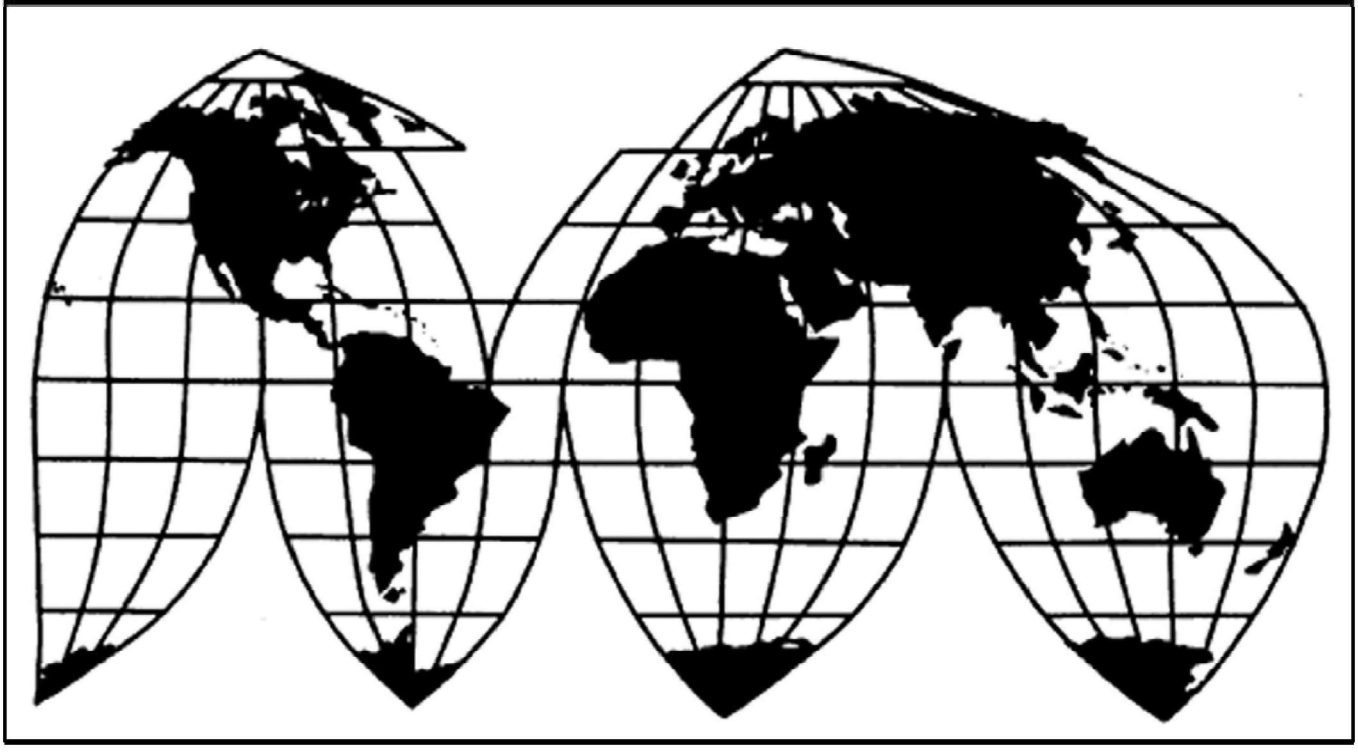
Magnesium from Israel

Investigation Nos. 701-TA-614 and 731-TA-1431 (Preliminary)

Publication 4860 **December 2018**

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

COMMISSIONERS

David S. Johanson, Chairman
Irving A. Williamson
Meredith M. Broadbent
Rhonda K. Schmidtlein
Jason E. Kearns

Staff assigned

Julie Duffy, Investigator
Gregory LaRocca, Industry Analyst
Lauren Gamache, Economist
Emily Kim, Accountant
Cynthia Payne, Statistician
Karl von Schriltz, Attorney
Douglas Corkran, Supervisory Investigator

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

U.S. International Trade Commission

Washington, DC 20436
www.usitc.gov

Magnesium from Israel

Investigation Nos. 701-TA-614 and 731-TA-1431 (Preliminary)

Publication 4860

December 2018

CONTENTS

Page

CONTENTS

CONTENTS

CONTENTS

Note.—Information that would reveal confidential operations of individual concerns may not be published. Such information is identified by brackets or by parallel lines in confidential reports and is deleted and replaced with asterisks in public reports.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-614 and 731-TA-1431 (Preliminary)

Magnesium from Israel

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of magnesium from Israel, provided for in subheadings 8104.11.00, 8104.19.00, and 8104.30.00 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value ("LTFV") and to be subsidized by the government of Israel.[2] [3]

COMMENCEMENT OF FINAL PHASE INVESTIGATIONS

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigations. The Commission will issue a final phase notice of scheduling, which will be published in the *Federal Register* as provided in section 207.21 of the Commission's rules, upon notice from the U.S. Department of Commerce ("Commerce") of affirmative preliminary determinations in the investigations under sections 703(b) or 733(b) of the Act, or, if the preliminary determinations are negative, upon notice of affirmative final determinations in those investigations under sections 705(a) or 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigations need not enter a separate appearance for the final phase of the investigations. Industrial users, and, if the merchandise under investigation is sold at the retail level, representative consumer organizations have the right to appear as parties in Commission antidumping and countervailing duty investigations. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to the investigations.

---

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

[2] Magnesium from Israel: Initiation of Less-Than-Fair-Value Investigation 83 FR 58533, (November 20, 2018); and Magnesium from Israel: Initiation of Countervailing Duty Investigation 83 FR 58529 (November 20, 2018).

[3] Commissioner Meredith M. Broadbent dissenting.

BACKGROUND

On October 24, 2018, US Magnesium LLC, Salt Lake City, Utah, filed petitions with the Commission and Commerce, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of magnesium from Israel and LTFV imports of magnesium from Israel. Accordingly, effective October 24, 2018, the Commission, pursuant to sections 703(a) and 733(a) of the Act (19 U.S.C. 1671b(a) and 1673b(a)), instituted countervailing duty investigation No. 701-TA-614 (Preliminary) and antidumping duty investigation No. 731-TA-1431 (Preliminary).

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of October 31, 2018 (83 FR 54778).4 The conference was held in Washington, DC, on November 14, 2018, and all persons who requested the opportunity were permitted to appear in person or by counsel.

[4] Due to the federal government's closure on December 5, 2018 as a mark of respect for George Herbert Walker Bush, these investigations conducted under authority of Title VII of the Tariff Act of 1930 accordingly have been tolled pursuant to 19 U.S.C. §§ 1671a(b)(2), 1673d(b)(2).

Views of the Commission

Based on the record in the preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of magnesium from Israel that are allegedly sold in the United States at less than fair value and are allegedly subsidized by the government of Israel.[1]

I. The Legal Standard for Preliminary Determinations

The legal standard for preliminary antidumping and countervailing duty determinations requires the Commission to determine, based upon the information available at the time of the preliminary determinations, whether there is a reasonable indication that a domestic industry is materially injured or threatened with material injury, or that the establishment of an industry is materially retarded, by reason of the allegedly unfairly traded imports.[2] In applying this standard, the Commission weighs the evidence before it and determines whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[3]

II. Background

US Magnesium LLC, a domestic producer of magnesium ("petitioner"), filed the petitions in these investigations on October 24, 2018. Petitioner appeared at the staff conference and submitted a postconference brief.

Several respondent entities participated in these investigations. Dead Sea Magnesium Ltd. ("DSM"), a producer and exporter of magnesium in Israel and a U.S. importer of magnesium from Israel, appeared at the staff conference and submitted a postconference brief. Allegheny Technologies Incorporated ("ATI") and Arconic, Inc. ("Arconic"), which are industrial users of magnesium, each submitted a postconference brief.[4] The North American Die Casting

[1] Commissioner Meredith M. Broadbent finds no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of magnesium from Israel that are allegedly sold in the United States at less than fair value and are allegedly subsidized by the government of Israel. *See* Dissenting Views of Commissioner Meredith M. Broadbent. She joins sections I-IV and V.A-B of these Views.

[2] 19 U.S.C. §§ 1671b(a), 1673b(a); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States,* 20 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

[3] American Lamb Co., 785 F.2d at 1001; see also Texas Crushed Stone Co. v. United States, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[4] Arconic incorporated by reference DSM's postconference brief. Arconic's Postconference Brief at 1.

Association, a trade and technical association whose members include industrial users of magnesium, submitted postconference comments.

U.S. industry data are based on the questionnaire responses of four firms that accounted for more than 80 percent of U.S. production of magnesium in 2017.[5] U.S. import data are based on official import statistics and the questionnaire responses of 13 firms that accounted for 70 percent of U.S. imports of magnesium and all such imports from Israel.[6] The Commission received a response to its foreign producers' questionnaire from DSM, which reportedly accounted for all production of magnesium in Israel and all U.S. imports of magnesium from Israel in 2017.[7]

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the "domestic like product" and the "industry."[8] Section 771(4)(A) of the Tariff Act of 1930, as amended ("the Tariff Act"), defines the relevant domestic industry as the "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."[9] In turn, 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."[10]

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis.[11] No single factor is

---

[5] Confidential Report ("CR") at I-5; Public Report ("PR") at I-4.

[6] CR at I-5; PR at I-4. Official import statistics are based on Harmonized Tariff Schedule of the United States ("HTS") subheadings 8104.11.00 (pure magnesium ingots), 8104.19.00 (alloy magnesium ingots), and 8104.30.00 (magnesium granules), which are believed to encompass only imports described by the scope of the investigations. CR at I-13; PR at I-11; Conference Tr. at 48 (Jones), 112 (Levy).

[7] CR/PR at VII-3.

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(10).

[11] 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); Torrington Co. v. United States, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991) ("every like product determination 'must be made on the particular record at issue' and the 'unique facts of each case'"). The Commission generally considers a number of factors including the following: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities, production processes, and production employees; and, where appropriate, (6) price. See Nippon, 19 CIT at 455 n.4; Timken Co. v. United States, 913 F. Supp. 580, 584 (Ct. Int'l Trade 1996).

dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[12] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[13] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,[14] the Commission determines what domestic product is like the imported articles Commerce has identified.[15] The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.[16]

A. Scope Definition

In its notices of initiation, Commerce defined the imported merchandise within the scope of these investigations as follows:

> The products covered by this investigation are primary and secondary pure and alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size (including, without limitation, magnesium cast into ingots, slabs, t-bars, rounds, sows, billets, and other shapes, and magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and any other shapes). Magnesium is a metal or alloy containing at least 50 percent by actual weight the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium

[12] *See*, *e.g.*, S. Rep. No. 96-249 at 90-91 (1979).

[13] *See*, *e.g.*, *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49*; see also* S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[14] *See*, *e.g.*, *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States,* 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

[15] *Hosiden Corp. v. Advanced Display Mfrs.,* 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

[16] *See*, *e.g.*, *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 at 8 n.34 (Nov. 2001); *Torrington,* 747 F. Supp. at 748-49 (holding that the Commission is not legally required to limit the domestic like product to the product advocated by the petitioner, co-extensive with the scope).

metal. The magnesium covered by this investigation also includes blends of primary magnesium, scrap, and secondary magnesium.

