subject merchandise. Presented in app. D are the responses received from purchaser surveys transmitted to the purchasers identified in this proceeding.

Responses to the Commission’s notice of institution

Individual responses

The Commission received one submission in response to its notice of institution in the subject reviews. It was filed on behalf of Innovative Water Care, LLC d/b/a Sigura (“IWC”), a domestic producer of calhypo (referred to herein as “domestic interested party”).

A complete response to the Commission’s notice of institution requires that the responding interested party submit to the Commission all the information listed in the notice. Responding firms are given an opportunity to remedy and explain any deficiencies in their responses. A summary of the number of responses and estimates of coverage for each is shown in table I-1.

Table I-1

Calhypo: Summary of responses to the Commission’s notice of institution

Type of interested party	Completed responses	
	Number of firms	Coverage
Domestic:		
U.S. producer	1	***% ¹

¹ In its response to the notice of institution, the domestic interested party estimated that it accounted for this share of total U.S. production of calhypo during 2018. The estimate was calculated as the quantity of IWC’s reported production (***) pounds) divided by estimated total U.S. production (***) pounds). The domestic interested party reported that there is one other U.S. producer of calhypo, Westlake Chemical, and based its estimate on Westlake’s 2017 production capacity of *** pounds, derived from an industry report, as a proxy for its 2018 production. Domestic interested party’s response to the notice of institution, January 2, 2020, exh. 6.

Party comments on adequacy

The Commission received party comments on the adequacy of responses to the notice of institution and whether the Commission should conduct expedited or full reviews from IWC. IWC requests that the Commission conduct expedited reviews of the antidumping and countervailing duty orders on calhypo.⁵

The original investigations

The original investigations resulted from a petition filed on December 18, 2013 with Commerce and the Commission by Arch Chemicals, Inc. (“Arch”), a Lonza Company, Atlanta,

⁵ Domestic interested party’s comments on adequacy, February 13, 2020, p. 4.

Georgia.⁶ On December 15, 2014, Commerce determined that imports of calhypo from China were being sold at less than fair value (“LTFV”) and subsidized by the Government of China.⁷ The Commission determined on January 27, 2015 that the domestic industry was materially injured by reason of such imports of calhypo from China.⁸ On January 30, 2015, Commerce issued its antidumping and countervailing duty orders with the final weighted-average dumping margin of 210.52 percent and net subsidy rate of 65.85 percent.⁹

Previous and related investigations

Calhypo has been the subject of one prior antidumping duty investigation in the United States. On April 25, 1984, Olin Corp., of Stamford, Connecticut filed a petition with the Commission and Commerce, alleging that an industry in the United States was being materially injured or threatened with injury by reason of LFTV imports of calcium hypochlorite from Japan. In April 1985, the Commission made an affirmative final determination, and Commerce issued an antidumping duty order on calhypo from Japan.¹⁰ Commerce initiated a sunset review of the order on December 2, 1998, but no domestic interested party responded to the notice of initiation by the applicable deadline, and Commerce accordingly revoked the order, effective January 1, 2000.¹¹

A related product, chlorinated isocyanurates (“chlorinated isos”), also used primarily for swimming pool sanitation, has been the subject of several antidumping and countervailing duty investigations. On May 14, 2004, a petition was filed by Clearon Corp. (“Clearon”), South Charleston, West Virginia, and Occidental Chemical Corporation (“Oxy”), Dallas, Texas with Commerce and the Commission alleging that an industry in the United States was materially injured by reason of LFTV imports of chlorinated isos from China and Spain.¹² On June 17, 2005, the Commission transmitted its affirmative final determinations to the Secretary of Commerce, and Commerce subsequently issued antidumping duty orders on chlorinated isos from China

⁶ Calcium Hypochlorite from China, Inv. Nos. 701-TA-510 and 731-TA-1245 (Final), USITC Publication 4515, January 2015 (“Original publication”), p. I-1.

⁷ 79 FR 74065, December 15, 2014; and 79 FR 74064, December 15, 2014.

⁸ 80 FR 4312, January 27, 2015.

⁹ 80 FR 5085, January 30, 2015; and 80 FR 5082, January 30, 2015.

