

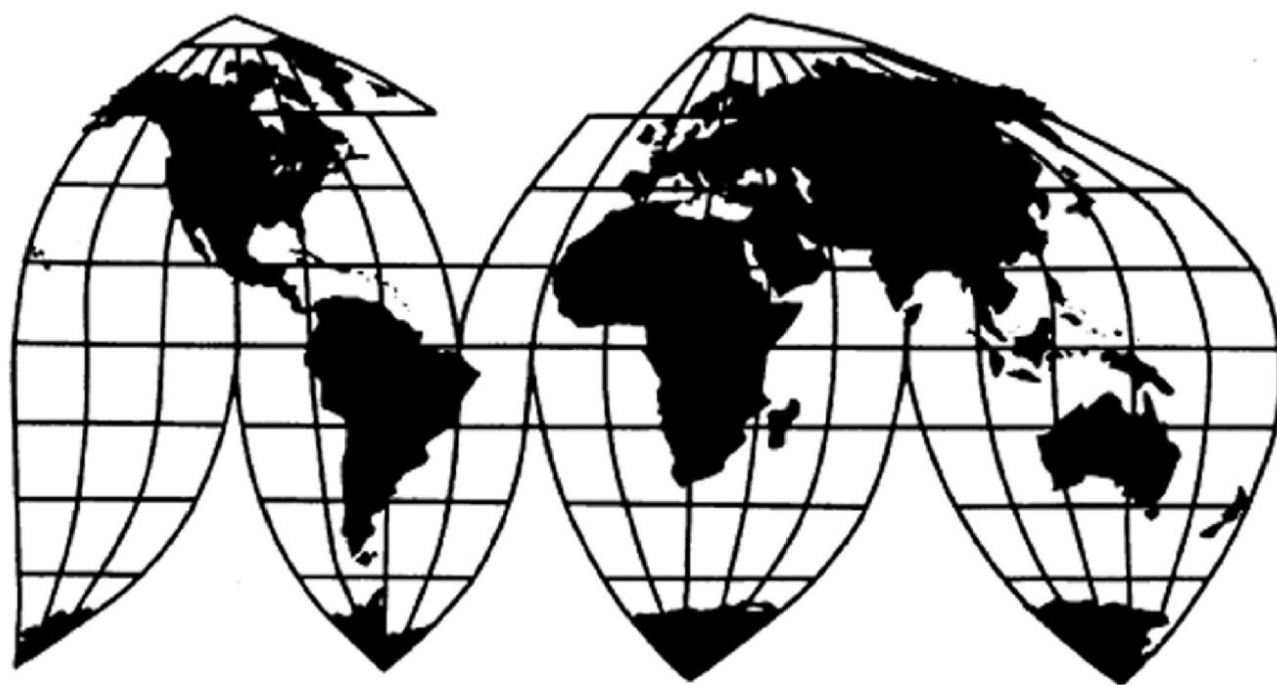
Difluoromethane (R-32) from China

Investigation No. 731-TA-1472 (Review)

Publication 5767

July 2026

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Note.—Information that would reveal confidential operations of individual firms may not be published.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. 731-TA-1472 (Review)

Difluoromethane (R-32) from China

DETERMINATION

On the basis of the record¹ developed in the subject five-year review, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that revocation of the antidumping duty order on difluoromethane (R-32) 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 February 2, 2026 (91 FR 4620, February 2, 2026) and determined on May 8, 2026 that it would conduct an expedited review (91 FR 30726, May 26, 2026).

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 antidumping duty order on difluoromethane (“R-32”) 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

A. The Prior Proceeding

In response to a petition filed on January 23, 2020, by Arkema, Inc. (“Arkema”), a domestic producer of R-32, the Commission determined in March 2021 that the domestic industry was materially injured by reason of less-than-fair-value (“LTFV”) imports of R-32 from China.¹ Subsequently, on March 11, 2021, the U.S. Department of Commerce (“Commerce”) issued an antidumping duty order on R-32 from China.²

B. The Current Review

On February 2, 2026, the Commission instituted this first five-year review.³ Arkema submitted a response to the notice of institution.⁴ The Commission did not receive a response to the notice of institution from any respondent interested party.⁵ On May 8, 2026, the Commission determined that the domestic interested party group response was adequate and that the respondent interested party group response was inadequate.⁶ Finding no other circumstances that would warrant conducting a full review, the Commission determined that it would conduct an expedited review pursuant to section 751(c)(3) of the Tariff Act (19 U.S.C. §

¹ *Difluoromethane (R-32) from China*, Inv. No. 731-TA-1472 (Final), USITC Pub. 5165 (Mar. 2021) (“*Original Determination*”) at 3.

² *Difluoromethane (R-32) From the People's Republic of China: Antidumping Duty Order*, 86 Fed. Reg. 13886 (Mar. 11, 2021).

³ See *Notice of Institution*.

⁴ See generally Arkema’s Response to Notice of Institution, EDIS Doc. No. 874356 (Mar. 4, 2026) (“Arkema’s Resp.”).

⁵ See Confidential Report, INV-YY-057 (Apr. 27, 2026) (“CR”); *Difluoromethane (R-32) from China*, Inv. No. 731-TA-1472 (Review), USITC Pub. 5767 (July 2026) (“PR”) (Collectively “CR/PR”) at B.3.

⁶ *Explanation of Commission Determination on Adequacy*, EDIS Doc. No. 881958 (May 12, 2026) (“*Adequacy Explanation*”).

1675 (c)(3)(b)).⁷ Arkema filed comments with the Commission pursuant to 19 C.F.R. § 207.61(d) arguing that the Commission should reach an affirmative determination.⁸

U.S. industry data in this review are based on information supplied by Arkema in its response to the notice of institution, and information from the original investigation.⁹ Arkema indicated that it was the *** U.S. producer of R-32 during the period of review (“POR”).¹⁰ U.S. import data and related information are based on Commerce’s official import statistics and information from the original investigation.¹¹ Foreign industry data and related information are based on information from the original investigation, information submitted by Arkema in this expedited review, and publicly available information compiled by the Commission.¹²

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.”¹³ 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.”¹⁴ 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.¹⁵

⁷ *Adequacy Explanation*.

⁸ See generally Arkema’s Final Comments, EDIS Doc. No. 886761 (Jul. 1, 2026).

⁹ See CR/PR at 1.11.

¹⁰ CR/PR at 1.11; Arkema’s Resp. at Exh. 1.

¹¹ See CR/PR at 1.13, Table 1.5 Note. Compiled from official Commerce statistics for HTS statistical reporting numbers 2903.39.2035 and 2903.42.1000. On January 27, 2022, HTS statistical reporting number 2903.39.2035 was transferred to the new statistical reporting number 2903.42.1000. Data for 2020 and 2021 may be overstated as HTS statistical reporting number 2903.39.2035 may contain products outside the scope of this review. *Id.* at Table 1.5 Note.

¹² See CR/PR at 1.16-1.20.

¹³ 19 U.S.C. § 1677(4)(A).

¹⁴ 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).

¹⁵ 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

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

The merchandise covered by this *Order* is difluoromethane (R-32), or its chemical equivalent, regardless of form, type or purity level. R-32 has the Chemical Abstracts Service (CAS) registry number of 75-10-5 and the chemical formula CH₂F₂. R-32 is also referred to as difluoromethane, HFC-32, FC-32, Freon-32, methylene difluoride, methylene fluoride, carbon fluoride hydride, halocarbon R32, fluorocarbon R32, and UN 3252. Subject merchandise also includes R-32 and unpurified R-32 that are processed in a third country or the United States, including, but not limited to, purifying or any other processing that would not otherwise remove the merchandise from the scope of this *Order* if performed in the country of manufacture of the in-scope R-32. R-32 that has been blended with products other than pentafluoroethane (R-125) is included within this scope if such blends contain 85% or more by volume on an actual percentage basis of R-32. In addition, R-32 that has been blended with any amount of R-125 is included within this scope if such blends contain more than 52% by volume on an actual percentage basis of R-32. Whether R-32 is blended with R-125 or other products, only the R-32 component of the mixture is covered by the scope of this *Order*. The scope also includes R-32 that is commingled with R-32 from sources not subject to this *Order*. Only the subject component of such commingled products is covered by the scope of this *Order*.

Excluded from the current scope is merchandise covered by the scope of the antidumping order on hydrofluorocarbon blends from the People's Republic of China. See *Hydrofluorocarbon Blends from the People's Republic of China: Antidumping Duty Order*, 81 FR 55436 (August 19, 2016) (*Blends Order*).

R-32 is classified under Harmonized Tariff Schedule of the United States (HTSUS) subheading 2903.39.2035. Other merchandise

(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).

subject to the current scope, including the above-mentioned blends that are outside the scope of the *Blends Order*, may be classified under 2903.39.2045 and 3824.78.0020. The HTSUS subheadings and CAS registry number are provided for convenience and customs purposes. The written description of the scope of the *Order* is dispositive.¹⁶

R-32 is a colorless, odorless, gaseous chemical that is primarily used as a component in hydrofluorocarbon (“HFC”) refrigerant blends for use in both residential and commercial refrigerant and cooling applications.¹⁷ R-32 is a flammable gas that is designated as a hazardous material by Occupational Safety and Health Administration (“OSHA”) regulation, and is produced to Air Conditioning, Heating, and Refrigeration Institute (“AHRI”) 700 standards in both the United States and China.¹⁸

In its original determination, the Commission defined a single domestic like product consisting of R-32, coextensive with Commerce’s scope.¹⁹ Arkema argues that the Commission should again adopt that definition in this review.²⁰ The record does not contain any new information suggesting that the pertinent product characteristics and uses of R-32 have changed since the original investigation.²¹ Accordingly, we again define a single domestic like product consisting of R-32, coextensive with Commerce’s scope.