The subject merchandise includes the following pure and alloy magnesium metal products made from primary and/or secondary magnesium: (1) Products that contain at least 99.95 percent magnesium, by actual weight (generally referred to as ''ultrapure'' or ''high purity'' magnesium); (2) products that contain less than 99.95 percent but not less than 99.8 percent magnesium, by actual weight (generally referred to as ''pure'' magnesium); and (3) chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by actual weight, whether or not conforming to an ''ASTM Specification for Magnesium Alloy.''

The scope of this investigation excludes mixtures containing 90 percent or less magnesium in granular or powder form by actual weight and one or more of certain nonmagnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nepheline syenite, feldspar, alumina (A1203), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.[17]

Magnesium, a silver-white metallic element, is the lightest of all structural metals with a density approximately 63 percent of that of aluminum, the principal metal with which it competes in the U.S. market.[18] Magnesium's light weight and high vibrational-dampening properties have encouraged research to develop magnesium-based alloys with improved physical and mechanical properties for use as a structural metal in applications where minimizing weight is an important design consideration.[19]

Magnesium is available in two principal forms: pure and alloy.[20] Pure magnesium in unwrought form contains at least 99.8 percent magnesium by weight.[21] Pure magnesium is widely used in commercial and industrial applications because it is easily machined and lightweight, has a high strength-to-weight ratio, has special electrical properties, and has special metallurgical and chemical properties that allow it to alloy well with metals, such as

[17] *Magnesium from Israel: Initiation of Countervailing Duty Investigation*, 83 Fed. Reg. 58529, 58532 (Nov. 20, 2018); *Magnesium from Israel: Initiation of Less-Than-Fair-Value Investigation*, 83 Fed. Reg. 58533, 58537 (Nov. 20, 2018). The merchandise subject to these investigations is classifiable under items 8104.11.0000, 8104.19.0000, and 8104.30.0000 of the Harmonized Tariff Schedule of the United States (HTSUS). Although the HTSUS items are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

[18] CR at I-14; PR at I-12.

[19] CR at I-14; PR at I-12.

[20] CR at I-15; PR at I-12.

[21] CR at I-15; PR at I-12-13.

aluminum.[22] Alloy magnesium (or magnesium alloy) consists of magnesium and other metals, typically aluminum and zinc, containing less than 99.8 percent magnesium by weight but more than 50 percent magnesium by weight, with magnesium the largest metallic element in the alloy by weight.[23] Alloy magnesium has certain properties that improve its strength, ductility, workability, corrosion resistance, density, and/or castability compared to pure magnesium.[24] It is principally used in structural applications, primarily in castings (die, permanent mold, and sand) and extrusions for the automotive industry.[25]

Pure and alloy magnesium are produced as either primary or secondary magnesium. Primary magnesium is produced by decomposing virgin raw materials into magnesium metal.[26] Secondary magnesium is produced by recycling magnesium-based scrap.[27] Unwrought magnesium may be cast into ingots or may be granular magnesium, which consists of all other physical forms of magnesium, such as raspings, turnings, granules, and powders.[28]

B. Arguments of the Parties

Petitioner argues that the Commission should define a single domestic like product coextensive with the scope, as it did in prior investigations and reviews of magnesium.[29] According to petitioner, there are no clear dividing lines separating the different forms of magnesium, including alloy, pure, primary, secondary, cast, and granular magnesium.[30] Respondent does not challenge petitioners' proposed domestic like product definition for purposes of the preliminary phase, but reserves the right to do so in any final phase of the investigations.[31]

---

[22] CR at I-15; PR at I-12-13.

[23] CR at I-16; PR at I-12-13.

[24] CR at I-16; PR at I-13.

[25] CR at I-16; PR at I-13.

[26] CR at I-17; PR at I-13-14.

[27] CR at I-17; PR at I-13-14.

[28] CR at I-18; PR at I-14.

[29] *See* Petition at 12-17; Petitioner's Postconference Brief at 3-4. In the only prior investigations covering all forms of magnesium – pure and alloy, primary and secondary, cast and granular – the Commission defined a single domestic like product encompassing all forms of magnesium, both in the original investigations and in the subsequent five year reviews. *Magnesium from China and Russia*, Inv. Nos. 731-TA-1071 and 1072 (Final), USITC Pub. 3763 (April 2005) at 6-11; *Magnesium from China and Russia*, Inv. Nos. 731-TA-1071 and 1072 (Review), USITC Pub. 4214 (Feb. 2011) at 7-10. After the antidumping duty order on magnesium from Russia was revoked, the Commission adopted the same domestic like product definition in the second review of the antidumping duty order on alloy magnesium from China. *Alloy Magnesium from China*, Inv. No. 731-TA-1071 (Second Review), USITC Pub. 4618 (June 2016) at 6-7.

[30] *See* Petition at 13-17.

[31] DSM's Postconference Brief at 2; Conference Tr. at 114 (Levy).

C. Analysis

Based on the record, we define a single domestic like product consisting of all magnesium coextensive with the scope of the investigations set forth in the notices of initiation. The scope of these investigations is substantially similar to the scope of the Commission's prior investigations and reviews of magnesium from China and Russia.[32] In those investigations and reviews, the Commission defined a single domestic like product coextensive with the scope of the investigations and reviews, encompassing all forms of magnesium.[33] There is no evidence on the record suggesting that the Commission should define the domestic like product differently from the prior investigations and reviews of magnesium. Nor has any party contested defining a single domestic like product to encompass all magnesium. Accordingly, we define the domestic like product to include all magnesium coextensive with the scope of the investigations.

IV. Domestic Industry

The domestic industry is defined 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."[34] In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market. Petitioner argues that the Commission should define the domestic industry to include all domestic producers of magnesium within the scope of the investigation, consistent with the definition of the domestic like product that it advocates.[35]

---

[32] *See Magnesium from China and Russia*, Inv. Nos. 731-TA-1071-72 (Review), USITC Pub. 4214 (Feb. 2011) at 4-6; *Magnesium from China and Russia*, Inv. Nos. 731-TA-1071-72 (Final), USITC Pub. 3763 (Apr. 2005) at 4-6.

[33] *Alloy Magnesium from China*, Inv. No. 731-TA-1071 (Second Review), USITC Pub. 4618 (June 2016) at 6-7; *Magnesium from China and Russia*, USITC Pub. 4214 at 7-10; *Magnesium from China and Russia*, USITC Pub. 3763 at 6-11.

[34] 19 U.S.C. § 1677(4)(A).

[35] Petition at 18. Petitioner also argues that the Commission should define the domestic industry to include producers of granular magnesium, known as grinders, to the extent that they engage in sufficient production-related activities and should not be excluded as related parties. Petition at 18 n.47. In previous investigations involving magnesium, including *Magnesium from China and Russia*, the Commission found that grinders engaged in sufficient production-related activities in the United States to be included in the domestic industry. *See Magnesium from China and Russia*, USITC Pub. 3763 at 10-11; *Pure Magnesium from China and Israel*, Inv. Nos. 701-TA-403 and 731-TA-895-96 (Final), USITC Pub. 3467 (Nov. 2001) at 9-11. In these investigations, however, no domestic producer focusing on the production of granular magnesium completed a domestic producers' questionnaire response, although ***. CR/PR at Table III-1. In any final phase of the investigations, we intend to seek information on grinders to determine whether they engage in sufficient production-related activities to be included in the domestic industry.

There are no domestic industry issues in these investigations.[36] Accordingly, consistent with our definition of the domestic like product, we define the domestic industry as all domestic producers of magnesium.

V. Reasonable Indication of Material Injury by Reason of Subject Imports[37]

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[38] In making this determination, the Commission must consider the volume of subject imports, their effect on prices for the domestic like product, and their impact on domestic producers of the domestic like product, but only in the context of U.S. production operations.[39] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[40] In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant economic factors that bear on the state of the industry in the United States.[41] No single factor is dispositive, and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[42]

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is "materially injured by reason of" unfairly

---

[36] No domestic producer is related to an exporter or importer of the subject merchandise, *see* CR at Table III-2, and ***. *Id.* at III-10. Accordingly, there are no related party issues in these investigations.

[37] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B).

Negligibility is not an issue in these investigations. Subject imports from Israel during the most recent 12-month period (October 2017 to September 2018) accounted for 44.2 percent of total imports. CR/PR at IV-5.

[38] 19 U.S.C. §§ 1671b(a), 1673b(a). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of reasonable indication of material injury and threat of material injury by reason of subject imports in certain respects.

[39] 19 U.S.C. § 1677(7)(B). The Commission "may consider such other economic factors as are relevant to the determination" but shall "identify each {such} factor ... {a}nd explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

[40] 19 U.S.C. § 1677(7)(A).

[41] 19 U.S.C. § 1677(7)(C)(iii).

[42] 19 U.S.C. § 1677(7)(C)(iii).

traded imports,[43] it does not define the phrase "by reason of," indicating that this aspect of the injury analysis is left to the Commission's reasonable exercise of its discretion.[44] In identifying a causal link, if any, between subject imports and material injury to the domestic industry, the Commission examines the facts of record that relate to the significance of the volume and price effects of the subject imports and any impact of those imports on the condition of the domestic industry. This evaluation under the "by reason of" standard must ensure that subject imports are more than a minimal or tangential cause of injury and that there is a sufficient causal, not merely a temporal, nexus between subject imports and material injury.[45]

In many investigations, there are other economic factors at work, some or all of which may also be having adverse effects on the domestic industry. Such economic factors might include nonsubject imports; changes in technology, demand, or consumer tastes; competition among domestic producers; or management decisions by domestic producers. The legislative history explains that the Commission must examine factors other than subject imports to ensure that it is not attributing injury from other factors to the subject imports, thereby inflating an otherwise tangential cause of injury into one that satisfies the statutory material injury threshold.[46] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[47] Nor does

---

[43] 19 U.S.C. §§ 1671b(a), 1673b(a).

[44] *Angus Chemical Co. v. United States*, 140 F.3d 1478, 1484-85 (Fed. Cir. 1998) ("{T}he statute does not 'compel the commissioners' to employ {a particular methodology}."), *aff'g* 944 F. Supp. 943, 951 (Ct. Int'l Trade 1996).

[45] The Federal Circuit, in addressing the causation standard of the statute, has observed that "{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement." *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that "this court requires evidence in the record 'to show that the harm occurred "by reason of" the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.'" *See also Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass'n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

[46] SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) ("{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports."); S. Rep. 96-249 at 75 (1979) (the Commission "will consider information which indicates that harm is caused by factors other than less-than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[47] SAA at 851-52 ("{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports."); *Taiwan Semiconductor Industry Ass'n* , 266 F.3d at 1345. ("{T}he (Continued…)

the "by reason of" standard require that unfairly traded imports be the "principal" cause of injury or contemplate that injury from unfairly traded imports be weighed against other factors, such as nonsubject imports, which may be contributing to overall injury to an industry.[48] It is clear that the existence of injury caused by other factors does not compel a negative determination.[49]

Assessment of whether material injury to the domestic industry is "by reason of" subject imports "does not require the Commission to address the causation issue in any particular way" as long as "the injury to the domestic industry can reasonably be attributed to the subject imports" and the Commission "ensure{s} that it is not attributing injury from other sources to the subject imports."[50] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[51]

The Federal Circuit's decisions in *Gerald Metals*, *Bratsk,* and *Mittal Steel* all involved cases in which the relevant "other factor" was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal Circuit's guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant

---

(…Continued)
Commission need not isolate the injury caused by other factors from injury caused by unfair imports ... . Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports." (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int'l Trade 2002) ("{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury" or make "bright-line distinctions" between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that "{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e*., it is not an 'other causal factor,' then there is nothing to further examine regarding attribution to injury"), *citing Gerald Metals,* 132 F.3d at 722 (the statute "does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.").