¹⁰ Calcium Hypochlorite from Japan, Inv. No. 731-TA-189 (Final), USITC Publication 1672, April 1985; and 50 FR 15470, April 18, 1985.

¹¹ 64 FR 9473, February 26, 1999.

¹² Chlorinated Isocyanurates from China and Spain, Inv. Nos. 731-TA-1082 and 1083 (Final), USITC Publication 3782, June 2005.

and Spain.¹³ In 2010, the Commission made affirmative determinations in its five-year reviews regarding imports of chlorinated isos from China and Spain and Commerce issued a continuation of the antidumping duty orders of chlorinated isos from China and Spain.¹⁴ In 2016, the Commission made affirmative determinations in its second five-year reviews regarding imports of chlorinated isos from China and Spain and Commerce issued a continuation of the antidumping duty orders of chlorinated isos from China and Spain.¹⁵

On August 29, 2013, Clearon and Oxy filed another petition alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of chlorinated isos from China and LFTV imports of chlorinated isos from Japan. On November 7, 2014, the Commission determined that an industry in the United States is threatened with material injury by reason of subsidized imports of chlorinated isos from China, and subsequently Commerce issued a countervailing duty order.¹⁶ The Commission further determined that an industry in the United States is not materially injured, threatened with material injury, and the establishment of an industry in the United States is not materially retarded by reason of LFTV imports of chlorinated isos from Japan.¹⁷ On October 1, 2019, the Commission instituted a five-year review to determine whether revocation of the countervailing duty order on chlorinated isos from China would be likely to lead to continuation or recurrence of material injury.¹⁸

Commerce's five-year reviews

Commerce is conducting expedited reviews with respect to the orders on imports of calhyppo from China and intends to issue the final results of these reviews based on the facts available not later than March 31, 2020.¹⁹ Commerce's Issues and Decision Memoranda, published concurrently with Commerce's final results, contains complete and up-to-date information regarding the background and history of the orders, including scope rulings, duty absorption, changed circumstances reviews, and anti-circumvention. A complete version of the Issues and Decision Memoranda can be accessed at <http://enforcement.trade.gov/frn/>. The

¹³ 70 FR 36205, June 22, 2005; and 70 FR 36561 and 70 FR 36562, June 24, 2005.

¹⁴ 75 FR 61772, October 6, 2010; and 75 FR 62764, October 13, 2010.

¹⁵ 81 FR 83871, November 22, 2016; and 81 FR 85927, November 29, 2016.

¹⁶ 79 FR 66404, November 7, 2014; and 79 FR 67424, November 13, 2014.

¹⁷ 79 FR 66404, November 7, 2014.

¹⁸ 84 FR 52132, October 1, 2019.

¹⁹ Letter from Alex Villanueva, Director, AD/CVD Operations, Enforcement and Compliance, U.S. Department of Commerce to Nannette Christ, Director of Investigations, January 22, 2020.

Memoranda will also include any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping and countervailing duty orders on imports of calhypo from China are noted in the sections titled “The original investigations” and “U.S. imports,” if applicable.

The product

Commerce’s scope

In the current proceeding, Commerce has defined the scope as follows:

Calcium hypochlorite, regardless of form (e.g., powder, tablet (compressed), crystalline (granular), or in liquid solution), whether or not blended with other materials, containing at least 10 percent available chlorine measured by actual weight. The scope also includes bleaching powder and hemibasic calcium hypochlorite.

Calcium hypochlorite has the general chemical formulation $\text{Ca}(\text{OCl})_2$, but may also be sold in a more dilute form as bleaching powder with the chemical formulation, $\text{Ca}(\text{OCl})_2 \cdot \text{CaCl}_2 \cdot \text{Ca}(\text{OH})_2 \cdot 2\text{H}_2\text{O}$ or hemibasic calcium hypochlorite with the chemical formula of $2\text{Ca}(\text{OCl})_2 \cdot \text{Ca}(\text{OH})_2$ or $\text{Ca}(\text{OCl})_2 \cdot 0.5\text{Ca}(\text{OH})_2$. Calcium hypochlorite has a Chemical Abstract Service (“CAS”) registry number of 7778-54-3, and a U.S. Environmental Protection Agency (“EPA”) Pesticide Code (“PC”) Number of 014701. The subject calcium hypochlorite has an International Maritime Dangerous Goods (“IMDG”) code of Class 5.1 UN 1748, 2880, or 2208 or Class 5.1/8 UN 3485, 3486, or 3487.