B. Domestic Industry

Section 771(4)(A) of the Tariff Act defines the relevant industry as the domestic “producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product.”²² 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-

¹⁶ *Difluoromethane (R-32) From the People's Republic of China: Final Results of the Expedited First Sunset Review of the Antidumping Duty Order*, 91 Fed. Reg. 31700 (May 28, 2026) and *accompanying Issues and Decision Memorandum*, A-570-121 (May 26, 2026) at 2.

¹⁷ *Original Determination*, USITC Pub. 5165 at 7.

¹⁸ *Original Determination*, USITC Pub. 5165 at 7.

¹⁹ *Original Determination*, USITC Pub. 5165 at 8.

²⁰ Arkema’s Resp. at 4.

²¹ See CR/PR at 1.7-1.10.

²² 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.

produced, captively consumed, or sold in the domestic merchant market.

In the original determination, the Commission defined the domestic industry as the sole U.S. producer of R-32, Arkema, in accordance with the domestic like product definition.²³ Arkema argues that the Commission should again adopt that definition in this review.²⁴ According to the information available, Arkema remains the sole U.S. producer of R-32. Accordingly, consistent with our definition of the domestic like product and in the absence of party argument to the contrary, we define the domestic industry as the sole domestic producer of R-32, Arkema.

III. Revocation of the Antidumping Duty 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.”²⁵ The Uruguay Round Agreements Act Statement of Administrative Action (“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.”²⁶ Thus, the likelihood standard is prospective in nature.²⁷ The U.S. Court of International Trade has found that “likely,” as used in the five-year

²³ *Original Determination*, USITC Pub. 5165 at 8.

²⁴ Arkema’s Resp. at 4.

²⁵ 19 U.S.C. § 1675a(a).

²⁶ 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.

²⁷ 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.

review provisions of the Act, means “probable,” and the Commission applies that standard in five-year reviews.²⁸

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.”²⁹ 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.”³⁰

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.”³¹ 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).³² The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not

²⁸ 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’”).

²⁹ 19 U.S.C. § 1675a(a)(5).

³⁰ 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.*

³¹ 19 U.S.C. § 1675a(a)(1).

³² 19 U.S.C. § 1675a(a)(1). Commerce has made no duty absorption finding concerning R-32 from China in the current review. *Difluoromethane (R-32) From the People’s Republic of China: Final Results of the Expedited First Sunset Review of the Antidumping Duty Order*, 91 Fed. Reg. 31,700 (May 28, 2026) and accompanying Issues and Decision Memorandum at 3.

necessarily give decisive guidance with respect to the Commission's determination.³³

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.³⁴ 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.³⁵

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.³⁶

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.³⁷ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are

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

³⁴ 19 U.S.C. § 1675a(a)(2).

³⁵ 19 U.S.C. § 1675a(a)(2)(A-D).

³⁶ 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.

³⁷ 19 U.S.C. § 1675a(a)(4).

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.³⁸

As noted, the Commission did not receive a response to the notice of institution from any respondent party that imported the subject merchandise from China.³⁹ The record, therefore, contains limited new information with respect to the R-32 industry in China. Accordingly, for our determination, we rely as appropriate on the facts available from the original investigation, and the limited new information on the record in this review.

B. Conditions of Competition and the Business Cycle

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to consider all relevant economic factors “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”⁴⁰ We have considered our findings regarding the conditions of competition in the original investigation.⁴¹ The following conditions of competition inform our determinations in this review.⁴²

i. Demand

The information available in this review indicates that demand for R-32 is driven by demand for the downstream products that use R-32, principally HFC blends used in a variety of residential and commercial refrigerant and cooling applications.⁴³ Other uses for R-32 include in silicon wafer manufacturing and as a stand-alone refrigerant.⁴⁴

Apparent U.S. consumption of R-32 was *** percent higher in 2025, at *** short tons,

³⁸ 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.

³⁹ See CR/PR at B.1.

⁴⁰ 19 U.S.C. § 1675a(a)(4).

⁴¹ *Original Determination*, USITC Pub. 5165 at 13-21.

⁴² In the original investigation, the Commission considered Arkema’s significant captive consumption of R-32 as a condition of competition. *Original Determination*, USITC Pub. 5165 at 15. While the record indicates that Arkema continues to internally consume a portion of the R-32 it produces, the record for this expedited five-year review has limited information about its internal consumption.

⁴³ CR/PR at 1.8.

⁴⁴ CR/PR at 1.8

than in 2019, the last full year of the original period of investigation (“POI”), at *** short tons.⁴⁵ Arkema argues that U.S. consumption of R-32 is projected to continue increasing through 2028.⁴⁶ According to Arkema, multiple countries are phasing out use of HFCs with high greenhouse warming potential pursuant to the Kigali Amendment to the Montreal Protocol, which has increased demand for HFCs with lower greenhouse warming potential such as R-32.^{47 48}

ii. Supply

Arkema was the largest source of R-32 in the U.S. market in 2025, accounting for *** percent of apparent U.S. consumption that year.⁴⁹ Arkema did not identify any major developments in the domestic R-32 industry since the imposition of the order.⁵⁰

Subject imports were not present in the U.S. market in 2025.⁵¹

Nonsubject imports were the second largest source of R-32 in the U.S. market in 2025, accounting for *** percent of apparent U.S. consumption that year.⁵² The largest sources of nonsubject imports during the period of review (“POR”) were India, the United Arab Emirates, and Thailand.⁵³

iii. Substitutability and Other Conditions

In the original investigation, the Commission determined that domestically produced R-32 and subject imports were produced to the same standards and thus highly substitutable, as confirmed by market participant questionnaire responses.⁵⁴ The Commission also determined based on questionnaire responses that price was an important purchasing factor.⁵⁵

The record of this review contains no new information indicating that the degree of

⁴⁵ CR/PR at Table 1.6.

⁴⁶ Arkema’s Resp. at 19-20.

⁴⁷ Arkema’s Resp. at 19-20. Arkema has provided *** in support of this claim. *Id.* at Exh. 4.

⁴⁸ Purchaser questionnaires were sent to five firms Arkema indicated were the largest R-32 purchasers but none of them responded. CR/PR at D.1.

⁴⁹ CR/PR at Table 1.6. The domestic industry’s share of apparent U.S. consumption was greater in 2025 than in 2019, but less than its shares in 2017 and 2018. *Id.*

⁵⁰ CR/PR at 1.11.

⁵¹ CR/PR at Table 1.6. In 2019, subject imports accounted for *** percent of apparent U.S. consumption. *Id.*

⁵² CR/PR at Table 1.6. Nonsubject imports were not appreciably present during the original POI. *Id.*

⁵³ CR/PR at Table 1.5.

⁵⁴ *Original Determination*, USITC Pub. 5165 at 19-20.

⁵⁵ *Original Determination*, USITC Pub. 5165 at 20.

substitutability between the domestic like product and subject imports or the importance of price has changed since the original investigation. Arkema contends that domestically produced R-32 and subject imports remain highly substitutable and that price continues to be a very important factor.⁵⁶ Based on the limited information on the record, we continue to find that domestically produced R-32 and subject imports are highly substitutable and that price is an important purchasing factor for R-32.

Effective February 24, 2026, R-32 originating in China is subject to an additional 10 percent *ad valorem* duty under section 122 of the Trade Act of 1974.^{57 58}

C. Likely Volume of Subject Imports

We have considered our findings regarding the volume of subject imports in the original investigation.⁵⁹ In the original investigation, the Commission found that the volume of subject imports and the increase in volume was significant, both in absolute terms and relative to consumption in the United States.⁶⁰ In the current review, the information indicates that the orders have had a restraining effect on subject import volumes; as discussed above, by 2025, subject imports were no longer present in the U.S. market.⁶¹ Given that the volume and market share of subject imports increased significantly over the original POI, we find that the limited information on the record indicates that, in the absence of the order, subject producers would likely resume exporting significant and increasing volumes of R-32 to the United States as they did during the original POI.⁶²

While the record in this five-year review contains limited information on the subject foreign industry, the available information indicates that the subject industry is very large with

⁵⁶ Arkema's Resp. at 13-15.

⁵⁷ CR/PR at 1.6. In addition, between February 4, 2025, and February 20, 2026, R-32 originating in China was subject to duties under the International Emergency Economic Powers Act ("IEEPA"). See *id.* at 1.6-1.7 (containing additional details of these duties).

⁵⁸ Although R-32 has not itself been subject to duties on derivative steel articles under section 232 of the Trade Expansion Act of 1962, as amended, from August 18, 2025, to April 6, 2026, the steel used in containers for transporting R-32 was subject to such duties. CR/PR at 1.5.

⁵⁹ *Original Determination*, USITC Pub. 5165 at 22; Confidential Original Views, EDIS Doc. 87780 at 22-23.

⁶⁰ *Original Determination*, USITC Pub. 5165 at 22.

⁶¹ CR/PR at Table 1.6. Subject imports declined from 46,959 short tons in 2020 to 28,973 short tons in 2021, 3,384 short tons in 2022, 2,017 short tons in 2023, 577 short tons in 2024, and none in 2025. *Id.* at Table 1.5. Arkema contends that, although subject import volumes have declined, they would likely be high should the order be revoked due to the subject industry's high capacity and export orientation and declining R-32 demand in China. Arkema's Resp. at 7-12.