[48] S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

[49] *See Nippon*, 345 F.3d at 1381 ("an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the 'dumping' need not be the sole or principal cause of injury.").

[50] *Mittal Steel*, 542 F.3d at 877-78; *see also id.* at 873 ("While the Commission may not enter an affirmative determination unless it finds that a domestic industry is materially injured 'by reason of' subject imports, the Commission is not required to follow a single methodology for making that determination ... {and has} broad discretion with respect to its choice of methodology.") *citing United States Steel Group v. United States*, 96 F.3d 1352, 1362 (Fed. Cir. 1996) and S. Rep. 96-249 at 75. In its decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[51] *Nucor Corp. v. United States*, 414 F.3d 1331, 1336, 1341 (Fed. Cir. 2005); *see also Mittal Steel*, 542 F.3d at 879 ("*Bratsk* did not read into the antidumping statute a Procrustean formula for determining whether a domestic injury was 'by reason' of subject imports.").

market presence of price-competitive nonsubject imports.[52] The additional "replacement/benefit" test looked at whether nonsubject imports might have replaced subject imports without any benefit to the U.S. industry. The Commission applied that specific additional test in subsequent cases, including the *Carbon and Certain Alloy Steel Wire Rod from Trinidad and Tobago* determination that underlies the *Mittal Steel* litigation.

Mittal Steel clarifies that the Commission's interpretation of *Bratsk* was too rigid and makes clear that the Federal Circuit does not require the Commission to apply an additional test nor any one specific methodology; instead, the court requires the Commission to have "evidence in the record 'to show that the harm occurred 'by reason of' the LTFV imports,'" and requires that the Commission not attribute injury from nonsubject imports or other factors to subject imports.[53] Accordingly, we do not consider ourselves required to apply the replacement/benefit test that was included in Commission opinions subsequent to *Bratsk*.

The progression of *Gerald Metals*, *Bratsk*, and *Mittal Steel* clarifies that, in cases involving commodity products where price-competitive nonsubject imports are a significant factor in the U.S. market, the Court will require the Commission to give full consideration, with adequate explanation, to non-attribution issues when it performs its causation analysis.[54]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[55] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[56]

B. Conditions of Competition and the Business Cycle

The following conditions of competition inform our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

---

[52] *Mittal Steel*, 542 F.3d at 875-79.

[53] *Mittal Steel*, 542 F.3d at 873 (quoting from *Gerald Metals*, 132 F.3d at 722), 875-79 & n.2 (recognizing the Commission's alternative interpretation of *Bratsk* as a reminder to conduct a non-attribution analysis).

[54] To that end, after the Federal Circuit issued its decision in *Bratsk*, the Commission began to present published information or send out information requests in the final phase of investigations to producers in nonsubject countries that accounted for substantial shares of U.S. imports of subject merchandise (if, in fact, there were large nonsubject import suppliers). In order to provide a more complete record for the Commission's causation analysis, these requests typically seek information on capacity, production, and shipments of the product under investigation in the major source countries that export to the United States. The Commission plans to continue utilizing published or requested information in the final phase of investigations in which there are substantial levels of nonsubject imports.

[55] We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[56] *Mittal Steel*, 542 F.3d at 873; *Nippon Steel Corp*., 458 F.3d at 1350, *citing U.S. Steel Group*, 96 F.3d at 1357; S. Rep. 96-249 at 75 ("The determination of the ITC with respect to causation is ... complex and difficult, and is a matter for the judgment of the ITC.").

1. Demand Conditions

Demand for magnesium is derived from demand for downstream products containing magnesium, including aluminum alloys, die cast magnesium products, and titanium.[57] Demand is influenced by the business cycles of the industries that consume magnesium; their demand generally tracks general economic conditions.[58] During the period of investigation, apparent U.S. consumption of magnesium declined from *** metric tons in 2015 to *** metric tons in 2016 and *** metric tons in 2017, a level *** percent lower than in 2015.[59] Apparent U.S. consumption of magnesium was *** metric tons in interim 2018, compared to *** metric tons in interim 2017.[60]

At the staff conference, a US Magnesium official stated that demand for magnesium declined between 2015 and 2017 as increased imports of downstream products displaced domestic production of aluminum alloys, die cast magnesium products, and titanium.[61] Another factor that reduced magnesium demand during the period of investigation was ATI's December 2016 closure of its titanium sponge plant located adjacent to US Magnesium's plant, which eliminated *** metric tons of demand for magnesium that had been supplied exclusively by US Magnesium pursuant to a toll agreement.[62] Under the agreement, US Magnesium received magnesium chloride generated as a byproduct of ATI's titanium production process, processed the magnesium chloride into magnesium using its electrolytic cells, and then supplied 100 percent of the resulting magnesium to ATI for use in titanium production.[63] According to US Magnesium, demand for magnesium rebounded in interim 2018 compared to interim 2017 due largely to increased domestic production of aluminum, spurred by the tariff imposed on imported aluminum pursuant to section 232 and the provisional antidumping duties imposed on aluminum products imported from certain countries.[64]

---

[57] Petitioner's Postconference Brief at 6; Petition at 6. Petitioner also argues that demand for magnesium is inelastic with respect to price. *Id.*

[58] Petitioner's Postconference Brief at 6.

[59] CR at Tables IV-6, C-1.

[60] CR at Table IV-6.

[61] Conference Tr. at 50 (Slade).

[62] ATI's Postconference Brief at 2; Petitioner's Postconference Brief at Exhibit 9 (***); Conference Tr. at 63 (Lutz), 63-64 (Tissington). ATI states that ***." ATI's Postconference Brief at 2, Attachment 1. We rely on US Magnesium's reported shipments of magnesium to ATI in 2015, which reconciles with the data certified as accurate in table III-9a of US Magnesium's domestic producers' questionnaire response. Petitioner's Postconference Brief at Exhibit 9. Nevertheless, we recognize that ATI's titanium sponge production facility ***.

[63] Conference Tr. at 43 (Tissington).

[64] Conference Tr. at 50-51 (Slade). Section 232 of the Trade Expansion Act of 1962, as amended (19 U.S.C. § 1862) ("Section 232") authorizes the Secretary of Commerce to conduct investigations to determine the effects of imports on the national security of the United States and authorizes the President to take action to restrict such imports. In June 2017, US Magnesium submitted written comments to Commerce pursuant to the section 232 national security investigation of imports of aluminum, arguing that "the domestic production of magnesium is . . . critical to U.S. national security" (Continued…)

2. Supply Conditions

The U.S. market for magnesium is currently served by domestic producers, which accounted for *** percent of apparent U.S. consumption in 2017, subject imports, which accounted for *** percent of apparent U.S. consumption in 2017, and nonsubject imports, which accounted for *** percent of apparent U.S. consumption in 2017.[65]

The domestic industry is dominated by US Magnesium, which accounted for *** percent of reported domestic industry production in 2017.[66] US Magnesium produces primary pure and alloy magnesium by extracting magnesium from brines of the Great Salt Lake in Utah, reducing the magnesium in electrolytic cells, and then casting the magnesium into ingots or slabs.[67]

DSM is the only producer and exporter of magnesium in Israel.[68] DSM produces magnesium utilizing an electrolytic process similar to that used by US Magnesium.[69]

According to official import statistics, the largest sources of nonsubject imports during the period of investigation were Russia, Canada, and Taiwan.[70] Combined, these countries accounted for 72.5 percent of nonsubject imports in 2017.[71] The second largest source of nonsubject imports in interim 2018 was Turkey.[72] According to petitioner, the lone Turkish producer, ESAN, shut down its operations in early 2018 and sold its inventory to a trader for sale in the United States.[73]

According to petitioner, another important supply condition is large and growing excess magnesium production capacity in China, which has created global conditions of oversupply and depressed prices for magnesium outside the United States.[74] Chinese magnesium capacity increased from 602,000 metric tons in 2006 to 1.7 million metric tons in 2016 while Chinese magnesium production increased to only 871,000 metric tons in 2016, resulting in a capacity utilization rate of only 51 percent.[75] In 2017, China accounted for 84.5 percent of global

---

(…Continued)
as an input in the production of aluminum; that "US Magnesium is adversely affected by imports of pure, alloy, and granular magnesium"; and that Commerce should therefore "determine that imports of magnesium threaten to impair the national security of the United States and impose trade relief." Written Comments of US Magnesium LLC in the Section 232 National Security Investigation of Imports of Aluminum, appended as Exhibit 16 to Petitioner's Postconference Brief ("Section 232 Comments"), at 1-3. On March 8, 2018, the President announced his decision to impose 10 percent ad-valorem duties on U.S. imports of various aluminum products. CR at I-9; PR at I-8.

[65] CR/PR at Table IV-7.

[66] CR/PR at Table III-1.

[67] CR at I-19-23; PR at I-15-18; CR/PR at Figure I-1.

[68] CR/PR at VII-3.

[69] Conference Tr. at 54 (Tissington), 90 (Lerer); *see also* CR at I-19; PR at I-15.

[70] CR at IV-6; PR at IV-4; CR/PR at Table IV-3.

[71] CR/PR at Table IV-3.

[72] CR/PR at Table IV-3.

[73] CR at VII-13; PR at VII-10; Conference Tr. at 45 (Slade).

[74] Petitioner's Postconference Brief at 8; Petition at 20-21.

[75] Petitioner's Postconference Brief at 8; Petition at 20-21.

primary magnesium production and 68.4 percent of all exports of magnesium.[76] Petitioner contends that, as low-priced magnesium exported from China depressed prices in most third country markets, magnesium prices in the United States have remained relatively higher due to antidumping duty orders on all forms of magnesium imported from China. [77]

3. Substitutability and Other Conditions

We find that there is a high degree of substitutability between subject imports and domestically produced magnesium.[78] We further find that price is an important factor in purchasing decisions for magnesium, although diversity and security of supply, quality, and service are also important.[79]

The record indicates that purchasers view magnesium from qualified suppliers as interchangeable, irrespective of the source, and therefore consider price as one of several important considerations in purchasing decisions.[80] Most responding domestic producers and importers reported that domestically produced magnesium, subject imports, and nonsubject imports are always or frequently interchangeable.[81] Similarly, most responding domestic producers and importers reported that differences other than price are sometimes or never significant to purchasers choosing between domestically produced magnesium, subject imports, and nonsubject imports.[82]

Responding purchasers were asked to rank the top three factors that influence their decisions to purchase magnesium from a particular source; they identified diversity and security of supply (13 firms), price (11 firms), quality (9 firms), and service (6) more than any other factors.[83] *** all reported purchasing subject imports instead of domestically produced magnesium to diversify their suppliers of magnesium and mitigate the risk of supply disruptions.[84] We intend to further investigate the importance of non-price factors to purchasers in any final phase of the investigations.

Most domestically produced magnesium and subject imports are sold pursuant to annual contracts that are negotiated during the fourth quarter for the following year.[85] In 2017, annual contracts accounted for *** percent of the domestic industry's U.S. commercial shipments and *** percent of DSM's U.S. commercial shipments of subject imports.[86]

---

[76] CR at VII-13; PR at VII-9.