Calcium hypochlorite is currently classifiable under the subheading 2828.10.0000 of the Harmonized Tariff Schedule of the United States (“HTSUS”). The subheading covers commercial calcium hypochlorite and other calcium hypochlorite. When tableted or blended with other materials, calcium hypochlorite may be entered under other tariff classifications, such as 3808.94.5000 and 3808.99.9500, which cover disinfectants and similar products. While the HTSUS subheadings, the CAS registry number, the U.S. EPA PC number, and the IMDG codes are

provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.²⁰

U.S. tariff treatment

Calhypo is provided for in HTS subheading 2828.10.00, which covers “commercial calcium hypochlorite and other calcium hypochlorites.”²¹ Calhypo produced in China enters the U.S. market at a column 1-general duty rate of 2.4 percent ad valorem. Effective September 24, 2018, goods imported from China under 2828.10.00 are subject to an additional 10 percent ad valorem duty under Section 301 of the Trade Act of 1974.²² Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

Description and uses²³

Calhypo is a chemical compound used primarily as a sanitizing agent for swimming pools, spas, and municipal water treatment systems. It is typically sold as a white solid in powder, crystalline, or tablet form. The active ingredient is chlorine, which acts as a biocide, killing algae and other microbes. Calhypo can be sold as a pure product, with available chlorine concentrations of 65-80 percent, or as a product blended with other ingredients. Blended products typically include algaecides and/or flocculants to clarify water and are most commonly sold with available chlorine content of 45-60 percent. Included in the scope for these investigations are bleaching powder and hemibasic calcium hypochlorite, which are calhypo mixtures with lower percentages of available chlorine.

Calhypo’s effectiveness in sanitizing water is due to chlorine’s properties as a strong oxidizing agent, disrupting the cellular activity of a broad range of microorganisms. For these biocidal applications, calhypo is subject to regulation by the U.S. Environmental Protection Agency (EPA) under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA). EPA registrations apply to specific concentrations of active chlorine, and so a producer selling multiple concentrations requires multiple EPA registrations. In the original investigations, the petitioner stated that the EPA registration process was not a barrier to importing calhypo.

²⁰ 80 FR 5082 and 80 FR 5085, January 30, 2015.

²¹ HTS subheading 2828.10.00 covers only calcium hypochlorite.

²² 83 FR 47974, September 21, 2018. Subsequently, USTR excluded tariff for some products in the list, but tariff exclusion was not granted for Calhypo (see 84 FR 38717, August 7, 2019).

²³ Unless otherwise noted, this information is based on the original publication, pp. I-7-I-9.

Calhypo's oxidizing properties also make it effective in degrading non-living material, a desirable quality in applications such as pool and spa maintenance. However, oxidizers can enhance or cause the combustion of other materials, posing fire hazards in transportation and storage. Domestically, the transportation of calhypo is regulated by the U.S. Department of Transportation, which classifies products containing more than 39 percent chlorine content by weight as a hazardous material whose transportation requires special handling. The National Fire Protection Association (NFPA) classifies calhypo as a class I, II, or III oxidizer depending on chlorine concentration. NFPA's guidelines for storage at retail facilities include requirements for sprinklers and recommended maximum quantities.

The principal application of calhypo in the United States is in water treatment at commercial and residential pools and spas. Calhypo is used both to maintain regular chlorine levels and/or to deliver quick, remedial increases in chlorine. For pool and spa applications, calhypo typically contains 45, 68, or 75 percent available chlorine. Other applications as a biocide include disinfection of drinking water and wastewater clearing, laundry, sanitizing food and non-food contact surfaces, and washing fruits and vegetables. Calhypo also has applications other than as a biocide, including treating cyanide in wastewater.