⁶² See CR/PR at Table 1.6.

significant export volumes. Arkema has identified 21 possible producers of R-32 in China.⁶³ The record indicates that since the original investigation, the R-32 industry in China has added significant production capacity, increasing by *** percent between 2019 and 2023 to account for *** percent of global R-32 production capacity.⁶⁴ Additionally, the subject industry's production capacity in 2023 was *** short tons, more than *** times apparent U.S. consumption in 2025, and Global Trade Atlas ("GTA") data⁶⁵ indicate that in 2025, China exported 70,334 short tons of R-32, or *** times apparent U.S. consumption that year.⁶⁶

The available information indicates that the United States would be an attractive market that subject producers would likely target if the order were revoked. Commerce found that exporters of HFC blends from Malaysia and Turkey circumvented antidumping duty orders by blending China-origin HFCs containing R-32 in Malaysia and Turkey, then exporting the blended product to the United States.⁶⁷ These circumvention efforts demonstrate the continued attractiveness of the U.S. market. In addition, the existence of antidumping duty orders on subject merchandise in other countries will likely make the U.S. market attractive, if the order were revoked. Specifically, R-32 from China became subject to antidumping duties in India in December 2021, which remain in effect.⁶⁸

Thus, the subject producers have the means and the incentive to export subject merchandise to the U.S. market in significant volumes within a reasonably foreseeable time if the order were revoked. In light of these considerations, including the significant and increasing volume of subject imports during the original investigation, the subject industry's substantial capacity and large volume of exports, and the attractiveness of the U.S. market to subject producers, we find that the volume of subject imports would likely be significant, both in absolute terms and relative to consumption in the United States, if the orders were revoked.

⁶³ CR/PR at 1.16; Arkema's Resp. at Exh. 1.

⁶⁴ CR/PR at 1.16; Arkema's Resp. at Exh. 4 (S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023).

⁶⁵ GTA data is derived from official export statistics for HS subheading 2903.42. Currently, R-32 is the only chemical classified under that subheading. CR/PR at Table 1.7 Note.

⁶⁶ CR/PR at 1.16, Tables 1.6, 1.7. Arkema alleges that, should the order be revoked, the subject industry could redirect these exports to third countries back to the United States. Arkema's Resp. at 9.

⁶⁷ CR/PR at Table 1.5, Note.

⁶⁸ CR/PR at 1.18. On August 19, 2020, Argentina imposed antidumping duties on Chinese mixtures containing R-32, but those duties were subsequently revoked on August 18, 2025. *Id.*

D. Likely Price Effects of Subject Imports

We have considered our findings regarding the price effects of subject imports in the original investigation.⁶⁹ As an initial matter, the Commission found that the record indicated a high degree of substitutability between subject imports from China and the domestic like product, and that price was an important factor in purchasing decisions for R-32.⁷⁰

In the original investigation, the Commission found that underselling by subject imports was significant and that lower-priced imports took market share and sales from the domestic industry.⁷¹ In particular, the Commission observed that the subject import purchase costs were lower than domestic R-32 prices in all quarters from the second quarter of 2019 through the end of the POI (third quarter 2020), which corresponded to the portion of the POI in which subject imports increased the most and gained the greatest market share (2019 and interim 2020).⁷² Purchaser questionnaire responses further indicated that subject imports were priced below the domestic like product and that a substantial share of purchases of subject imports were based primarily on lower prices.⁷³

Additionally, the Commission found that, in light of the fact that the increase in the domestic industry's unit sales value was not enough to cover the increase in unit COGS during a period of significantly increasing apparent U.S. consumption, subject imports prevented price increases, which otherwise would have occurred to a significant degree.⁷⁴ Thus, the Commission found that subject imports had significant effects on prices for the domestic like product.⁷⁵

The record in this expedited five-year review does not contain recent product-specific pricing information. Based on the available information, including the high degree of 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 significantly undersell the domestic like product, as occurred in the original investigation. Absent the discipline of the order, the likely significant volumes of low-priced subject imports would likely take sales and market share from the domestic industry and/or force the domestic industry to lower prices or restrain any needed price increases, thereby depressing or

⁶⁹ *Original Determination*, USITC Pub. 5165 at 22-29; Conf. *Original Determination* at 23-29.

⁷⁰ *Original Determination*, USITC Pub. 5165 at 23.

⁷¹ *Original Determination*, USITC Pub. 5165 at 26.

⁷² *Original Determination*, USITC Pub. 5165 at 23-25.

⁷³ *Original Determination*, USITC Pub. 5165 at 26.

⁷⁴ *Original Determination*, USITC Pub. 5165 at 27-28.

⁷⁵ *Original Determination*, USITC Pub. 5165 at 28-29.

suppressing prices for the domestic like product. Consequently, we find that if the order were to be revoked, subject imports would likely have significant price effects.

E. Likely Impact of Subject Imports⁷⁶

We have considered our findings regarding the impact of subject imports in the original investigation.⁷⁷ The record in this five-year review contains limited information concerning the domestic industry's performance since the original POI.⁷⁸

In considering whether the domestic industry is in a vulnerable condition, we observe that the domestic industry's performance in 2025 was strong and an improvement when compared to 2019, the final year investigated in the original investigation. The industry's capacity, at *** short tons, was lower than in the original investigation, but its production and capacity utilization, at *** short tons and *** percent, respectively, were higher.⁷⁹ Its U.S. shipments by quantity, value, and unit value, at *** short tons, \$***, and \$*** per short ton, respectively, were also higher than during the original POI.⁸⁰ In 2025, the industry's ratio of cost of goods sold ("COGS") to net sales, at *** percent, was lower than during the original POI.⁸¹ Its net sales value, operating income, and gross profits were all higher than during the original POI, at \$***, \$***, and \$***, as was its ratio of operating income to net sales, at *** percent.⁸² The limited information on the record is insufficient for us to make a finding on whether the domestic industry is vulnerable to the continuation or recurrence of material injury in the event of revocation of the order.

However, as discussed above, the subject producers and exporters have the ability and incentive to significantly increase exports to the U.S. market, where they would likely undersell the domestic like product to a significant degree if the order were revoked. The likely significant and increasing volume of lower priced subject imports would cause the domestic industry to

⁷⁶ In its expedited review of the antidumping duty order on China, Commerce determined that revocation of the antidumping duty order would likely result in the continuation or recurrence of dumping with margins of up to 221.06 percent. *Difluoromethane (R-32) From the People's Republic of China: Final Results of the Expedited First Sunset Review of the Antidumping Duty Order*, 91 Fed. Reg. 31700 (May 28, 2026).

⁷⁷ *Original Determination*, USITC Pub. 5165 at 29-33; Conf. Original Determination at 29-34.

⁷⁸ We note that domestic industry data from the original investigation are comparable to the data in the current review; in both proceedings, Arkema was the only known U.S. producer. CR/PR at 1.11; Arkema's Resp. at Exh. 1; *Original Determination*, USITC Pub. 5165 at 3.

⁷⁹ CR/PR at Table 1.4.

⁸⁰ CR/PR at Table 1.4.

⁸¹ CR/PR at Table 1.4.

⁸² CR/PR at Table 1.4.

lose market share and sales and/or lower prices or forgo needed price increases to maintain their sales, thereby depressing or suppressing prices for the domestic like product to a significant degree. The domestic industry would thus experience negative effects to its capacity, production, capacity utilization, shipments, employment, and financial performance. Consequently, we conclude that if the order were revoked, subject imports 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 so as to not attribute likely injury from other factors to subject imports. Although nonsubject imports' share of the R-32 market was substantial,⁸³ their presence in the U.S. market would not preclude subject imports from taking market share from the domestic industry, given the attractiveness of the U.S. market and that producers in China accounted for *** percent of global R-32 production capacity as of 2023.⁸⁴ Consequently, we find that any future effects of nonsubject imports would be distinct from the likely effects attributable to subject imports, and that nonsubject imports would not prevent subject imports from having a significant impact on the domestic industry.

In sum, we conclude that, if the order were revoked, subject imports of R-32 from China would likely have a significant impact on the domestic industry within a reasonably foreseeable time.

IV. Conclusion

For the above reasons, we determine that revocation of the antidumping duty order on R-32 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.

⁸³ CR/PR at Table 1.6. Nonsubject imports' market share increased from none to *** percent since the original investigation, essentially taking the place of subject imports, which exited the U.S. market since imposition of the order. *See id.*

⁸⁴ CR/PR at 1.16; Arkema's Resp. at Exh. 4 (S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023).

Information obtained in this review

Background

On February 2, 2026, the U.S. International Trade Commission (“Commission”) gave notice, pursuant to section 751(c) of the Tariff Act of 1930, as amended (“the Act”),¹ that it had instituted a review to determine whether revocation of the antidumping duty order on difluoromethane (“R-32”) from China would be likely lead to 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 Table 1.1 presents information relating to the background and schedule of this proceeding:

Table 1.1 R-32: Information relating to the background and schedule of this proceeding

Effective date	Action
February 2, 2026	Notice of initiation by Commerce (91 FR 4499, February 2, 2026)
February 2, 2026	Notice of institution by Commission (91 FR 4620, February 2, 2026)
May 8, 2026	Commission’s vote on adequacy
May 26, 2026	Commerce’s results of its expedited review
July 31, 2026	Commission’s determination and views

The original investigation

The original investigation resulted from a petition filed on January 23, 2020 with Commerce and the Commission by Arkema, Inc., King of Prussia, Pennsylvania.⁵ On January 11, 2021, Commerce determined that imports of R-32 from China were being, or were likely to be,

¹ 19 U.S.C. 1675(c).