[77] Conference Tr. at 24 (Slade); Petitioner's Postconference Brief at 8-9, Exhibits 13-14; Petition at 21.

[78] CR at II-9-10; PR at II-7.

[79] *See* CR at II-10; PR at II-7.

[80] *See* Conference Tr. at 24-25 (Slade), 96 (Wanless); Petitioner's Postconference Brief at 7; DSM's Postconference Brief at 2.

[81] CR/PR at Table II-6.

[82] CR/PR at Table II-7.

[83] CR at II-10; PR at II-7.

[84] DSM's Postconference Brief at 23; CR at Table V-9

[85] CR/PR at V-3, Tables V-1-2.

[86] CR/PR at Table V-2.

US Magnesium and DSM are also subject to distinctive economies of production, with strong economic incentives to operate their magnesium production facilities at a high rate of capacity utilization. The electrolytic cells used by both US Magnesium and DSM to produce magnesium must be utilized in continuous production because such cells deteriorate once shut down and are expensive to bring back online.[87] Electrolytic cells must also be rebuilt every four years or so, or they become much less energy efficient.[88] In addition, due to the high fixed-cost nature of magnesium production, US Magnesium must operate at a high rate of capacity utilization to remain economically viable.[89] [90]

C. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[91]

Subject import volume was 12,890 metric tons in 2015, 11,335 metric tons in 2016, and 11,450 metric tons in 2017, a level 11.2 percent lower than in 2015.[92] Subject import volume was 7,882 metric tons in interim 2018, compared to 9,362 metric tons in interim 2017.[93] As a share of apparent U.S. consumption, subject imports declined from *** percent in 2015 to *** percent in 2016 but increased to *** percent in 2017.[94] Subject import market share was *** percent in interim 2018, compared to *** percent in interim 2017.[95]

Based on the record in the preliminary phase of the investigations, we conclude that the volume of subject imports was significant both in absolute terms and relative to consumption in the United States during the period of investigation.

D. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

[87] Petitioner's Postconference Brief at 6-7; Conference Tr. at 20 (Torrington), 25-26 (Slade), 34, 36-37 (Lutz), 90, 127-29 (Lerer).

[88] Conference Tr. at 61 (Slade), 125 (Lerer).

[89] Petition at 19; Conference Tr. at 25 (Slade), 36 (Lutz).

[90] Commissioner Meredith M. Broadbent does not join the remainder of these Views.

[91] 19 U.S.C. § 1677(7)(C)(i).

[92] CR at Tables IV-2, C-1.

[93] CR at Table IV-2.

[94] CR at Table IV-7.

[95] CR at Table IV-7.

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[96]

As addressed in section V.B.3 above, the record indicates that there is a high degree of substitutability between subject imports and the domestic like product and that price is an important consideration in purchasing decisions.

Three domestic producers and one importer provided usable quarterly net U.S. f.o.b. selling price data for three magnesium products, although not all firms reported pricing for all products for all quarters.[97] Reported pricing data accounted for approximately *** percent of domestic producers' U.S. shipments of magnesium and *** percent of U.S. shipments of subject imports from Israel.[98]

These data show that subject imports oversold the domestic like product in 31 of 45 quarterly comparisons (*** percent of comparisons) at an average margin of *** percent, and undersold the domestic like product in 14 of 45 quarterly comparisons at an average margin of *** percent.[99] Because most comparisons of subject import underselling (*** of ***) were for product 1, which is a low-volume specialty product, subject import overselling accounted for *** percent of reported subject import sales volume for the pricing products (*** metric tons out of *** metric tons).[100]

Petitioner challenges the accuracy of the pricing data reported by DSM, alleging that DSM may have inappropriately reported sales prices on a delivered basis for product 2 and sales of *** as sales of product 3.[101] Contrary to petitioner's allegation, DSM certified in its questionnaire response that it reported pricing data on an f.o.b. basis.[102] In response to a request by Commission staff, ***.[103] We find that the pricing product data on the record of the

[96] 19 U.S.C. § 1677(7)(C)(ii).

[97] CR at V-5; PR at V-4-5. Product 1 was defined as "Pure magnesium ingots containing at least 99.95 percent magnesium ('high purity magnesium')." *Id.* Product 2 was defined as "Pure magnesium ingots containing at least 99.8 percent magnesium, but less than 99.95 percent magnesium ('pure magnesium')." *Id.* Product 3 was defined as "Alloy magnesium ingots containing less than 99.8 percent magnesium, meeting ASTM specifications for alloy magnesium."

[98] CR at V-5-6; PR at V-4-5.

[99] CR/PR at Table V-7.

[100] CR/PR at Table V-7; Conference Tr. at 92 (Wanless). DSM argues that it is able to sell at relatively high prices in the U.S. market because of purchasers' desire for dual sourcing and its reputation for reliability, noting that ***. DSM's Postconference Brief at 22-23. As discussed earlier, in any final phase of the investigations we will further examine the role of non-price factors in purchasing decisions.

[101] Petitioner's Postconference Brief at 17 & n.71.

[102] DSM's Importers' Questionnaire Response at Question III-2b.

[103] *See* Staff E-mail Correspondence with ***, November 21, 2018, EDIS Doc. No. 662809.

preliminary phase of the investigations permit apples-to-apples comparisons between the prices of subject imports and domestically produced magnesium.[104]

In light of the preponderance of overselling by subject imports, we find that there has not been significant price underselling by subject imports.

Official import unit value data show results similar to the price data. Because magnesium is a commodity product, average unit value data concerning subject imports corresponding to product 2, pure magnesium ingots, and subject imports corresponding to product 3, alloy magnesium ingots, would not be unduly influenced by changes in product mix over the period of investigation.[105] These data show that the average unit values of subject imports of pure magnesium were higher than the average unit values of domestic producer sales of product 2 in *** of *** quarters, while the average unit values of subject imports of alloy magnesium were higher than the average unit values of domestic producer sales of product 3 in *** of *** quarters .[106]

The record also shows that the domestic industry's prices declined and that it experienced a cost-price squeeze. Domestic producer sales prices for all three pricing products declined during the period of investigation. Between the first quarter of 2015 and the third quarter of 2018, domestic producer sales prices declined *** percent for product 1, *** percent for product 2, and *** percent for product 3.[107] Because the domestic industry's declining prices were generally accompanied by increasing unit costs, the domestic industry's ratio of net sales to cost of goods sold ("COGS") increased from *** percent in 2015 to ***

---

[104] Parties should provide any proposed alternative pricing products in their comments on the draft questionnaires in any final phase of the investigations. 19 C.F.R. § 207.20(b).

[105] US Magnesium and DSM agree that magnesium is a commodity product. *See* Conference Tr. at 9 (Jones), 18 (Tissington), 24 (Slade), 34-35 (Lutz), 96 (Wanless), 147 (Jones). HTSUS number 8104.11.00 corresponds to pure magnesium ingots, product 2, and HTSUS number 8104-19.00 corresponds to alloy magnesium ingots, product 3. CR at I-13; PR at I-11.

[106] *Compare* CR/PR at Tables V-4-5 *with id.* at Appendices D-2-3. We recognize that the average unit value of subject imports is on a c.i.f. basis, which excludes the transportation and warehousing costs and the profit margin that would normally be included in subject import sales prices to unrelated customers. Because the average unit value of subject imports on a c.i.f. basis would generally be lower than subject import sales prices to unrelated customers, comparing the average unit value of subject imports to domestic producer sales prices would tend to minimize margins of overselling.

Petitioner's own average unit value data provided in the petitions also show that the average unit value of subject imports was ***. *See* Petition at 22-23, 27. Indeed, petitioner does not argue that subject import underselling was significant. *See* Petition at 22-23; Conference Tr. at 59 (von Schriltz) ("I noticed in the petition that you don't really mention underselling. I'm wondering, are you alleging that subject import underselling is significant?"), 59 (Jones) ("I think we'd like to address that in our postconference brief. We're certainly alleging significant adverse price effects."); Petitioner's Postconference Brief at 16-36. Rather, as discussed below, petitioner has argued, based primarily on *** submitted with its postconference brief, that "DSM's lower-priced imports have caused US Magnesium to lose both sales and revenues to DSM." Petitioner's Postconference Brief at 18-19; *see also* Petition at 23.

[107] CR/PR at Table V-6.

percent in 2016 and to *** percent in 2017.[108] The industry's ratio of net sales to COGS was *** percent in interim 2018, compared to *** percent in interim 2017.

Despite the data showing that subject imports generally oversold the domestic product, other evidence on the record suggests that there was price competition between the subject imports and the domestic like product. Specifically, purchaser responses to the lost sales and lost revenue surveys, which were provided to the purchasers identified in petitioner's lost sales and revenue allegations, show that *** of *** responding purchasers reported that subject import prices were lower than the prices of domestically produced magnesium.[109] Additionally, *** of *** purchasers reported purchasing subject imports instead of domestically produced magnesium.[110] Most responding purchasers, however, reported stable or increasing purchases from domestic producers between 2015 and 2017, and declining purchases of subject imports.[111]

The record also shows that, of the *** responding purchasers that purchased subject imports instead of domestically produced magnesium during the period, *** stated they did so for reasons other than price, including diversification of supply, quality, and customer service.[112] Only *** responding purchasers reported that price was a primary reason they purchased subject imports instead of domestically produced magnesium, for a volume of *** metric tons, and both purchasers reported *** the share of their purchases from domestic producers between 2015 and 2017.[113] Only *** of *** responding purchasers reported that domestic producers reduced their prices to compete with lower-priced subject imports, by an estimated *** percent, and *** also explained that "***.[114]

The record also contains *** submitted by petitioner, described as "***.[115] Petitioner contends the *** show that low-priced subject import competition caused the domestic industry to lose significant sales and revenues ***.[116] In any final phase of the investigations, we plan to further evaluate the ***,[117] including ***[118] and the other evidence on the record showing that the subject imports were generally priced higher that the domestic magnesium.

---

[108] CR/PR at Table VI-1. The domestic industry's unit COGS increased throughout most of the period of investigation, with the exception of a decline ***. *Id.*

[109] CR/PR at Table V-9.

[110] CR at V-13-14; PR at V-7; CR/PR at Table V-9.

[111] CR/PR at Tables V-8-9. Specifically, *** of *** responding purchasers reported an increased share of purchases from domestic producers and *** reported a reduced share of purchases from DSM. CR/PR at Table V-8.

[112] CR at V-15; PR at V-8; CR/PR at Table V-9. For example, one responding purchaser, ***, reported that "***."

[113] CR/PR at Tables V-8-9.

[114] CR/PR at Table V-10.

[115] Petitioner's Postconference Brief at 18-19, Exhibit 7. ***. *See* Petitioner's Postconference Brief at Exhibits 7A-7Q.

[116] *See* Petitioner's Postconference Brief at 18-35, Exhibits 7, 7A-Q.

[117] Commissioner Kearns notes that assessment of *** will be substantially facilitated by an opportunity to question, at any final phase hearing, relevant US Magnesium personnel ***.