Municipal purification of water for drinking, which requires precise control of calhypo levels, typically uses a feeder certified by NSF International (an independent standards and certification organization) for usage with a specific manufacturer's tablet. In the original investigation the petitioner acknowledged that for municipal governments that use calhypo for water purification, there are standards for the usage of a specific manufacturer's tablets to match a customer's purification equipment. However, the petitioner asserted that these standards do not limit the purchase of imported calhypo as some municipal customers view them as recommendations, not requirements. Furthermore, the petitioner stated that for wastewater treatment, the other major municipal calhypo application, there were no NSF standards and municipal customers could use any producer's calhypo tablets.

Calhypo is sold by manufacturers to end users, repackers, distributors, dealers, and other retailers. Manufacturers may also engage contract and toll packagers to formulate, tablet, or package products. In the retail market, repackers transfer bulk chemical into smaller packages, in some cases with a private brand, and may tablet calhypo and/or blend it with other components. Wholesale distributors market to commercial pools, retailers, and pool service companies. Both specialty stores and large discount stores sell to retail consumers.

Providers of pool maintenance services and commercial pools and spas themselves are also part of the retail distribution channel. In the institutional and industrial channel of

distribution, manufacturers may sell directly to end users, or product may move through distributors and repackers.

Manufacturing process²⁴

Calhypo is produced by combining chlorine and calcium hydroxide (lime). There are two main production processes: one using sodium, and the other using calcium. The sodium process yields higher available chlorine content and, with some variations, is used for all domestic product and the majority of imported Chinese product. In the sodium process, caustic soda (NaOH) and chlorine (Cl₂) are combined in a reactor, yielding sodium hypochlorite (NaOCl), sodium chloride (NaCl), and water. The sodium hypochlorite is then combined with hydrated lime and chlorine to create calcium hypochlorite paste (Ca(OCl)₂). Calcium hypochlorite paste is filtered to produce a cake, which is dried to a granular or powder form. This material is cooled, compacted, and crushed, then screened for size. Under- and over-sized material is recycled. The resulting product typically has an available chlorine content of approximately 68 percent and can be packaged for sale, blended with other materials, and/or tableted. Variations in the sodium process include approaches that yield calhypo with different percentages of available chlorine, both higher purity product (with 78 percent available chlorine) and lower purity products, including bleaching powder (approximately 35 percent chlorine).

In the calcium process, lime is blended with chlorine to produce hemibasic calcium hypochlorite crystals. After removal of calcium chloride by filtering or centrifuging, the crystals are dried to make a final product with approximately 60 percent available chloride content. The calcium process is believed to be used by some manufacturers in China, although not for export to the United States.

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 two firms, which accounted for all production of calhypo in the United States during 2013.²⁵

²⁴ Unless otherwise noted, this information is based on the original publication, pp. I-7-I-9.

²⁵ Original publication, pp. I-3-I-4.

In response to the Commission’s notice of institution in these current reviews, domestic interested parties provided a list of two known and currently operating U.S. producers of calhypo. The domestic interested party accounted for approximately *** percent of production of calhypo in the United States during 2018.²⁶

Recent developments

Table I-2 presents events in the U.S. industry since the original investigations.

Table I-2
Calhypo: Recent developments in the U.S. industry

Item	Firm	Event
Acquisition	Westlake Chemical	Acquired calhypo producer Axiall Corporation in August 2016.
Acquisition	IWC	Acquired water care operations, including calhypo production, from Arch/Lonza in February 2019.

Source: “Westlake Chemical Completes Acquisition of Axiall Corporation,” Westlake Chemical company website, August 31, 2016, <https://www.westlake.com/newsroom/article?reqid=1087&type=wl>; and Domestic interested party’s response to the notice of institution, January, 2, 2020, p. 1.

²⁶ Domestic interested party’s response to the notice of institution, January 2, 2020, exh. 1 and exh. 6.

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 reviews.²⁷ Table I-3 presents a compilation of the data submitted from all responding U.S. producers as well as trade and financial data submitted by U.S. producers in the original investigations.