² 91 FR 4620, February 2, 2026. In accordance with section 751(c) of the Act, the U.S. Department of Commerce (“Commerce”) published a notice of initiation of a five-year review of the subject antidumping duty order. 91 FR 4499, February 2, 2026. 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 investigation 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.

⁵ Difluoromethane (R-32) from China, Inv. No. 731-TA-1472 (Final), USITC Publication 5165, March 2021 (“Original publication”), p. 1.1.

sold at less than fair value (“LTFV”).⁶ The Commission determined on March 2, 2021 that the domestic industry was materially injured by reason of LTFV imports of R-32 from China.⁷ On March 8, 2021, Commerce issued its antidumping duty order with final weighted-average dumping margins ranging from 161.49 to 221.06 percent for R-32 from China.⁸

Previous and related investigations

The Commission has conducted a number of previous import relief investigations on R-32 and/or similar merchandise, as presented in table 1.2.

Table 1.2 R-32: Previous and related Commission proceedings and current status

Date	Number	Product	Country	ITC original determination	Current status
2013	701-TA-509	1,1,1,2-Tetrafluoroethane (R-134a)	China	Negative	—
2013	731-TA-1244	1,1,1,2-Tetrafluoroethane (R-134a)	China	Negative	—
2015	731-TA-1279	Hydrofluorocarbon Blends and Components	China	Affirmative	Order continued after first review, 2022
2016	731-TA-1313	1,1,1,2 - Tetrafluoroethane (R-134a)	China	Affirmative	Order continued after first review, 2022
2021	701-TA-662	Pentafluoroethane (R-125)	China	Affirmative	Order in place, 2022
2021	731-TA-1554	Pentafluoroethane (R-125)	China	Affirmative	Order in place, 2022

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

Note: The scope of Hydrofluorocarbon Blends and Components from China, Inv. No. 731-TA-1279 (Final), covers blends of hydrofluorocarbon (“HFC”) that include R-32. 87 FR 11044, February 28, 2022.

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

⁶ 86 FR 5136, January 19, 2021.

⁷ 86 FR 13400, March 8, 2021.

⁸ 86 FR 13886, March 11, 2021.

Commerce's five-year review

Commerce announced that it would conduct expedited review with respect to the order on imports of R-32 from China with the intent of issuing the final results of this review based on the facts available not later than June 2, 2026.⁹ 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 antircumvention, as well as any decisions that may have been pending at the issuance of this report. Any foreign producers/exporters that are not currently subject to the antidumping duty order on imports of R-32 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 merchandise covered by this order is difluoromethane (R-32), or its chemical equivalent, regardless of form, type or purity level. R-32 has the Chemical Abstracts Service (CAS) registry number of 75-10-5 and the chemical formula CH₂ F₂. R-32 is also referred to as difluoromethane, HFC-32, FC-32, Freon-32, methylene difluoride, methylene fluoride, carbon fluoride hydride, halocarbon R32, fluorocarbon R32, and UN 3252. Subject merchandise also includes R-32 and unpurified R-32 that are processed in a third country or the United States, including, but not limited to, purifying or any other processing that would not otherwise remove the merchandise from the scope of this order if performed in the country of manufacture of the in-scope R-32. R-32 that has been blended with products other than pentafluoroethane (R-125) is included within

⁹ Letter from Eric Greynolds, Office Director, Office IV, AD/CVD Operations, U.S. Department of Commerce to Nannette Christ, Director of Investigations, March 27, 2026.

this scope if such blends contain 85% or more by volume on an actual percentage basis of R-32. In addition, R-32 that has been blended with any amount of R-125 is included within this scope if such blends contain more than 52% by volume on an actual percentage basis of R-32. Whether R-32 is blended with R-125 or other products, only the R-32 component of the mixture is covered by the scope of this order. The scope also includes R-32 that is commingled with R-32 from sources not subject to this order. Only the subject component of such commingled products is covered by the scope of this order.

Excluded from the current scope is merchandise covered by the scope of the antidumping order on hydrofluorocarbon blends from the People's Republic of China. See Hydrofluorocarbon Blends from the People's Republic of China: Antidumping Duty Order, 81 FR 55436 (August 19, 2016) (the Blends Order).¹⁰

U.S. tariff treatment

R-32 is currently imported under Harmonized Tariff Schedule of the United States (“HTS”) statistical reporting number 2903.42.1000.¹¹ The general rate of duty for HTS subheading 2903.42.10 is 3.7 percent ad valorem.¹² Merchandise that is an in-scope blend containing R-32 that falls outside of the scope of the Blends Order may be imported under various statistical reporting numbers that have various rates (e.g., statistical reporting number 3827.65.0000).¹³ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

¹⁰ 86 FR 13886, March 11, 2021.

¹¹ In the original investigation, R-32 was imported under statistical reporting number 2903.39.2035, which consisted of R-32, pentafluoroethane, and 1,1,1-trifluoroethane. USITC, HTS (2020) Revision 28, USITC Publication 5143, November 2020, p. 29.6. Effective January 27, 2022, difluoromethane became the sole chemical under subheading 2903.42.10. Pres. Proc 10326; 86 F.R. 73593. Modifications to the Harmonized Tariff Schedule of the United States under Section 1206 of the Omnibus Trade and Competitiveness Act of 1988 and for Other Purposes, December 2021, USITC Publication 5240, p. 32, https://www.usitc.gov/publications/tariff_affairs/pub5240.pdf.

¹² USITC, HTS (2026) Revision 4, USITC Publication 5711, February 2026, p. 29.7.

¹³ In the original investigation, hydrofluorocarbon blends may have been imported under statistical reporting numbers 2903.39.2045 and 3824.78.0020. USITC, HTS (2020) Revision 28, USITC Publication 5143, November 2020, p. 29.6. Effective January 27, 2022, subheading 2903.39.20 was deleted and

(continued...)

Below is a summary of additional tariffs applied to R-32 from China. Table 1.3 provides a summary of additional tariffs in place effective April 7, 2026. Historical information is summarized beneath the table.

Table 1.3 R-32: Additional tariffs on imports originating in China effective April 7, 2026

Duty rates in percent ad valorem

Additional tariff	2903.42.1000
Section 122	10
Section 232	NA
Section 301	NA
Total additional ad valorem rate	10

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

Note: For the purposes of this table, “not applicable” is shown as “NA.” This applies when the subject product from that subject country is not subject to the tariff for any reason.

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

Section 232 tariffs

R-32 originating in China is currently not subject to any duties on derivative steel articles under section 232 of the Trade Expansion Act of 1962, as amended. From August 18, 2025, to April 6, 2026, any steel content of the R-32 product (R-32 is packaged in steel containers) would have been subject to section 232 duties.¹⁴

replaced with various new subheadings containing halogenated derivatives of hydrocarbons under subheadings 2903.41 through 2903.69. Subheading 3824.78.00 was deleted and various subheadings were added, including new heading 3827 through subheading 3827.90.90, which are comprised of mixtures containing halogenated derivatives of methane, ethane or propane, not elsewhere specified or included. Pres. Proc 10326; 86 F.R. 73593. Modifications to the Harmonized Tariff Schedule of the United States under Section 1206 of the Omnibus Trade and Competitiveness Act of 1988 and for Other Purposes, December 2021, USITC Publication 5240, pp. 32 to 34; 52 to 57.

https://www.usitc.gov/publications/tariff_affairs/pub5240.pdf.

¹⁴ Effective August 18, 2025, R-32 originating in China became subject to an additional 50 percent ad valorem duty under section 232 of the Trade Expansion Act of 1962, as amended. The duty was applied to the declared value of the steel content of the product. Effective April 6, 2026, the additional section 232 duty on R-32 originating in China was removed. 90 FR 9817, February 18, 2025; 90 FR 40326, August 19, 2025. See also HTS heading 9903.81.91 and U.S. note 16(n) to subchapter 3 of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2026) Revision 4, USITC Publication 5711, February 2026, pp. 99.3.70 and 99.3.450. The White House, Strengthening Actions Taken to Adjust Imports of Aluminum, Steel, and Copper into the United States, April 2, 2026, <https://www.whitehouse.gov/presidential-actions/2026/04/strengthening-actions-taken-to-adjust-imports-of-aluminum-steel-and-copper-into-the-united-states/>.

Section 301 tariffs

R-32 originating in China is not subject to an additional duty under section 301 of the Trade Act of 1974.¹⁵

Section 122 tariffs

Effective February 24, 2026, R-32 originating in China is subject to an additional 10 percent ad valorem duty under section 122 of the Trade Act of 1974.¹⁶

Tariffs initiated under the International Emergency Economic Powers Act (“IEEPA”)¹⁷

Effective February 20, 2026, all tariffs initiated under IEEPA were terminated. Below is a history of the IEEPA tariffs relevant to R-32 originating in China that were in effect until February 20, 2026.¹⁸

Country specific IEEPA tariffs

Effective February 4, 2025, R-32 originating in China was subject to an additional 10 percent ad valorem duty under IEEPA, and on March 4, 2025, that additional duty increased to 20 percent ad valorem. However, effective November 10, 2025, that additional duty was reduced back to

¹⁵ See also U.S. notes 20 and 31 to subchapter 3 of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2026) Revision 4, Publication 5711, February 2026, pp. 99.3.90 to 99.3.328, 99.3.340 to 99.3.348.