The record also shows that factors other than subject imports may have contributed to the domestic industry's declining sales prices and inability to raise prices to cover increasing costs. As discussed above, apparent U.S. consumption fell by *** percent from 2015 to 2017, in part due to the closure of ATI's titanium sponge facility. In any final investigations, we intend to consider the impact of declining demand and of the ATI closure (which directly impacted US Magnesium) on prices in the U.S. market.[119] Declining demand also likely increased the domestic industry's unit COGS as domestic producers were forced to spread their high fixed costs over fewer units of production, contributing to the increase in the domestic industry's ratio of COGS to net sales.[120]

We also intend to consider the price impact of nonsubject imports, which like subject imports are highly substitutable with domestically produced magnesium. With the exception of interim 2018, nonsubject import volume fell within a range similar to that of the subject imports.[121] Unlike subject imports, however, nonsubject import volume increased during the period of investigation, and the average unit values of nonsubject imports from the largest sources, Canada, Russia, Taiwan, and Turkey, were lower than the average unit values of subject imports in nearly every quarterly comparison.[122] [123]

(…Continued)

[118] Commissioner Kearns notes that there is some question as to the precision and reliability of ***. In many of ***. *See, e.g.*, Petitioner's Postconference Brief, Exhibit 7A at 6, Exhibit 7B at 1, Exhibit 7D at 3, Exhibit 7E at 2, 4, Exhibit 7F at 1, Exhibit 7H at 2, Exhibit 7I at 6. When asked whether "customers regularly quote the Dead Sea prices to you during negotiations," US Magnesium's vice president of marketing stated "sometimes." *Id.* at 80 (Slade). On the other hand, a DSM official stated that "it's rare" for his customers to quote competing prices and more common for customers to provide "signaling" as to the prices and volumes offered by competitors, which "they can embellish" and "overstate." *Id.* at 118, 141 (Wanless). He also notes that ***, in particular some purchasers' responses to the lost sales and lost revenue surveys. For example, contrary to ***, ***. *Compare* CR/PR at Table V-9 *with* Petitioners' Postconference Brief at Exhibits 7G, 7I, 7J, and 7Q.

[119] CR/PR at Table IV-7; Conference Tr. at 34 (Lutz). Petitioner argues that magnesium demand is inelastic with respect to price; that is, a reduction in price does not lead to a material change in demand.

[120] Conference Tr. at 61 (Slade); *see also* US Magnesium's Section 232 Comments, appended as Exhibit 16 to Petitioner's Postconference Brief at 17, 23-24 (arguing that ATI's closure of its titanium plant eliminated U.S. demand that had been served exclusively by US Magnesium, forcing US Magnesium to "shut down cells that supplied ATI" and "raising per unit production costs, making it more difficult for US Magnesium to compete in the long term."). Petitioner has cited the increase in this ratio as evidence of price suppression by subject imports. *See* Petitioner's Postconference Brief at 36-37.

[121] CR/PR at Tables IV-2, C-1.

[122] CR at IV-6; PR at IV-4; CR/PR at Table IV-2. Based on official import statistics, the average unit values of nonsubject imports of pure magnesium from Canada, Russia, and Turkey were lower than the average unit values of subject imports of pure magnesium in 41 of 41 quarterly comparisons. CR/PR at Appendix D-2. The average unit values of nonsubject imports of alloy magnesium from Canada, Russia, and Taiwan were lower than the average unit values of subject imports of alloy magnesium in 28 of 29 quarterly comparisons. *Id.* at Appendix D-3.

We find that the record in the preliminary phase of these investigations contains conflicting evidence regarding subject imports' pricing in the market. On one hand, the pricing data on the record do not show significant underselling and there is evidence emphasizing the importance of non-price factors. On the other hand, there is some information from purchasers and petitioner's *** that provide evidence of price competition and show that the domestic industry lost sales and revenue because of the subject imports. Given the high degree of substitution, the importance of price in purchasing factors, and the significant volume of subject imports in the market, we cannot conclude, in the preliminary phase of these proceedings, that there is clear and convincing evidence that the subject imports were not having adverse price effects on the domestic industry and therefore causing material injury.[124]

E. Impact of the Subject Imports[125]

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[126]

The domestic industry's performance declined according to most measures during the period of investigation. The domestic industry's capacity increased overall *** percent during

---

(…Continued)

[123] We note that in its Section 232 Comments, US Magnesium emphasized that increased imports of pure magnesium from Russia and Turkey and imports of secondary alloy magnesium from countries other than Israel had depressed magnesium prices in the U.S. market. *See* US Magnesium's Section 232 Comments, appended as Exhibit 16 to Petitioner's Postconference Brief at 19-20 (arguing that "low-priced" imports of pure magnesium from Russia and Turkey "increased significantly" in 2017 resulting "in price declines that are harming US Magnesium's financial condition, employment, and ability to invest" and that "imports of secondary alloy magnesium, made from scrap produced from Chinese alloy magnesium, increase{ed} sharply" beginning in 2016 at an average unit value "far below that AUV of imports of primary pure or alloy magnesium . . . plac{ing} considerable pressure on US Magnesium's prices, and thus US Magnesium's viability."). DSM is a producer and exporter of primary magnesium. Conference Tr. at 40 (Byers). US Magnesium also observed in its Section 232 comments that Israel's share of total imports of pure and alloy magnesium had declined dramatically as the volume of nonsubject imports increased. Magnesium's Section 232 Comments, appended as Exhibit 16 to Petitioner's Postconference Brief at 19-20.

[124] *See American Lamb Co.*, 785 F.2d at 1001.

[125] Commerce initiated the investigation based on estimated antidumping duty margins of 92.06 to 130.61 percent for imports from Israel. *Magnesium from Israel: Initiation of Less-Than-Fair-Value Investigation*, 83 Fed. Reg. 58533, 58536 (Nov. 20, 2018).

[126] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

2015-17, from *** metric tons in 2015 to *** metric tons in 2016 before declining to *** metric tons in 2017, and was flat between interim 2017 and 2018, at *** metric tons.[127] The domestic industry's production, however, declined during the period, from *** metric tons in 2015 and *** metric tons in 2016 to *** metric tons in 2017; it was *** metric tons in interim 2018, compared to *** metric tons in interim 2017.[128] Consequently, the domestic industry's rate of capacity utilization declined from *** percent in 2015 to *** percent in 2016 and *** percent in 2017, and was *** percent in interim 2018, compared to *** percent in interim 2017.[129] Between 2015 and 2017, the domestic industry's number of production related workers ("PRWs") declined by *** percent, its total hours worked declined by *** percent, and its wages paid declined by *** percent.[130] Each of these measures was lower in interim 2018 compared to interim 2017.[131]

The domestic industry's declining production directly resulted from its declining sales volume and market share between 2015 and 2017, although the industry's sales volume and market share were higher in interim 2018 compared to interim 2017. The industry's U.S. shipments declined from *** metric tons in 2015 to *** metric tons in 2016 and *** metric tons in 2017, a level *** percent lower than in 2015.[132] The industry's U.S. shipments were *** metric tons in interim 2018, compared to *** metric tons in interim 2017.[133] The industry's U.S. shipments as a share of apparent U.S. consumption declined from *** percent in 2015 to *** percent in 2016 and *** percent in 2017, and was *** percent in interim 2018, compared to *** percent in interim 2017.[134]

The domestic industry's end-of-period inventories fluctuated between 2015 and 2017 but were lower in interim 2018 compared to interim 2017. Specifically, the industry's end-of-period inventories declined from *** metric tons in 2015 to *** metric tons in 2016 before increasing to *** metric tons in 2017.[135] The industry's end-of-period inventories were *** metric tons in interim 2018, compared to *** metric tons in interim 2017.[136] The industry's end-of-period inventories as a share of total shipments declined from *** percent in 2015 to

[127] CR/PR at Tables III-5, C-1.

[128] CR/PR at Tables III-5, C-1.

[129] CR/PR at Table III-5.

[130] CR/PR at Tables III-9, C-1. The domestic industry's number of PRWs declined from *** PRWs in 2015 to *** PRWs in 2016 and to *** PRWs in 2017, and were *** PRWs in interim 2018, compared to *** PRWs in interim 2017. CR/PR at Table III-9. The industry's total hours worked declined from *** hours in 2015 to *** hours in 2016 and to *** hours in 2015, and were *** hours in interim 2018, compared to *** hours in interim 2017. *Id.* The industry's wages paid increased from $*** in 2015 to $*** in 2016 but declined to $*** in 2017, and were $*** in interim 2018, compared to $*** in interim 2017. *Id.*

[131] CR/PR at Tables III-9.

[132] CR/PR at Tables III-6, C-1.

[133] CR/PR at Table III-6.

[134] CP/PR at Tables III-7, IV-7.

[135] CR/PR at Table III-8.

[136] CR/PR at Table III-8.

*** percent in 2016 before increasing to *** percent in 2017.[137] The industry's end-of-period inventories as a share of total shipments was *** percent in interim 2018, down from *** percent in interim 2017.[138]

The domestic industry's declining sales volume, coupled with declining prices for the domestic like product and increasing unit costs, resulted in a substantial deterioration in the industry's financial performance during the period of investigation. The domestic industry's net sales value declined from $*** in 2015 to $*** in 2016 and $*** in 2017, a level *** percent lower than in 2015.[139] The industry's net sales value was $*** in interim 2018, compared to $*** in interim 2017.[140] As the domestic industry's net sales value declined by more than its operating expenses between 2015 and 2017, the industry's operating income declined from $*** in 2015 to $*** in 2016 and a loss of negative $*** in 2017.[141] The industry's operating loss was negative $*** in interim 2018, compared to negative $*** in interim 2017.[142] Similarly, the domestic industry's operating income margin of *** percent in 2015 declined to *** percent in 2016 and to an operating loss of negative *** percent in 2017, and negative *** percent in interim 2018, compared to negative *** percent in interim 2017.[143] The industry's average operating return on assets declined from *** percent in 2015 to *** percent in 2016 and to negative *** percent in 2017.[144] [145]

The domestic industry's capital expenditures also declined during the period of investigation.[146] The industry's capital expenditures declined from $*** in 2015 to $*** in

[137] CR/PR at Table III-8.

[138] CR/PR at Table III-8.

[139] CR/PR at Tables VI-1, C-1.

[140] CR/PR at Table VI-1.

[141] CR/PR at Tables VI-1.

[142] CR/PR at Table VI-1.

[143] CR/PR at Tables VI-1.

[144] CR/PR at Table VI-5. The domestic industry's gross profit and net income exhibited similar declining trends. The industry's gross profit declined from $*** in 2015 to $*** in 2016 and to a gross loss of negative $*** in 2017, and negative $*** in interim 2018, compared to a gross profit of $*** in interim 2017. *Id.* The industry's net income declined from $*** in 2015 to a net loss of negative $*** in 2016 before narrowing to negative $*** in 2017. *Id.* The industry suffered a net loss of negative $*** in interim 2018, compared to negative $*** in interim 2017. *Id.* The industry's cash flow declined from $*** in 2015 to negative $*** in 2016 before increasing to negative $*** in 2017. *Id.* The industry's cash flow was negative $*** in interim 2018, compared to $*** in interim 2017. *Id.*

[145] Declining demand also may have contributed to the domestic industry's increasing ratio of COGS to net sales by placing downward pressure on prices and by increasing the domestic industry's unit costs. See section V.D, above; CR/PR at Table VI-1 (showing that $*** of the $*** per metric ton increase in unit COGS between 2015 and 2017, or *** percent of the increase, consisted of higher labor and other factory costs per unit, which are influenced by the industry's rate of capacity utilization).