Table I-3
Calhypo: Trade and financial data submitted by U.S. producers, 2011-13, and 2018

Item	2011	2012	2013	2018
Capacity (1,000 pounds)	***	***	***	***
Production (1,000 pounds)	***	***	***	***
Capacity utilization (percent)	***	***	***	***
U.S. shipments:				
Quantity (1,000 pounds)	***	***	***	***
Value (\$1,000)	***	***	***	***
Unit value (per pound)	***	***	***	***
Net sales (\$1,000)	***	***	***	***
COGS (\$1,000)	***	***	***	***
COGS/net sales (percent)	***	***	***	***
Gross profit (loss) (\$1,000)	***	***	***	***
SG&A expenses (\$1,000)	***	***	***	***
Operating income (loss) (\$1,000)	***	***	***	***
Operating income (loss)/net sales (percent)	***	***	***	***

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

Note: In its response to the notice of institution, the domestic interested party indicated that its U.S. shipments also consist of product shipped through a tolling arrangement (** pounds valued at \$**).

Source: For the years 2011-13, data are compiled using data submitted in the Commission's original investigations. See *app. C*. For the year 2018, data are compiled using data submitted by the domestic interested party. Domestic interested party's response to the notice of institution, January 2, 2020, pp. 4-5, exh. 6 and exh. 7; and Domestic interested party's supplemental response to the notice of institution, January 24, 2020, pp. 2-3.

²⁷ Individual company trade and financial data are presented in *app. B*.

Definitions of the domestic like product and domestic industry

The domestic like product is defined as the domestically produced product or products which are like, or in the absence of like, most similar in characteristics and uses with, the subject merchandise. The domestic industry is defined as the U.S. producers as a whole of the domestic like product, or those producers whose collective output of the domestic like product constitutes a major proportion of the total domestic production of the product. Under the related parties provision, the Commission may exclude a related party for purposes of its injury determination if “appropriate circumstances” exist.²⁸

In its original determinations, the Commission defined a single domestic like product consisting of all calhypo coextensive with Commerce’s scope. Also in its original determinations, the Commission defined the domestic industry to include the two U.S. producers of granular/powder calhypo: Arch and Axiall Corp. The Commission further concluded that independent or standalone tableters were not engaged in sufficient production-related activities to be included in the domestic industry definition, but that the domestic industry definition encompassed Arch’s integrated producer operations involved in producing the both granular/powder calhypo and calhypo tablets.²⁹

U.S. imports and apparent U.S. consumption

U.S. importers

During the final phase of the original investigations, the Commission received U.S. importer questionnaires from four firms, which accounted for approximately 15.8 percent of total U.S. imports of calhypo from China between January 2011 and June 2014.³⁰ Import data presented in the original investigations are based on official Commerce statistics.

Although the Commission did not receive responses from any respondent interested parties in these current reviews, in its response to the Commission’s notice of institution, the domestic interested party provided a list of nine potential U.S. importers of calhypo.³¹

²⁸ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

²⁹ 84 FR 66002, December 2, 2019.

³⁰ Original publication, p. IV-1.

³¹ Domestic interested party’s response to the notice of institution, January, 2, 2020, exh. 3.

U.S. imports

Table I-4 presents the quantity, value, and unit value of U.S. imports from China as well as the other top sources of U.S. imports (shown in descending order of 2018 imports by quantity).

Table I-4
Calhypo: U.S. imports, 2014-18

Item	2014	2015	2016	2017	2018
Quantity (1,000 pounds)					
China (subject)	4,054	29	—	—	—
India	1,694	4,743	2,575	2,371	2,036
All other sources	1	1	1	8	7
Total imports	5,794	4,774	2,576	2,379	2,043
Landed, duty-paid value (1,000 dollars)					
China (subject)	2,893	23	—	—	—
India	1,183	3,602	1,897	1,843	1,520
All other sources	16	8	9	6	18
Total imports	4,093	3,634	1,906	1,849	1,538
Unit value (dollars per pound)					
China (subject)	0.71	0.80	—	—	—
India	0.70	0.76	0.74	0.78	0.75
All other sources	27.26	6.51	13.65	0.80	2.51
Total imports	0.71	0.76	0.74	0.78	0.75

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

Source: Compiled from official Commerce statistics for HTS statistical reporting number 2828.10.0000.