¹⁶ Section 122 authorizes the President to impose a temporary import surcharge for a period not exceeding 150 days unless such period is extended by an Act of the Congress. In the case of R-32, from February 24, 2026, to April 6, 2026, the section 122 duty applied to the non-steel content. The section 122 duty did not apply to the steel content of the product because that content was subject to section 232 tariffs. 91 FR 9339, February 25, 2026. See also HTS heading 9903.03.03 and 9903.03.06 and U.S. note 2(aa)(ii) to subchapter 3 of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2026) Revision 4, Publication 5711, February 2026, pp. 99.3.51, 99.3.58, 99.3.59, and 99.3.411.

¹⁷ Multiple tariffs were enacted under the authority of the International Emergency Economic Powers Act (“IEEPA”), including tariffs that applied to countries that may not be subject in this proceeding. Tariffs specific to Canada, China, and Mexico were initiated in February 2025. Tariffs initiated in April 2025 under IEEPA were applied globally. Tariffs specific to Brazil were initiated in July 2025. Tariffs specific to India were initiated in August 2025 and terminated effective February 7, 2026. Tariffs under IEEPA were amended over time. All tariffs initiated under IEEPA were terminated effective February 20, 2026. 91 FR 9437, February 25, 2026.

¹⁸ 91 FR 9437, February 25, 2026.

10 percent.¹⁹ Effective February 20, 2026, tariffs initiated under IEEPA and the associated duties imposed under IEEPA were terminated.²⁰

Tariffs initiated in April 2025 under IEEPA

Effective April 5, 2025, R-32 originating in China was subject to an additional 10 percent ad valorem duty as part of tariffs initiated in April 2025 under IEEPA. That duty rose to 84 percent ad valorem effective April 9, 2025, and rose again to 125 percent effective April 10, 2025. However, effective May 14, 2025, the duty rate for tariffs initiated in April 2025 under IEEPA on products originating in China was reduced to 10 percent.²¹ Effective February 20, 2026, tariffs initiated under IEEPA and the associated duties imposed under IEEPA were terminated.²²

Description and uses²³

R-32 is a hydrofluorocarbon (“HFC”), a colorless, odorless, gaseous chemical that is primarily used as a component in HFC blends. Once blended, these gases are used for various residential and commercial refrigerant and cooling applications. Apart from “R-32”, difluoromethane can be referred to with many other names including HFC-32, FC-32, Freon-32, methylene difluoride, methylene fluoride, carbon fluoride hydride, halocarbon R32, fluorocarbon R32, and UN 3252. Compared to other HFC components, R-32 has a low global warming potential (“GWP”), no ozone depletion potential, and is a low-to-medium temperature refrigerant. R-32 is classified as a Category 1- Flammable Gas and is considered a hazardous

¹⁹ 90 FR 9121, February 7, 2025; 90 FR 11426, March 6, 2025; 90 FR 11463, March 7, 2025; 90 FR 50725, November 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 (2026) Revision 4, USITC Publication 5711, February 2026, pp. 99.3.3 to 99.3.4, 99.3.374, and 99.3.375.

²⁰ 91 FR 9437, February 25, 2026.

²¹ For China, the duty as part of tariffs initiated in April 2025 under IEEPA is in addition to the 10 percent ad valorem duty under IEEPA that went into effect on November 10, 2025. From August 18, 2025, onward, any steel content of the product would not have been subject to tariffs initiated in April 2025 under IEEPA because that steel content was subject to section 232 tariffs. 90 FR 15041, April 7, 2025; 90 FR 15509, April 14, 2025; 90 FR 15625, April 15, 2025; 90 FR 21831, May 21, 2025; 90 FR 39305, August 14, 2025; 90 FR 40326, August 19, 2025; 90 FR 50729, November 7, 2025. See also HTS headings 9903.01.25 and 9903.01.63 and U.S. note 2(v) to subchapter 3 of chapter 99 and related tariff provisions for this duty treatment. USITC, HTS (2026) Revision 4, USITC Publication 5711, February 2026, pp. 99.3.4 to 99.3.41.

²² 91 FR 9437, February 25, 2026.

²³ Unless otherwise noted, this information is based on Original publication, pp. 1.9 to 1.12.

material by the OSHA Hazard Communication Standard. R-32 is produced to the same well-established standards published by the Air Conditioning, Heating, and Refrigeration Institute, (AHRI). In both the United States and China, R-32 is produced to meet the AHRI standard known as AHRI 700. This standard takes into account general characteristics, vapor phase contaminants, and liquid phase contaminants for single-component fluorocarbon refrigerants (e.g. R-32) as well as blends containing R-32. Similarly, all R-32 conforms to the same chemical formula (CH_2F_2) and chemical composition as defined by the Chemical Abstracts Service (CAS) number 75-10-5.

The principal end use for R-32 is as a component in the production of HFC blends, whether internally consumed or sold to third parties. These HFC blends are used in a variety of residential and commercial refrigerant and cooling applications. Other uses for R-32 include semiconductor silicon wafer manufacturing for etching silicon and as a stand-alone refrigerant. R-32 in its stand-alone application requires a high-purity R-32 and makes up a limited percentage of the market.

HFCs, which include R-32, have gained favor over time compared to another class of refrigerants known as hydrochlorofluorocarbons ("HCFCs"). HCFCs are known to be ozone depleting and began being phased out of production in accordance with the Montreal Protocol.²⁴ HFCs, such as R-32, are intended to be a replacement for HCFCs, such as R-22,²⁵ in residential and commercial refrigerant and cooling applications. Compared to HCFCs, HFC blends, such as those containing R-32, do not cause ozone depletion and present a more environmentally friendly option. In 2023 HFCs represented *** percent of global consumption of fluorocarbons, while HCFCs were *** percent.²⁶ Reflecting the effort of phase out HCFCs, the global share of HCFCs shrank from *** percent in 2012 to *** percent of total fluorocarbon market in 2023.²⁷ By 2030, all HCFC production in developed countries will be banned.²⁸

²⁴ S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, p. 26 regarding the phase out of HCFCs with the Montreal Protocol and zero ozone depletion potential of HFCs; [Montreal Protocol Fact Sheet](#), accessed April 23, 2026.

²⁵ The chemical name for R-22 is chlorodifluoromethane. PubChem, "[Chlorodifluoromethane](#)," accessed April 23, 2026.

²⁶ The remaining percentages were for chlorofluorocarbons (CFCs) (*** percent) and hydrofluoroolefins (HFOs) (*** percent). S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, p. 7.

²⁷ Original publication; S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, p. 7.

²⁸ Developing countries have until 2040; for a list, see United Nations, Vienna Convention, Montreal Protocol, "Treaties," accessed April 16, 2026 from <https://ozone.unep.org/treaties/montreal-protocol/meetings/first-meeting-parties/decisions/decision-i12e-clarification-terms-and-definitions-developing-countries>. The Montreal Protocol restrictions only refer to newly produced product that is
(continued...)

Although HFCs are not ozone depleting like HCFCs, they emit greenhouse gases and have been slated for phasedown.²⁹

The American Innovation and Manufacturing (AIM) Act was signed on December 27, 2020, and it will lead to phasedown of HFCs^{30 31} in alignment with the Kigali amendment to the Montreal Protocol.³² Specifically, the sum of all regulated substances on the list of the AIM Act will decrease in production and consumption by 40 percent by 2028, 70 percent by 2033, 80 percent by 2035, and 85 percent by 2036 and later.³³

The AIM Act permits allowances and trading.³⁴ Each individual chemical substance on the list has a specific GWP value.³⁵ This value is a common measure that allows for the

not used as feedstock for other chemicals. S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, pp. 26 to 27. U.S. Environmental Protection Agency, "[Phaseout of Class II Ozone-Depleting Substances](#)," April 1, 2026 (last update).

²⁹ U.S. Environmental Protection Agency, "[Recent International Developments Under the Montreal Protocol](#)" February 3, 2026 (last update); U.S. Environmental Protection Agency, "[Reducing HFC Use](#)," January 9, 2026 (last update); S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, p. 29.

³⁰ Doniger, David and Alex Hillbrand, "HFC Phasedown Marks Top Climate Win of 116th Congress," NRDC, December 20, 2020 and updated December 27, 2020 <https://www.nrdc.org/experts/david-doniger/hfc-phasedown-marks-top-climate-win-116th-congress>; S. 2754, 116th Congress, §6(b)(3), available at <https://www.congress.gov/bill/116th-congress/senate-bill/2754/text>.

³¹ In the original proceeding, Arkema expected that as the other HFCs were being phased down in distinct steps, those products that contained lower global warming potential products for R-32 would have increased consumption and demand before each step down in 2024 and 2029. Original publication, p. 1.11.

³² The R-32 and R-22 are two of the included substances on the AIM Act and Kigali amendment lists. Original publication, p. 1.11.

³³ As the Act stipulates that *all* chemical substances on the regulated list will in total be decreased by 85 percent by 2036, the individual chemical substances themselves may have different percentages of decrease. Recycled product is excluded. S. 2754, 116th Congress, §6(b)(3), available at <https://www.congress.gov/bill/116th-congress/senate-bill/2754/text>.