[146] Responding domestic producers reported no research and development expenditures. CR at VI-17; PR at VI-4. Three responding domestic producers reported that subject imports had negative effects on their investment and three responding domestic producers reported that subject imports had negative effects on their growth and development. *Id.* at Table VI-6.

2016 and to $*** in 2017, a level *** percent lower than in 2015.[147] The industry's capital expenditures were $*** in interim 2018, compared to $*** in interim 2017.[148] ***.[149] After ATI's closure of its adjacent titanium metal plant in November 2016, US Magnesium shut down the electrolytic cells that supplied ATI, which raised its per unit production costs.[150] Low market prices and diminished cash flow also forced US Magnesium to delay the rebuilding of dozens of electrolytic cells that it reports should have been rebuilt in 2016 and 2017, significantly and negatively impacting its production rate and productivity and further increasing its unit cost of production.[151] ***.[152]

The record of the preliminary phase of the investigations is mixed regarding the impact of subject imports on the domestic industry. Some evidence provides a reasonable indication that subject imports contributed to the domestic industry's declining prices and financial performance. In particular, the domestic product and subject imports are highly substitutable and *** of *** responding purchasers reported that subject import prices were lower than prices for domestically produced magnesium.[153] ***, suggest that low-priced subject import competition caused US Magnesium to lose substantial sales and revenues.[154] Moreover, three of four responding domestic producers reported that subject imports had negative effects on their investment and growth and development during the period of investigation.[155]

On the other hand, subject import volume declined between 2015 and 2017 and was lower in interim 2018 than in 2017, while subject import market share declined irregularly during the period of investigation.[156] However, apparent U.S. consumption also declined by more than the decline in subject import volume.[157] Pricing data show substantial overselling by subject imports, and few responding purchasers reported that low subject import prices caused them to purchase subject imports instead of domestic product, or caused domestic producers to reduce their prices to them.[158] There also is not an obvious correlation between subject import market share and the domestic industry's worsening financial performance over the

[147] CR/PR at Tables VI-4, C-1.

[148] CR/PR at Table VI-4.

[149] CR/PR at Table VI-8.

[150] US Magnesium's Section 232 Comments, appended as Exhibit 16 to Petitioner's Postconference Brief at 17, 23-24; Conference Tr. at 63 (Lutz), 64 (Tissington).

[151] Conference Tr. at 22 (Tissington); CR/PR at Table VI-7.

[152] CR/PR at Table VI-7.

[153] CR/PR at Table V-9.

[154] *See* Section V.D, above.

[155] CR/PR at Tables VI-6-7.

[156] CR/PR at Tables IV-2, 6, 7. Subject import volume declined from 12,890 metric tons in 2015 to 11,335 metric tons in 2016 and to 11,450 metric tons in 2017, and was 7,882 metric tons in interim 2018, compared to 9,362 metric tons in interim 2017. *Id.* at Table IV-2. Subject import market share declined from *** percent in 2015 to *** percent in 2016 before increasing to *** percent in 2017, and was *** percent in interim 2018, compared to *** percent in interim 2017. *Id.* at Table IV-7.

[157] CR/PR at Table C-1.

[158] *See* section V.D, above.

period of investigation, with the industry's weakest operating income margin in interim 2018 corresponding to the lowest subject import market share.[159]

In light of the conflicting evidence, we cannot conclude that the record of the preliminary phase of the investigations contains clear and convincing evidence that there is no material injury by reason of the subject imports.[160]

We also recognize that the domestic industry's declining performance may have been impacted by other factors, including declining demand[161] and low-priced nonsubject import competition. In particular, the closure of the ATI titanium sponge facility eliminated *** metric tons of annual demand for magnesium that had been supplied exclusively by US Magnesium. Indeed, a US Magnesium official stated at the conference that ATI's titanium plant "was an extremely important venture to us".[162] As discussed above, nonsubject import volume increased over the period of investigation, and the average unit values for leading nonsubject sources were lower than subject import average unit values.

In any final phase of the investigations, we intend to further assess the effect of declining demand and ATI's titanium facility closure on prices in the US market, and the role of nonsubject imports.

For the foregoing reasons, we find a reasonable indication of material injury by reason of subject imports.

VI. Conclusion

For the reasons stated above, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of subject imports of magnesium from Israel that are allegedly subsidized and sold in the United States at less than fair value.

---

[159] CR/PR at Tables IV-7, VI-1. Petitioner has argued that the domestic industry's performance in the merchant market (which excludes US Magnesium's recycling operations for ATI) also show injury. *See* Petitioner's Postconference Brief at 39-42, Exhibit 9. However, an examination of the merchant market (which excludes the tolling operations of US Magnesium and ***) similarly does not show an obvious correlation between subject import market share and worsening domestic industry performance. CR at VI-5; PR at VI-2. Subject imports as a share of the U.S. merchant market declined during the period of investigation. Calculated by Commission staff from CR/PR at Tables IV-6-7; Domestic Producers' Questionnaire Response of ***, Supplemental Tolling Questionnaire; and Petitioner's Postconference Brief at Exhibit 9.

[160] See American Lamb Co., 785 F.2d at 1001.

[161] The *** metric ton decline in apparent U.S. consumption between 2015 and 2017 mirrors the *** metric ton decline in the domestic industry's U.S. shipments during the period. CR/PR at Tables III-6, IV-7. Similarly, the higher level of apparent U.S. consumption in interim 2018 compared to interim 2017 (by *** metric tons) is similar to the higher level of the domestic industry U.S. shipments in interim 2018 compared to interim 2017 (by *** metric tons). *Id.*

[162] Conference Tr. at 43-44 (Tissington); *see also* DSM's Postconference Brief at Exhibit 1.

Dissenting Views of Commissioner Meredith M. Broadbent

Based on the record in the preliminary phase of these investigations, I find that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of magnesium from Israel that are allegedly sold in the United States at less than fair value and subsidized by the government of Israel. I join with and adopt as my own sections I-V.B of the Views of the Commission.

My negative determinations are based upon the clear and convincing evidence in the record as a whole showing that: (1) the domestic industry's reduction in U.S. shipments was largely due to a substantial decrease in apparent U.S. consumption driven by multiple factors including the closure of a major purchaser, Allegheny Technologies Incorporated (ATI), in 2016; (2) the domestic industry's decline in market share was *** due to the loss of sales resulting from the closure of ATI and increasing volumes of nonsubject imports; (3) subject imports, which were declining throughout the POI, pervasively oversold the domestic like product throughout the period of investigation; (4) subject imports did not significantly depress or suppress U.S. producers' prices; and (5) subject imports are not likely to cause material injury to the domestic industry in the imminent future.

I. Legal Standard for Preliminary Determinations

In preliminary phase investigations, the Commission is required to determine whether there is a "reasonable indication" of material injury or a threat of material injury by reason of the subject imports.[163] In *American Lamb Co. v. United States*,[164] the Federal Circuit held that the "reasonable indication" standard does not mean that the Commission is to determine only whether there is a "possibility" of material injury.[165] Instead, the Federal Circuit stated that the Commission may appropriately weigh the record evidence in a preliminary determination in order to determine whether "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[166] Indeed, the Federal Circuit has stated that "{t}he

---

[163] 19 U.S.C. §§ 1671b(a)(l) & 1673b(a)(l).

[164] 785 F.2d 994, 1001-04 (Fed. Cir. 1986).

[165] *Id.* at 1004.

[166] *Id.* at 1001. With respect to the "clear and convincing evidence" standard articulated in *American Lamb*, the Court of International Trade ("CIT") has stated that the Commission need not find each piece of evidence to be clear and convincing, but instead has found that *American Lamb* requires only that "'the record as a whole' contain clear and convincing evidence that there is no material injury or threat of material injury by reason of imports." *Celanese Chemicals Ltd. v. United States*, — F. Supp. 2d—, Slip Op. 07-16 (Ct. Int'l Trade January 29, 2007) at 11("each piece of evidence" need not be clear and convincing, but the record as a whole); *Connecticut Steel Corp. v. United States*, — F. Supp.— , Slip Op. 06-159 (October 31, 2006) at 15; *Connecticut Steel Corp. v. United States*, 852 F. Supp. 1061, 1064 (Ct. Int'l Trade 1994). Moreover, the CIT has reaffirmed that in applying the reasonable indication "standard for making a preliminary determination regarding material injury or threat of material injury, the

(*continued*...)

statute calls for a reasonable indication of injury, not a reasonable indication of need for further inquiry."[167] In addition, the Federal Circuit has stated that Congress intended the Commission to use preliminary determinations to avoid the cost and disruptions to trade caused by unnecessary investigations.[168]

II. No Reasonable Indication of Material Injury by Reason of Subject Imports from Israel

A. Volume of Subject Imports

Section 771(7)(C)(i) of the Tariff Act provides that the "Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States, is significant."[169]

In this case, subject imports of magnesium from Israel decreased by 11.2 percent from 2015 to 2017 and by 15.8 percent in interim 2018 compared with interim 2017.[170] Subject imports' market share decreased slightly, from *** percent in 2015 to *** percent in 2016, and then increased to *** percent in 2017, and was *** percent in interim 2018, down from *** percent in interim 2017.[171]

These declines in subject import volume and market share over the period of investigation coincided with the domestic industry's overall market share remaining steady at *** percent in 2015 and *** percent in 2016, before decreasing to *** percent in 2017.[172] Domestic industry market share was *** percent in interim 2018, up from *** percent in interim 2017.[173] In contrast to subject import market share, the market share of nonsubject imports increased from *** percent in 2015 to *** percent in 2016, and *** percent in 2017,

---

(…*continued*)
Commission may weigh all evidence before it and resolve conflicts in the evidence." *Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp. 2d 1353, 1368 (Ct. Intl. Trade 1999).

In the Commission's analysis of whether no likelihood exists that contrary evidence will arise in a final investigation, the CIT has stated that the Commission "must analyze the 'best information available' contained in the record at the time of its determination and judge the likelihood that evidence contrary to that already gathered will arise in a final determination that would support an affirmative determination." *Calabrian Coro. v. U.S. Int'l Trade Comm'n*, 794 F. Supp. 377, 386 (Ct. In'tl Trade 1992). Additionally, the CIT has stated that "a showing of likelihood requires more than speculation, or the indication that something might happen." *Committee for Fair Coke Trade v. United States*, — F. Supp. 2d.----, Slip Op. 04-68 at 37 (Ct. Int'l Trade June 10, 2004).

[167] *Texas Crushed Stone Co. v. United States*, 35 F.3d 1535, 1543 (Fed. Cir. 1994).

[168] *American Lamb*, 785 F.2d at 1004.

[169] 19 U.S.C. § 1677(7)(C)(i).

[170] CR/PR at Table C-1.

[171] CR/PR at Table IV-7.

[172] CR/PR at Table IV-7.