Apparent U.S. consumption and market shares

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

Table I-5
Calhypo: U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares, 2011-13 and 2018

Item	2011	2012	2013	2018
Quantity (1,000 pounds)				
U.S. producers' U.S. shipments	***	***	***	***
U.S. imports from— China	9,481	10,626	13,247	—
All other sources	1,790	741	1,124	2,043
Total imports	11,271	11,367	14,372	2,043
Apparent U.S. consumption	***	***	***	***
Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***
U.S. imports from— China	6,532	7,798	9,233	—
All other sources	1,223	559	729	1,538
Total imports	7,754	8,357	9,961	1,538
Apparent U.S. consumption	***	***	***	***
Share of consumption based on quantity (percent)				
U.S. producer's share	***	***	***	***
U.S. imports from— China	***	***	***	***
All other sources	***	***	***	***
Total imports	***	***	***	***
Share of consumption based on value (percent)				
U.S. producer's share	***	***	***	***
U.S. imports from— China	***	***	***	***
All other sources	***	***	***	***
Total imports	***	***	***	***

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

Source: For the years 2011-13, data are compiled using data submitted in the Commission's original investigations. See app. C. For the year 2018, U.S. producers' U.S. shipments are compiled from the domestic interested party's response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting number 2828.10.0000.

The industry in China

During the final phase of the original investigations, the Commission received no useable responses. During the preliminary phase of the original investigation, the Commission received responses from two firms which accounted for approximately *** percent of overall production of calhypo in China and *** percent of all calhypo exports to the United States from China in 2012.³²

Although the Commission did not receive responses from any respondent interested parties in these five-year reviews, the domestic interested party provided a list of 27 possible producers of calhypo in China.³³

Since the original investigations, Chinese firm Haixing Eno obtained EPA registration in 2014.³⁴

³² Investigation Nos. 701-TA-510 and 731-TA-1245 (Final): Calcium Hypochlorite from China, Confidential Report, INV-MM-130, December 19, 2014, as revised in INV-MM-135, December 23, 2014 (“Original confidential report”), pp. VII-3-VII-5.

³³ Domestic interested party’s response to the notice of institution, January, 2, 2020, exh. 2.

³⁴ “Company Introduction,” Haixing Eno company website, <https://enochem.en.alibaba.com/> (accessed February 5, 2020).

Table I-6 presents export data for 2828.10, a category that includes calhypo and out-of-scope products, from China (by export destination in descending order of quantity for 2018).

Table I-6
Commercial calcium hypochlorite and other calcium hypochlorites: Exports from China, by destination, 2014-18

Item	Calendar year				
	2014	2015	2016	2017	2018
Quantity (1,000 pounds)					
Russia	57,968	40,243	55,558	62,501	68,936
Philippines	19,808	17,429	13,544	15,002	22,384
Thailand	75,291	53,516	63,652	50,102	18,331
Hong Kong	1,925	1,886	7,039	4,692	17,413
Brazil	9,082	11,908	10,633	14,504	12,717
Colombia	7,128	8,098	8,800	8,353	10,122
Vietnam	14,080	10,030	10,270	8,680	9,090
Australia	9,092	8,609	9,476	11,125	8,012
Belgium	1,190	4,839	5,788	5,107	6,662
Indonesia	5,038	2,335	5,178	2,842	5,952
All other	102,808	70,594	63,483	59,321	70,023
Total	303,410	229,486	255,450	242,230	249,640

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 2828.10.
Retrieved February 3, 2020.

Antidumping or countervailing duty orders in third-country markets

Based on available information, calhypo from China has not been subject to other antidumping or countervailing duty investigations outside the United States.

The global market

Table I-7 presents global exports of calhypo (by source in descending order of quantity for 2018). After China and the United States, Japan and India are the two largest nonsubject exporters, which is consistent with reports from the *** which noted that ***.³⁵

Table I-7

Commercial calcium hypochlorite and other calcium hypochlorites: Global exports by major sources, 2014-18

Item	Calendar year				
	2014	2015	2016	2017	2018
Value (1,000 dollars)					
China	123,883	95,555	104,944	98,752	113,903
United States	57,023	53,627	54,018	52,252	51,639
Japan	30,942	31,612	32,685	31,464	32,850
India	21,356	19,485	11,429	15,227	17,361
Belgium	11,825	10,952	14,402	14,592	15,840
South Africa	4,798	5,139	6,687	8,102	10,504
Hong Kong	94	443	3,668	4,988	4,605
Netherlands	2,505	2,394	3,112	3,116	3,588
Germany	2,769	2,836	2,803	2,462	3,333
France	1,271	1,311	1,311	1,080	2,491
All other	12,808	10,388	10,286	10,620	11,973
Total	269,273	233,734	245,346	242,656	267,088

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

Source: Global Trade Information Services, Inc., Global Trade Atlas, HTS subheading 2828.10.