³⁴ An allowance is a limited authorization for the production or consumption of a regulated substance under the Act and does not constitute a property right. S. 2754, 116th Congress, §6(b)(3), available at <https://www.congress.gov/bill/116th-congress/senate-bill/2754/text>; In one example of a trading program, a company may be permitted one ton of sulfur dioxide emissions into the air. It can trade that allowance amount in an allowance market for its benefit. Environmental Protection Agency, "How Do Emissions Trading Programs Work?" September 30, 2025 (last update), <https://www.epa.gov/emissions-trading-resources/how-do-emissions-trading-programs-work>.

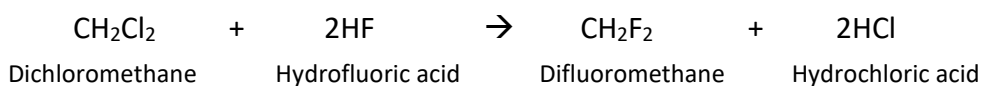
³⁵ Specifically, it is a measure of how much energy the emissions of 1 ton of a gas will absorb over a given period of time, relative to the emissions of 1 ton of carbon dioxide (CO₂). 100 years is usually the time period used. GWP is a common unit of measure across gases can be added to get a national inventory. It allows for the comparison of emissions reduction opportunities across sectors and gases.

(continued...)

comparison of different gases, as different gases have different Earth warming effects. The common measure also allows for the comparison of emissions reduction opportunities across sectors and gases. The higher the GWP number, the more the gas warms the Earth.³⁶ In a trading and allowance system in which all the individual GWPs are added together and the lowering of total GWPs is the goal, those individual chemical substances with a lower GWP number may fare better in the market than those with a higher GWP number.³⁷ Under the AIM Act, the details of the trading programs were delegated to the Environmental Protection Agency.³⁸

Manufacturing process³⁹

The reaction used in the manufacturing process that produces R-32 is known as hydrofluorination. It is the reaction of a chlorinated starting compound with hydrofluoric acid. The yield from this reaction is a carbon-hydrogen-fluorine compound and hydrochloric acid. For the specific production of R-32, dichloromethane (CH₂Cl₂; also known as methylene chloride) reacts with chlorine gas and hydrofluoric acid. This results in crude R-32 and liquid waste. The waste is incinerated, and the crude R-32 is then purified. The purification process results in the production of food grade hydrochloric acid. The purified R-32 then goes through a drying process and is stored in containers for shipping to customers. The chemical formula summarizing the reaction is as follows:



According to AHRI standards, R-32 may have a maximum level of contaminants of 1.5 percent by weight. Contaminants in this system are non-compressible gases such as nitrogen. Other contaminants include moisture and oxygenated air. The downstream effect on an air

EPA, “Understanding Global Warming Potentials,” December 29, 2025 (last update), <https://www.epa.gov/ghgemissions/understanding-global-warming-potentials>.

³⁶ In the AIM Act, the GWP over 100 years is called the exchange value.

³⁷ The GWP range of all individual chemical substances listed in the Act is 53 to 14,800 GWP (100 years) (AIM Act terms it “exchange rate”). R-32 has a GWP, 100 Years value of 675 and is thus lower than some of the other chemical substances on the list. S. 2754, 116th Congress, §6(b)(3), available at <https://www.congress.gov/bill/116th-congress/senate-bill/2754/text>.

³⁸ S. 2754, 116th Congress, §6(b)(3), available at <https://www.congress.gov/bill/116th-congress/senate-bill/2754/text>.

³⁹ Unless otherwise noted, this information is based on Original publication, pp. 1.12 to 1.13.

conditioner in a system with contaminants is lack of efficiency, through excessive energy usage or excessive heating of the air conditioner unit.

A common HFC blend that contains R-32 is R-410a, which is a gas that is used in almost all modern air conditioning units. It is comprised by volume of 50 percent R-32 and 50 percent R-125.⁴⁰ There is no substitute for R-32 that can be used to produce R-410a. There are many downstream HFC blends used in refrigerants that do not contain any R-32. However, these blends are not as widely used as R-410a. These components also do not share common manufacturing facilities. The equipment at Arkema's Calvert City, Kentucky plant used to manufacture R-32 cannot produce other components, such as R-143a (1,1,1-trifluoroethane), R-125 (pentafluoroethane) and R-134a (1,1,1,2-tetrafluoroethane).⁴¹

The industry in the United States

U.S. producers

During the final phase of the original investigation, the Commission received U.S. producer questionnaires from one firm, which was believed to account for all known production of R-32 in the United States during 2019.

In response to the Commission's notice of institution in this current review, domestic interested parties identified *** known and currently operating U.S. producers of R-32, accounting for all production of R-32 in the United States during 2025.⁴²

Recent developments

There were no major developments in the R-32 industry since the imposition of the order identified by interested parties in this proceeding.⁴³

⁴⁰ R-125 is pentafluoroethane. PubChem, "[Pentafluoroethane](#)," accessed April 23, 2026.

⁴¹ PubChem, "[1,1,1-trifluoroethane](#)," accessed April 23, 2026; PubChem, "[1,1,1,2-tetrafluoroethane](#)," accessed April 23, 2026.

⁴² Domestic interested party's response to the notice of institution, March 4, 2026, exh. 1.

⁴³ Arkema has sought avenues of selling chemicals with lower GWPs than HFCs since the original investigation, including a commercial arrangement with Honeywell International to sell hydrofluoroolefins (HFO) blends globally. The HFO blends are lower global warming potential refrigerants. Arkema, "Arkema Strengthens Its Range of Lower Global Warming Potential Refrigerant Solutions," Press Release, May 19, 2025, <https://www.arkema.com/usa/en/media/news/global/investorrelations/2025/20250519-lower-global-warming-potential-refrigerant/>

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 1.4 presents a compilation of the trade and financial data submitted from responding U.S. producers in the original investigation.

Table 1.4 R-32: Trade and financial data submitted by U.S. producers, by period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton; ratio in percent

Item	Measure	2017	2018	2019	2025
Capacity	Quantity	***	***	***	***
Production	Quantity	***	***	***	***
Capacity utilization	Ratio	***	***	***	***
U.S. shipments	Quantity	***	***	***	***
U.S. shipments	Value	***	***	***	***
U.S. shipments	Unit value	***	***	***	***
Net sales	Value	***	***	***	***
COGS	Value	***	***	***	***
COGS to net sales	Ratio	***	***	***	***
Gross profit or (loss)	Value	***	***	***	***
SG&A expenses	Value	***	***	***	***
Operating income or (loss)	Value	***	***	***	***
Operating income or (loss) to net sales	Ratio	***	***	***	***

Source: For the years 2017, 2018, and 2019, data are compiled using data submitted in the Commission's original investigations. For the year 2025, data are compiled using data submitted by domestic interested party. Domestic interested party's response to the notice of institution, March 4, 2026, exh. 1.

Note: ***. For years 2017, 2018, and 2019, Arkema confirmed that internal consumption values reflected a *** and *** reflected the ***. From Arkema's perspective, both valuations *** reflected relevant fair market value ("FMV"). Difluoromethane (R-32) from China (Final), Confidential Report, INV-TT-015, February 1, 2021 ("Original confidential report"), pp. 6.9 and 6.10. For year 2025, Arkema confirms that *** was reported at FMV and ***, as done in the original investigation. Domestic interested party's cure response, April 17, 2026.

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.⁴⁴

In its original determination, the Commission defined a single domestic like product consisting of difluoromethane (R-32), coextensive with Commerce’s scope of investigation. In its original determination, the Commission defined the domestic industry as all domestic producers of difluoromethane (R-32).⁴⁵

U.S. importers

During the final phase of the original investigation, the Commission received U.S. importer questionnaires from 13 firms, which accounted for approximately *** percent of total U.S. imports of R-32 from China during 2019 under HTS statistical reporting number 2903.39.2035, a broad category that includes non-scope merchandise.⁴⁶ Import data presented in the original investigation are based on questionnaire responses.

Although the Commission did not receive responses from any respondent interested parties in this current review, in its response to the Commission’s notice of institution, the domestic interested party provided a list of 29 potential U.S. importers of R-32.⁴⁷

U.S. imports

Table 1.5 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 2025 imports by quantity).

⁴⁴ Section 771(4)(B) of the Tariff Act of 1930, 19 U.S.C. § 1677(4)(B).

⁴⁵ 91 FR 4620, February 2, 2026.

⁴⁶ Original confidential report, p. 4.1.

⁴⁷ Domestic interested party’s response to the notice of institution, March 4, 2026, exh. 1.