[173] CR/PR at Table IV-7.

and remained steady in interim 2018 at *** percent, compared to *** percent in interim 2017.[174]

During 2015 to 2017, magnesium consumption decreased, reportedly as imports of semi-processed products that contain magnesium increased.[175] In addition, the *** significant decline in magnesium consumption, between 2016 and 2017, was *** due to the 2016 closure of the Allegheny Technologies Incorporated (ATI) titanium sponge plant in Rowley, Utah, a significant consumer of domestically produced magnesium.[176] As consumption decreased between 2015 and 2016, the domestic industry decreased U.S. shipments, but was able to maintain its market share while the volume and market share of subject imports decreased.[177] In 2017, as consumption decreased by *** percent compared with 2016, the domestic industry's market share decreased by *** percentage points.[178] As domestic producers' market share decreased in 2017, subject imports' market share increased by *** percentage points and nonsubject imports' market share increased by *** percentage points.[179] Although the domestic industry, unlike subject imports, lost market share in 2017, this was *** a result of from the closure of ATI, which was a significant consumer of domestically produced magnesium.[180] Importantly, the domestic industry was able to recoup market share in interim 2018.[181]

Between interim 2017 and interim 2018, domestic consumption increased and domestic producers were able to increase U.S. shipment volumes by *** percent and market share by *** percentage points.[182] The volume of subject imports, in contrast, was 15.8 percent lower, with an accompanying reduction of *** percentage points of market share. The volume of nonsubject imports was 3.5 percent higher in interim 2018, and market share of nonsubject imports ***.[183] Therefore, as consumption increased in interim 2018, domestic producers were able to take market share from subject imports.

---

[174] CR/PR at Table IV-7.

[175] U.S. imports reportedly increased for aluminum alloys, die-casting products, and titanium. As imports substituted for domestic production of these magnesium containing products, less magnesium was consumed in the United States. Conference Tr. at 50 (Slade).

[176] ATI's Rowley plant consumed *** of magnesium in 2015 and *** in 2016, ***. Petitioner's Postconference Brief at 40; Conference Tr. at 43 (Tissington).

[177] CR/PR at Table IV-7.

[178] CR/PR at Table C-1.

[179] CR/PR at Table C-1.

[180] Had *** maintained the same level of sales to ATI in 2017 as in 2015, subject import market share would have been *** percent, down from *** percent in 2015. CR/PR at Table IV-7; Petitioner's Postconference Brief at Exhibit 9.

[181] CR/PR at Table C-1.

[182] CR/PR at Table C-1. Both the petitioner and respondent stated that recent increases in the demand for magnesium in the aluminum sector was influenced by the recent 232 and AD/CVD proceedings in the aluminum sector. The petitioner also stated that demand for magnesium has also increased in the die casting segment of the market. CR at II-8; PR at II-5-6.

[183] CR/PR at Table C-1.

In light of the discussion above, I find that subject imports were significant both in absolute terms and relative to consumption. However, for the reasons I discuss below, I do not find that the subject imports caused significant price effects or had a significant impact on the domestic industry.

B. Price Effects of the Subject Imports

Section 771(7)(C)(ii) of the Tariff Act provides that, in evaluating the price effects of subject imports, the Commission shall consider whether –

(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.[184]

As addressed in section V.B.3 of the Views of the Commission, the record indicates that there is a high degree of substitutability between domestically produced magnesium and subject imports from Israel, and that price is an important factor in purchasing decisions for magnesium, although diversity and security of supply, quality, and service are also important.[185]

The Commission sought quarterly data on the total quantity and f.o.b. value of three magnesium products from domestic producers and U.S. importers.[186] Three domestic producers and one importer of subject merchandise provided usable data.[187] Reported pricing data was essentially complete, accounting for approximately *** percent of the value of the domestic industry's U.S. shipments of magnesium and *** percent of subject imports from Israel.[188]

The fulsome pricing data collected by the Commission indicate that subject imports generally oversold the domestic like product, in 31 of 45 quarterly comparisons, and undersold the domestic like product in only 14 comparisons.[189] Overselling by subject imports accounted for *** percent of reported subject import sales volume.[190] Consistent with the pricing data, official import statistics show that the AUVs of subject imports were higher than the AUVs of the domestic industry's U.S. shipments throughout the POI.[191] Therefore, the record shows

---

[184] 19 U.S.C. § 1677(7)(C)(ii).
[185] CR at II-10, PR at II-7.
[186] CR at V-5; PR at V-4-5.
[187] CR at V-5; PR at V-4-5.
[188] CR at V-5-6; PR at V-4-5.
[189] CR/PR at Table V-7.
[190] CR/PR at Table V-7. *** *Id*.
[191] CR/PR at Table C-1. Petitioner stated that the official trade data contains only in-scope magnesium products. Conference Tr. at 40 (Jones), 112 (Levy).

that subject imports did not undersell the domestic like product to a significant degree throughout the period.[192]

Petitioner argued that the overselling by subject imports seen in pricing data submitted by DSM for *** did not match the Petitioner's market experience.[193] Specifically, Petitioner reported that it had to lower its prices in response to subject imports to maintain sales volumes to ***.[194] Petitioner also submitted ***, which are internal ***[195] and 16 additional purchasers.[196] Petitioner argues that these *** demonstrate that contrary to the pricing data, customers frequently used lower subject import prices to compel US Magnesium to lower its prices and purchased lower-priced subject imports instead of domestically produced magnesium.

The record, however, does not support Petitioner's claim that it faced pricing pressure from DSM for sales to ***. First, as discussed above, the pricing data does not show underselling by subject imports. Second, in ***.[197] Third, in ***[198] The information reported by *** contradicts the Petitioner's claims that it lost sales and revenues to the customers due to low-priced subject imports, and these *** purchasers are unlikely to submit additional information supporting the opposite conclusion in any final phase of these investigations.

The ***[199] The anecdotal evidence contained in the *** is directly contradicted by pricing data showing pervasive overselling, and purchasers' lost sales/lost revenue questionnaire responses showing that few responding purchasers reported that low subject import prices caused them to shift purchases to subject imports or domestic producers to reduce their prices to them.[200] Nor was there any shift in market share from the domestic industry to subject imports during the period of investigation, as would be expected if the *** alleged in the *** were accurate and widespread. The prevalence of subject import overselling, and purchaser responses showing no significant adverse price effects, are unlikely to change in

---

[192] The Petitioner expressed concern about *** Petitioner's Postconference Brief at 16–17. Commission staff addressed both of these concerns before the inclusion of the data in the staff report. See EDIS Doc. No. 662809. I find that the pricing product data on the record of the preliminary phase of the investigations permit apples-to-apples comparisons between the prices of subject imports and domestically produced magnesium.

[193] Petitioner's Postconference Brief at 18.

[194] Petitioner's Postconference Brief at 18, Exhibit 7.

[195] ***.

[196] Petitioner's Postconference Brief at 19–35.

[197] CR/PR at Table V-9, V-10. *** its domestic share of total purchases by *** percent over the POI, while at the same time it *** its share of subject imports by *** percent. CR/PR at Table V-8.

[198] ***

[199] Petitioner's Postconference Brief at 19-35.

[200] CR/PR at Tables V-7-10. The *** purchasers that reported price being a primary reason for purchasing subject imports reported that the combined quantity for these purchases was only *** metric tons over the POI, which was only *** percent of apparent consumption and *** percent of subject imports. CR/PR at Table V-9 and Table C-1.

any final phase of the investigations, and no amount of new information on the *** submitted by the Petitioner could overcome this contrary evidence.

The record also does not show significant price depression by reason of subject imports. Domestic producer sales prices for all three pricing products decreased during the POI, from *** percent to *** percent.[201] Although domestic prices decreased over the POI while unit costs increased, resulting in a cost-price squeeze, there was no evidence of significant underselling by subject imports that would have depressed prices during the POI. Subject imports oversold the domestic like product in *** of *** quarters on sales of pricing products 2 and 3, covering pure and alloy magnesium in ingot form, which accounted for *** percent of the pricing product sales volume reported by domestic producers.[202] Overselling accounted for *** percent of reported subject import sales volume for products 2 and 3.[203] In addition, *** of *** responding purchasers reported that price was not a primary reason for purchasing subject imports instead of domestically produced magnesium.[204]

Moreover, I do not find that subject imports prevented price increases, which otherwise would have occurred, to a significant degree. I acknowledge that the domestic industry's ratio of cost of goods sold ("COGS") to net sales increased from *** percent in 2015 to *** percent in 2017, and was *** percent in interim 2018, compared to *** percent in interim 2017.[205] Some of the increase in this ratio was attributable to an increase in the domestic industry's unit COGS of *** percent from 2015 to 2017, and an increase of *** percent in interim 2018, compared to interim 2017, resulting in part from declining demand.[206] Although the industry's

---

[201] CR/PR at Table V-6.

[202] CR/PR at Tables V-3-5, 7. I recognize that subject import underselling contributed to declining prices on domestic producer sales of product 1. Id. at Tables V-6-7. Because product 1 accounted for domestic producer sales of only *** metric tons during the period of investigation, however, I do not find such price depression caused by subject imports to be significant. CR/PR at Table V-3.

[203] CR/PR at Table V-7.

[204] Lost sales/lost revenues questionnaires were sent to purchasers of magnesium that were identified by U.S. producers as possible examples of lost sales or revenue due to competition from imports of magnesium from Israel. CR at V-13; PR at V-13. *** purchasers that reported purchasing subject imports instead of the domestic product indicated that subject imports were lower-priced. CR/PR at Table V-9. However, of the *** responding purchasers, only *** reported that price was a primary reason for purchasing subject imports as opposed to domestic products. CR/PR at Table V-9. The *** purchasers that reported price being a primary reason for purchasing subject imports reported that the combined quantity for these purchases was only *** metric tons over the POI, which was only *** percent of apparent consumption and *** percent of subject imports. CR/PR at Table V-9 and Table C-1. Only *** purchasers reported increasing their share of subject country imports over the POI. CR/PR at Table V-8. Only *** purchasers reported that U.S. producers had reduced prices to compete with lower-priced imports from Israel, and the reported estimated price reduction was only *** percent. CR at V-17; PR at V-17.

[205] CR/PR at Table C-1.

[206] CR/PR at Table C-1. As a ratio to net sales, all of three of the categories of COGS increased. Raw materials to net sales increased from *** percent in 2015 to *** percent in 2017, and was *** percent in interim 2018. Direct labor to net sales increased from *** percent in 2015 to *** percent in 2017, and

(*continued*...)

AUV of net sales decreased by *** percent from 2015 to 2017 and contributed to the cost-price squeeze, subject imports could not have prevented price increases over the POI because they were pervasively and consistently overselling the domestic like product.[207] Moreover, the decline in apparent U.S. consumption over the POI made it unrealistic for domestic producers to increase prices over this period.[208]

Furthermore, the record shows that factors other than subject imports explain the domestic industry's declining sales prices and inability to raise prices to cover increasing costs. Throughout the POI, decreasing magnesium prices coincided with significant decreases in consumption, which also served to increase the domestic industry's unit costs.[209] Increasing volumes of low-priced nonsubject imports, which were highly substitutable with domestically produced magnesium, also contributed to declining prices for the domestic like product during the period of investigation.[210] Nonsubject imports from the largest sources, including Canada, Russia, Taiwan, and Turkey, had average unit values that were lower than those of subject imports, as well as domestic producer sales prices, in nearly every quarterly comparison.[211] In its 232 Comments, US Magnesium emphasized that increased imports of pure magnesium from Russia and Turkey and imports of secondary alloy magnesium from countries other than Israel had depressed magnesium prices in the U.S. market.[212]

(…*continued*)
was *** percent in interim 2018. Other factory costs to net sales increased from *** percent in 2015 to *** percent in 2017, and was *** percent in interim 2018. CR/PR at Table VI-1. Because electrolytic cells are used for a significant amount of the domestic production of magnesium, producers "must maintain continuous production and high capacity utilization" to be cost effective. Petitioner's Postconference Brief at 6. Therefore, when demand decreases, domestic magnesium production may become less cost effective, and an increase in COGS as a ratio of net sales would be expected.