³⁵ ***.

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
84 FR 65968 December 2, 2019	<i>Initiation of Five-Year (Sunset) Reviews</i>	https://www.govinfo.gov/content/pkg/FR-2019-12-02/pdf/2019-26015.pdf
84 FR 66002 December 2, 2019	<i>Calcium Hypochlorite From China: Institution of Five-Year Reviews</i>	https://www.govinfo.gov/content/pkg/FR-2019-12-02/pdf/2019-25939.pdf

APPENDIX B
COMPANY-SPECIFIC DATA

* * * * *

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Table C-1

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

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

	Report data					Period changes			
	Calendar year		January to June			Calendar year			Jan-June
	2011	2012	2013	2013	2014	2011-13	2011-12	2012-13	2013-14
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China.....	***	***	***	***	***	***	***	***	***
All others sources.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China.....	***	***	***	***	***	***	***	***	***
All others sources.....	***	***	***	***	***	***	***	***	***
Total imports.....	***	***	***	***	***	***	***	***	***
U.S. Imports from:									
China:									
Quantity.....	9,481	10,626	13,247	9,834	3,910	39.7	12.1	24.7	-60.2
Value.....	6,532	7,798	9,233	6,896	2,736	41.4	19.4	18.4	-60.3
Unit value.....	\$0.69	\$0.73	\$0.70	\$0.70	\$0.70	1.2	6.5	-5.0	-0.2
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity.....	1,790	741	1,124	378	859	-37.2	-58.6	51.8	127.1
Value.....	1,223	559	729	269	518	-40.4	-54.2	30.3	92.1
Unit value.....	\$0.68	\$0.76	\$0.65	\$0.71	\$0.60	-5.1	10.6	-14.2	-15.4
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Total imports:									
Quantity.....	11,271	11,367	14,372	10,212	4,769	27.5	0.9	26.4	-53.3
Value.....	7,754	8,357	9,961	7,165	3,254	28.5	7.8	19.2	-54.6
Unit value.....	\$0.69	\$0.74	\$0.69	\$0.70	\$0.68	0.7	6.9	-5.7	-2.8
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
U.S. producers':									
Powder form calhypo:									
Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***
Tablet form calhypo:									
Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***
U.S. shipments (combined) (fn2):									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Export shipments (combined) (fn3):									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Powder form calhypo:									
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour).....	***	***	***	***	***	***	***	***	***
Unit labor costs.....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Tablet form calhypo:									
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***	***	***	***
Production workers.....	***	***	***	***	***	***	***	***	***
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour).....	***	***	***	***	***	***	***	***	***
Unit labor costs (dollars per pound).....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Financial data (excluding Stellar except as noted): (fn4)									
Net Sales									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Cost of goods sold (COGS).....	***	***	***	***	***	***	***	***	***
Gross profit of (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures (fn4).....	***	***	***	***	***	***	***	***	***
Unit COGS.....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Unit SG&A expenses.....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
Unit operating income or (loss).....	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***	\$***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

Notes:

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

fn2.--Combines powder-form and tablet-form U.S. shipments of calhypo eliminating doublecounting. See part III for a discussion of the adjustments.

fn3.--Combines powder-form and tablet-form U.S. shipments of calhypo. Doublecounting is not an issue in compiling export data between levels.

fn4.--Reported financial data excluded the toll producer Stellar's results except reported capital expenditures which includes data reported by Stellar.

Source: Compiled from data submitted in response to Commission questionnaires and Customs data for HTS number 2828.10.000.

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

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

1. Have there been any significant changes in the supply and demand conditions for calcium hypochlorite that have occurred in the United States or in the market for calcium hypochlorite in China since January 1, 2014?

Purchaser	Changes that have occurred
***	No
***	No

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

Purchaser	Anticipated changes
***	No
***	No