Table 1.5 R-32: U.S. imports, by source and period

Quantity in short tons; value in 1,000 dollars; unit value in dollars per short ton

U.S. imports from	Measure	2020	2021	2022	2023	2024	2025
China	Quantity	46,959	28,973	3,384	2,017	577	—
India	Quantity	3,649	2,241	2,246	3,403	3,047	6,751
United Arab Emirates	Quantity	—	—	—	7,757	3,710	4,611
Thailand	Quantity	—	—	—	—	—	1,316
All other sources	Quantity	2,461	577	0	9	0	19
Nonsubject sources	Quantity	6,110	2,818	2,246	11,168	6,758	12,697
All import sources	Quantity	53,068	31,791	5,630	13,185	7,334	12,697
China	Value	104,462	94,704	7,887	4,294	1,301	—
India	Value	12,919	8,068	16,229	19,333	13,795	48,042
United Arab Emirates	Value	—	—	—	26,201	14,697	27,695
Thailand	Value	—	—	—	—	—	8,521
All other sources	Value	14,347	4,606	10	73	10	113
Nonsubject sources	Value	27,266	12,674	16,239	45,607	28,502	84,372
All import sources	Value	131,728	107,378	24,125	49,901	29,804	84,372
China	Unit value	2,225	3,269	2,331	2,130	2,257	—
India	Unit value	3,541	3,601	7,225	5,682	4,527	7,116
United Arab Emirates	Unit value	—	—	—	3,378	3,961	6,007
Thailand	Unit value	—	—	—	—	—	—
All other sources	Unit value	5,830	7,976	46,067	8,192	34,913	5,964
Nonsubject sources	Unit value	4,463	4,498	7,229	4,084	4,218	6,645
All import sources	Unit value	2,482	3,378	4,285	3,785	4,064	6,645

Source: Compiled from official Commerce statistics for HTS statistical reporting numbers 2903.39.2035 and 2903.42.1000, accessed March 20, 2026. Data for 2020 and 2021 may be overstated as HTS statistical reporting number 2903.39.2035 may contain products outside the scope of this review. HTS statistical reporting number 2903.39.2035 was transferred to the new statistical reporting number 2903.42.1000, effective on January 27, 2022. USITC, Modifications to the Harmonized Tariff Schedule of the United States under Section 1206 of the Omnibus Trade and Competitiveness Act of 1988 and for Other Purposes, Publication 5240, December 2021.

Note: Commerce has found that exporters of HFC blends from Malaysia and Turkey have circumvented antidumping duty orders by blending China-origin HFCs in Malaysia and Turkey, then exporting the blended product to the United States. These HFC blends include R-32 as a component. The domestic interested party states that subject imports may be understated and nonsubject imports from Thailand may be overstated in 2024 and 2025 as a result of circumvention. 89 FR 4984, June 12, 2024; 89 FR 56855, July 11, 2024; 89 FR 56859, July 11, 2024. Domestic interested party's response to the notice of institution, March 4, 2026, p. 10.

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

Apparent U.S. consumption and market shares

Table 1.6 presents data on U.S. producers' U.S. shipments, U.S. imports, apparent U.S. consumption, and market shares.

Table 1.6 R-32: Apparent U.S. consumption and market shares, by source and period

Quantity in short tons; value in 1,000 dollars; shares in percent

Source	Measure	2017	2018	2019	2025
U.S. producers	Quantity	***	***	***	***
China	Quantity	***	***	***	—
Nonsubject sources	Quantity	***	***	***	12,697
All import sources	Quantity	***	***	***	12,697
Apparent U.S. consumption	Quantity	***	***	***	***
U.S. producers	Value	***	***	***	***
China	Value	***	***	***	—
Nonsubject sources	Value	***	***	***	84,372
All import sources	Value	***	***	***	84,372
Apparent U.S. consumption	Value	***	***	***	***
U.S. producers	Share of quantity	***	***	***	***
China	Share of quantity	***	***	***	***
Nonsubject sources	Share of quantity	***	***	***	***
All import sources	Share of quantity	***	***	***	***
U.S. producers	Share of value	***	***	***	***
China	Share of value	***	***	***	***
Nonsubject sources	Share of value	***	***	***	***
All import sources	Share of value	***	***	***	***

Source: For the years 2017, 2018, and 2019, data are compiled using data submitted in the Commission's original investigation. For the year 2025, U.S. producers' U.S. shipments are compiled from the domestic interested party's response to the Commission's notice of institution and U.S. imports are compiled using official Commerce statistics under HTS statistical reporting numbers 2903.39.2035 and 2903.42.1000, accessed March 20, 2026.

Note: ***. For years 2017, 2018, and 2019, Arkema confirmed that internal consumption values reflected a *** and *** reflected the ***. From Arkema's perspective, both valuations *** reflected relevant fair market value ("FMV"). Original confidential report, pp. 6.9 and 6.10. For year 2025, Arkema confirms that *** was reported at FMV and ***, as done in the original investigation. Domestic interested party's cure response, April 17, 2026.

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

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

The industry in China

Producers in China

During the final phase of the original investigation, the Commission received foreign producer/exporter questionnaires from ten firms: six producers of R-32 and four exporters/resellers of R-32. These firms' exports to the United States accounted for *** percent of reported U.S. imports of merchandise under HTS statistical reporting number 2903.39.2035, a broad category that includes non-scope merchandise. According to estimates requested of the responding Chinese producers, the production of R-32 in China reported in questionnaires accounted for approximately *** percent of overall production of R-32 in China in 2019.⁴⁸

Although the Commission did not receive responses from any respondent interested parties in this five-year review, the domestic interested party provided a list of 21 possible producers of R-32 in China.⁴⁹

Recent developments

There were no major developments in the China industry since the imposition of the orders identified by interested parties in the proceeding. The average annual capacity of China increased since the original investigations, from *** short tons in 2019 to *** short tons in 2023, corresponding to an increase of *** percent to *** percent of the share of total global capacity.⁵⁰

Exports

Table 1.7 presents export data for HS subheading 2903.42, a category that includes difluoromethane (R-32) only, from China (by export destination in descending order of quantity for 2025).

⁴⁸ Original confidential staff report, p. 7.3.

⁴⁹ Domestic interested party's response to the notice of institution, March 4, 2026, exh. 1.

⁵⁰ Original publication, p. 7.11; S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, pp. 54, 137 to 138, 162 to 163, 165, 184.

Table 1.7 R-32: Quantity of exports from China, by destination and period

Quantity in short tons

Destination market	2022	2023	2024	2025
Thailand	12,403	10,778	13,966	15,116
Brazil	4,542	2,754	8,139	9,352
Netherlands	5,640	4,504	6,065	8,499
Indonesia	2,157	2,096	3,862	4,142
Turkey	4,162	2,367	2,956	3,768
Mexico	2,922	754	3,339	3,682
Malaysia	4,576	2,915	4,523	3,536
Japan	3,753	3,629	4,293	3,163
South Korea	1,264	824	1,117	2,335
Pakistan	744	682	1,380	2,193
All other markets	23,597	23,481	13,213	14,544
All markets	65,765	54,778	62,853	70,334

Source: Official exports statistics under HS subheading 2903.42 reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed April 8, 2026.

Note: Because of rounding, figures may not add to totals shown. Effective January 27, 2022, a new subheading was added that specified difluoromethane (R-32) as the sole chemical under the 8-digit subheading 2903.42.10, and there are currently no additional chemicals at the 6-digit level under HS 2903.42. The previous classification for Chinese exports from the original investigations included multiple chemicals in addition to difluoromethane (R-32). No data are presented before 2022 since the previous classification is not comparable to the current classification.

Third-country trade actions

On September 28, 2020, India initiated an antidumping duty investigation into Chinese R-32.⁵¹ In September 2021, the Government of India published its final findings with recommendations of imposition of anti-dumping duties, and in December 2021, definitive duties were imposed.⁵² On September 24, 2025, the first sunset review was initiated and is ongoing.⁵³ On February 26, 2019, Argentina initiated an antidumping duty investigation into Chinese mixtures containing difluoromethane and pentafluoroethane.⁵⁴ No measures were imposed in the preliminary phase; however, as a result of the final phase, antidumping duties were imposed on August 19, 2020.⁵⁵ On August 18, 2025, those antidumping duties were terminated.⁵⁶

⁵¹ Government of India, Directorate General of Trade Remedies, “Anti-Dumping Investigation Concerning Imports of Hydrofluorocarbons (HFC) Component R-32 Originated in or Exported from China PR,” accessed April 9, 2026, <https://www.dgtr.gov.in/en/anti-dumping-cases/anti-dumping-investigation-concerning-imports-hydrofluorocarbons-hfc-component-r>

⁵² Duties recommended ranged from \$1,172 per metric ton to \$1,520 depending on the specific company. Government of India, Directorate General of Trade Remedies, “Notification: Final Findings, Case No. AD(OI)-28/2020,” September 23, 2021, <https://dgtr.gov.in/sites/default/files/2024-08/HFC%20NCV.pdf>; Domestic interested party’s response to the notice of institution, March 4, 2026, exh. 5.

⁵³ Government of India, Directorate General of Trade Remedies, “Initiation Notification: Case No. AD (SSR)-11/2025,” https://dgtr.gov.in/sites/default/files/2025-09/Initiation%20Notification_Eng_HFC-32%2024.09.2025.pdf; Government of India, Directorate General of Trade Remedies, “Anti-Dumping Investigation Concerning Imports of Hydrofluorocarbons (HFC) Component R-32 Originated in or Exported from China PR,” accessed April 9, 2026, <https://www.dgtr.gov.in/en/anti-dumping-cases/anti-dumping-investigation-concerning-imports-hydrofluorocarbons-hfc-component-r>

⁵⁴ The scope additionally covered mixtures containing tetrafluoroethane and pentafluoroethane covered under HS 3824.78. World Trade Organization, Trade Remedies Data Portal, accessed April 16, 2026 from <https://trade-remedies.wto.org/en/antidumping/investigations/measures/arg-ex-2018-61016579-apn-dgdmpytchi-2>.

⁵⁵ The duties imposed were 23 percent ad valorem for mixtures containing difluoromethane and pentafluoroethane and 7 percent ad valorem for mixtures containing tetrafluoroethane and pentafluoroethane. World Trade Organization, Trade Remedies Data Portal, accessed April 16, 2026 from <https://trade-remedies.wto.org/en/antidumping/investigations/measures/arg-ex-2018-61016579-apn-dgdmpytchi-2>.

⁵⁶ Global Trade Alert, “Argentina: Termination of definitive antidumping duty on imports of certain mixtures from China,” accessed on April 16, 2026 from <https://globaltradealert.org/intervention/70531>.

The global market

China is the world's largest producer and consumer of fluorocarbons, supplying approximately *** percent of global demand in 2023.⁵⁷ In 2023, China comprised *** percent of global R-32 production capacity and the United States comprised *** percent of global production capacity, as shown in Table 1.8. Japan, India and Korea are the only nonsubject countries identified with capacity to produce R-32.⁵⁸ These three nonsubject countries comprise the remaining *** percent of global production capacity, as shown in Table 1.8. However, during the original investigation, there were *** nonsubject imports into the U.S. market.⁵⁹

It is predicted that North American consumption will increase from 2023 to 2028 by 3,307 short tons.⁶⁰ A possible reason for this increase is that due to many countries ratifying the Kigali Amendment to the Montreal Protocol, HFC phaseout will lead to demand for those HFCs that have lower global warming values. R-32 has a global warming potential of 771, and as it is a single refrigerant, it has a lower value than some typically used blends, giving it at least a short-term advantage.⁶¹

Table 1.8 R-32: Global average capacity, 2023

Country	Average Annual Capacity 2023 (short tons)	Share of total (percent)
China	***	***
USA	***	***
India	***	***
Korea	***	***
Japan	***	***
Total	***	100.0

Source: S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, pp. 54, 137 to 138, 162 to 163, 165, 184 converted to short tons.

⁵⁷ S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, p. 12.

⁵⁸ S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, pp. 54, 137 to 138, 162 to 163, 165, 184.

⁵⁹ Original publication, p. 7.11.

⁶⁰ Data is converted from metric tons to short tons. S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, pp. 61 to 62.

⁶¹ S&P Global, Chemical Economics Handbook, Fluorocarbons, August 2023, pp. 197 to 198.

Table 1.9 presents global export data for HS subheading 2903.42, a category that includes difluoromethane (R-32) only (by source in descending order of quantity for 2025). The largest global exporter in 2025 was China, (70,334 short tons), followed by India (15,158 short tons), and Hong Kong (3,134 short tons).

Table 1.9 R-32: Quantity of global exports by country and period

Quantity in short tons

Exporting country	2022	2023	2024	2025
China	65,765	54,778	62,853	70,334
India	2,519	3,149	5,336	15,158
Hong Kong	506	893	851	3,134
Netherlands	1,397	1,978	1,371	1,818
Thailand	72	68	5	1,531
United States	176	1,165	1,488	849
Italy	259	451	386	612
Belgium	1,026	949	728	393
Poland	165	123	150	386
Germany	160	265	242	287
All other markets	1,505	10,754	2,671	1,583
All markets	73,550	74,573	76,081	96,085

Source: Official exports statistics under HS subheading 2903.42 reported by various national statistical authorities in the Global Trade Atlas Suite database, accessed April 8, 2026.

Note: Because of rounding, figures may not add to totals shown. Effective January 27, 2022, a new subheading was added that specified difluoromethane (R-32) as the sole chemical under the 8-digit subheading 2903.42.10, and there are currently no additional chemicals at the 6-digit level under HS 2903.42. The previous classification of global exports from the original investigations included multiple chemicals in addition to difluoromethane (R-32). No data are presented before 2022 since the previous classification is not comparable to the current classification.

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
91 FR 4499, February 2, 2026	Initiation of Five-Year (Sunset) Reviews	https://www.govinfo.gov/content/pkg/FR-2026-02-02/pdf/2026-02090.pdf
91 FR 4620, February 2, 2026	Difluoromethane (R-32) From China; Institution of a Five-Year Review	https://www.govinfo.gov/content/pkg/FR-2026-02-02/pdf/2026-02052.pdf

APPENDIX B

RESPONSES TO THE NOTICE OF INSTITUTION

Responses to the Commission’s notice of institution

Individual responses

The Commission received a submission in response to its notice of institution in the subject review filed on behalf of Arkema Inc. (“Arkema”), domestic producers of R-32 (collectively referred to herein as “domestic interested party”).

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

Table B.1 R-32: Summary of responses to the Commission’s notice of institution

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

Note: The U.S. producer coverage figure presented is the domestic interested party’s estimate of its share of total U.S. production of R-32 during 2025. Domestic interested party’s response to the notice of institution, March 4, 2026, exh. 1.

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 the domestic interested party. The domestic interested party requests that the Commission conduct an expedited review of the antidumping duty order on R-32.¹

¹ Domestic interested party’s comments on adequacy, April 13, 2026, p. 1.

Company-specific information

Table B.2 R-32: Response checklist for U.S. producers

Yes = provided response

Item	Arkema
Nature of operation	Yes
Statement of intent to participate	Yes
Statement of likely effects of revoking the order	Yes
U.S. producer list	Yes
U.S. importer/foreign producer list	Yes
List of 3-5 leading purchasers	Yes
List of sources for national/regional prices	Yes
Trade/financial data	Yes
Changes in supply/demand	Yes
Complete response	Yes

APPENDIX C

SUMMARY DATA COMPILED IN PRIOR PROCEEDINGS

Total market

Table C-1

R-32: Summary data concerning the U.S. total market, 2017-19, January to September 2019, and January to September 2020

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

	Reported data					Period changes			
	Calendar year		January to September			Comparison years			Jan-Sep
	2017	2018	2019	2019	2020	2017-19	2017-18	2018-19	2019-20
U.S. total market consumption quantity:									
Amount.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Producers' share (fn1).....	***	***	***	***	***	▼ ***	▼ ***	▼ ***	▼ ***
Importers' share (fn1):									
China.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
U.S. total market consumption value:									
Amount.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Producers' share (fn1).....	***	***	***	***	***	▼ ***	▼ ***	▼ ***	▼ ***
Importers' share (fn1):									
China.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
U.S. importers' U.S. shipments of imports from:									
China:									
Quantity.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Value.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Unit value.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Ending inventory quantity.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▼ ***
Nonsubject sources:									
Quantity.....	***	***	***	***	***	***	***	***	▲ ***
Value.....	***	***	***	***	***	***	***	***	▲ ***
Unit value.....	***	***	***	***	***	***	***	***	▲ ***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	▲ ***
All import sources:									
Quantity.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Value.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Unit value.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Ending inventory quantity.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▼ ***
U.S. producers':									
Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Capacity utilization (fn1).....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
U.S. shipments:									
Quantity.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▲ ***
Value.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▲ ***
Unit value.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▲ ***
Export shipments:									
Quantity.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Value.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Unit value.....	***	***	***	***	***	▼ ***	▲ ***	▼ ***	▼ ***
Ending inventory quantity.....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Inventories/total shipments (fn1).....	***	***	***	***	***	▲ ***	▲ ***	▼ ***	▼ ***
Production workers.....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	***
Hours worked (1,000s).....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▼ ***
Wages paid (\$1,000).....	***	***	***	***	***	▲ ***	▲ ***	▲ ***	▼ ***
Hourly wages (dollars per hour).....	***	***	***	***	***	▼ ***	▲ ***	▼ ***	▲ ***
Productivity (short tons per 1,000 hours)...	***	***	***	***	***	▼ ***	▲ ***	▼ ***	▲ ***
Unit labor costs.....	***	***	***	***	***	▲ ***	▼ ***	▲ ***	▲ ***

Table continued.

Total market

Table C-1--Continued

R-32: Summary data concerning the U.S. total market, 2017-19, January to September 2019, and January to September 2020

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

	Reported data					Period changes			
	Calendar year		2019	January to September		Comparison years			Jan-Sep 2019-20
	2017	2018		2019	2020	2017-19	2017-18	2018-19	
U.S. producers'--continued:									
Net sales:									
Quantity.....	***	***	***	***	***	▲***	▲***	▼***	▼***
Value.....	***	***	***	***	***	▲***	▲***	▼***	▲***
Unit value.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Cost of goods sold (COGS).....	***	***	***	***	***	▲***	▲***	▲***	▼***
Gross profit or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▲***
SG&A expenses.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Operating income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▲***
Net income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▲***
Capital expenditures.....	***	***	***	***	***	▼***	▲***	▼***	▼***
Research and development expenses.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Net assets.....	***	***	***	***	***	▲***	▲***	▲***	***
Unit COGS.....	***	***	***	***	***	▲***	▲***	▲***	▼***
Unit SG&A expenses.....	***	***	***	***	***	▲***	▲***	▲***	▲***
Unit operating income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▲***
Unit net income or (loss) (fn2).....	***	***	***	***	***	▼***	▲***	▼***	▲***
COGS/sales (fn1).....	***	***	***	***	***	▲***	▼***	▲***	▼***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▲***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	▼***	▲***	▼***	▲***

Note.--Shares and ratios shown as "0.0" percent represent non-zero values less than "0.05" percent (if positive) and greater than "0.05" percent (if negative). Zeroes, null values, and undefined calculations are suppressed and shown as "--". Period changes preceded by a "▲" represent an increase, while period changes preceded by a "▼" represent a decrease.

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

fn2.--Percent changes only calculated when both comparison values represent profits; The directional change in profitability provided when one or both comparison values represent a loss.

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

APPENDIX D

PURCHASER QUESTIONNAIRE RESPONSES

As part of their response to the notice of institution, interested parties were asked to provide a list of three to five leading purchasers in the U.S. market for the domestic like product. A response was received from a domestic interested party, and it identified these five firms that it believes to be the top five purchasers of R-32 ***. Purchaser questionnaires were sent to these five firms and none of them responded.