[207] CR/PR at Table C-1.

[208] Although apparent U.S. consumption was *** percent higher in interim 2018 compared to interim 2017, it remained depressed relative to levels earlier in the period of investigation. Although domestic prices were slightly lower in interim 2018 compared to interim 2017, subject imports declined in the interim period by 15.8 percent and lost *** percentage points of market share compared with interim 2017. Furthermore, domestic prices in interim 2018 reflected annual contracts negotiated in 2017, when magnesium demand was at a period low. Given this, and the declining presence of subject imports, I do not find that subject imports depressed or suppressed U.S. prices in interim 2018. CR/PR at Table C-1.

[209] Conference Tr. at 61 (Slade).

[210] CR/PR at Table IV-2.

[211] See CR/PR at Tables IV-3, V-4-5, Appendices D-2-3.

[212] *See* US Magnesium's 232 Comments, appended as Exhibit 16 to Petitioner's Postconference Brief at 3, 19-20 (arguing that "low-priced" imports of pure magnesium from Russia and Turkey "increased significantly" in 2017 resulting "in price declines that are harming US Magnesium's financial condition, employment, and ability to invest" and that "imports of secondary alloy magnesium, made from scrap produced from Chinese alloy magnesium, increase{ed} sharply" beginning in 2016 at an average unit value "far below that AUV of imports of primary pure or alloy magnesium . . . plac{ing} considerable pressure on US Magnesium's prices, and thus US Magnesium's viability."). DSM is a producer and exporter of primary magnesium. Conference Tr. at 40 (Byers). US Magnesium also observed in its 232
(*continued*...)

In sum, I find no significant underselling and no significant adverse price effects by subject imports during the period of investigation.

C. Impact of the Subject Imports[213]

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, "shall evaluate all relevant economic factors which have a bearing on the state of the industry." These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."[214]

Overall, the domestic industry's financial and performance indicators worsened over the POI. Capacity increased by *** percent from 2015 to 2017 while production decreased by *** percent. Capacity remained steady in interim 2018 compared with interim 2017 and production decreased by *** percent.[215] As capacity increased and production decreased, capacity utilization decreased in every year and in the interim period, from *** percent in 2015 to *** percent in interim 2018.[216]

U.S. producers' share of apparent U.S. consumption remained steady at *** percent in 2015 and *** percent in 2016, before decreasing to *** percent in 2017. U.S. producer's share of apparent U.S. consumption was *** percent in interim 2018.[217] U.S. producers' U.S. shipments declined by *** percent between 2015 and 2017, but increased by *** percent in interim 2018 compared with interim 2017.[218] The domestic industry's inventories decreased by *** percent between 2015 and 2017, but rose from *** percent of total shipments in 2015 to *** percent in 2017.[219] In interim 2018, inventories decreased by *** percent and were *** percent of total shipments.[220] The number of production workers declined by *** percent between 2015 and 2017, while productivity decreased by *** percent and hourly wages

(…*continued*)
Comments that Israel's share of total imports of pure and alloy magnesium had declined dramatically as the volume of nonsubject imports increased. Magnesium's 232 Comments, appended as Exhibit 16 to Petitioner's Postconference Brief at 19-20.

[213] Commerce initiated the antidumping investigation of magnesium from Israel based on estimated dumping margins of 92.06-130.61 percent. *Magnesium from Israel: Initiation of Less-Than-Fair-Value Investigation*, 83 FR 58533 (November 20, 2018).

[214] 19 U.S.C. § 1677(7)(C)(iii).

[215] CR/PR at Table C-1.

[216] CR/PR at Table C-1.

[217] CR/PR at Table C-1.

[218] CR/PR at Table C-1.

[219] CR/PR at Table C-1.

[220] CR/PR at Table C-1.

increased by *** percent.[221] In interim 2018, the number of production workers decreased by *** percent, productivity decreased by *** percent, and hourly wages decreased by *** percent.[222]

The domestic industry's operating income margin declined from *** percent in 2015 to *** percent in 2016, was negative *** percent in 2017, and was negative *** percent in interim 2018.[223] The domestic industry's gross profit margins also decreased significantly, dropping from *** percent in 2015 to *** percent in 2016, and to negative *** percent in 2017, and were negative *** percent in interim 2018.[224] The industry's capital expenditures decreased over the period, dropping by *** percent from 2015 to 2017, and although capital expenditures were *** percent higher in interim 2018 compared with interim 2017, capital expenditures were still significantly lower than in 2015.[225]

Although the domestic industry's performance worsened over the period of investigation, I find that subject import trends generally did not correlate with domestic industry performance and that factors other than subject imports accounted for the decline. As discussed in greater detail within my analysis of volume trends, the decrease in the domestic industry's shipments and capacity utilization resulted from decreasing demand and the closure of a major U.S. purchaser, while subject imports decreased in terms of volume and market share. Therefore, I attribute the domestic industry's declining shipments and market share to declining demand and competition from nonsubject imports, rather than from subject imports.

Declining demand also contributed to the domestic industry's worsening financial performance by reducing the industry's rate of capacity utilization. Because electrolytic cells are used for a significant amount of the domestic production of magnesium, producers "must maintain continuous production and high capacity utilization" to be cost effective,[226] and a decline in capacity utilization would be accompanied by an increase in unit costs and a decline in financial performance. The increasing volume of low-priced nonsubject imports also contributed to the domestic industry's declining financial performance, by capturing market share from the domestic industry and placing downward pressure on domestic prices. As noted above, in its 232 Comments, US Magnesium reported that low priced imports from nonsubject countries were the cause of negative effects on the domestic industry. By contrast, the declining volume and market share of subject imports generally oversold the domestic like product, and had no significant adverse price effects. Thus, I find no causal nexus between subject imports and the domestic industry's declining performance during the period of investigation.

In view of the foregoing, I find no reasonable indication that subject imports from Israel are having a significant impact on the domestic industry. Accordingly, I find that there is no

---

[221] CR/PR at Table C-1.
[222] CR/PR at Table C-1.
[223] CR/PR at Table C-1.
[224] CR/PR at Table VI-1.
[225] CR/PR at Table C-1.
[226] Petitioner's Postconference Brief at 6.

reasonable indication that the domestic industry is materially injured by reason of imports of magnesium from Israel that are allegedly subsidized and sold in the United States at less than fair value.

III. No Reasonable Indication of Threat of Material Injury by Reason of Subject Imports from Israel

A. Legal Standard

Section 771(7)(F) of the Tariff Act directs the Commission to determine whether the U.S. industry is threatened with material injury by reason of the subject imports by analyzing whether "further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted."[227] The Commission may not make such a determination "on the basis of mere conjecture or supposition," and considers the threat factors "as a whole" in making its determination whether dumped or subsidized imports are imminent and whether material injury by reason of subject imports would occur unless an order is issued.[228] In making my determination, I consider all statutory threat factors that are relevant to this investigation.[229]

---

[227] 19 U.S.C. § 1677(7)(F)(ii).

[228] 19 U.S.C. § 1677(7)(F)(ii).

[229] These factors, pursuant to 19 U.S.C. § 1677(7)(F)(i) are as follows:

(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement) and whether imports of the subject merchandise are likely to increase,

(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,

(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,

(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices and are likely to increase demand for further imports,

(V) inventories of the subject merchandise,

(VI) 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,

…

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(*continued*...)

B. Likely Volume

As previously discussed, the volume of subject imports declined by 11.2 percent from 2015 to 2017 and was 15.8 percent lower in interim 2018 compared with interim 2017. The market share of subject imports also decreased over the POI, from *** percent in 2015 to *** percent in interim 2018. Consequently, there was no significant rate of increase in either the volume or the market share of the subject imports during the POI.

The record also does not indicate that DSM, the sole producer and exporter of magnesium in Israel, has substantial ***.[230] DSM's production capacity remained unchanged at *** metric tons per year during the POI and its production of magnesium increased by *** percent between 2015 and 2017, but was *** percent lower in interim 2018 compared with interim 2017.[231] DSM projects that its capacity will *** but that production will *** in 2019.[232] DSM's capacity utilization rate increased from *** percent in 2015 to *** percent in 2017, but decreased to *** in interim 2018.[233] The record also shows that DSM exported *** percent of its shipments throughout the POI.[234] DSM's reported share of total shipments that were exported to the United States decreased from *** percent in 2015 to *** percent in 2017, and to *** percent in interim 2018, as the share of its total shipments exported to third country markets increased.[235] DSM projects that its share of total shipments exported to the United States will be *** percent in 2019.[236]

Although DSM has a high degree of export orientation, its export shipments to the United States declined as a share of total shipments over the POI and it has ***.[237] Therefore,

---

(…*continued*)

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).

[230] CR at VII-3; PR at VII-3.

[231] CR/PR at Table VII-2.

[232] CR/PR at Table VII-2.

[233] CR/PR at Table VII-2.

[234] CR/PR at Table VII-2.

[235] CR/PR at Table VII-2.

[236] CR/PR at Table VII-2.

[237] The Petitioner cites a 20-F Disclosure Statement from DSM's parent company to argue that DSM's annual production capacity was around 33,000 metric tons, significantly higher than DSM reported, and therefore DSM has significant excess capacity. Petitioner's Postconference Brief at 45-46. DSM responded that while it has unused cells in its electrolytic cell room, it would be costly to bring them back online. DSM also argues that this is irrelevant because the real limit to production capacity is the need to dispose of chlorine gas that is a byproduct of magnesium production. DSM claims that it could not dispose of the additional chlorine gas that would result from producing more than *** metric tons of magnesium per year. Dead Sea Magnesium, Postconference Brief at 37, Response to Staff Questions, 1. Although there might be disagreement among the parties as to the proper capacity estimate, subject imports decreased in terms of volume and market share, particularly in interim 2018. Therefore, even if the Israeli industry had additional capacity, the evidence on the record does not indicate that they would direct additional quantities of magnesium to the United States.

the data does not suggest the likelihood of substantially increased imports in the imminent future. As discussed above, subject imports decreased both absolutely and relative to apparent U.S. consumption over the period of investigation, despite higher prices in the United States relative to third country markets, and subject import overselling was pervasive.[238] In light of the foregoing, I do not find a likelihood of significantly increased subject imports in the imminent future.

C. Likely Price Effects

As stated above, I found that subject imports oversold the domestic product in a majority of quarterly price comparisons and for most reported subject import sales volume. The prevalence of subject import overselling is unlikely to diminish in the imminent future given ***. Accordingly, I find that imports of subject merchandise are unlikely to enter at prices that would be likely to have a significant depressing or suppressing effect on domestic prices, or are likely to increase demand for such imports.

D. Likely Impact

As discussed above, I have found that the volume of subject imports is not likely to increase significantly in the imminent future. Furthermore, subject imports are not likely to undersell the domestic like product, and are not entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices. In view of the foregoing, I find that there is no reasonable indication that an industry in the United States is threatened with material injury by reason of subject imports from Israel that are allegedly subsidized and sold at less than fair value.

---

[238] See Petitioner's Postconference Brief at Exhibits 13-14. I have also considered the other statutory threat factors, none of which indicate that a significant increase in the volume of subject imports is imminent. The Israeli industry's end-of-period inventories relative to its reported total shipments increased from *** percent in 2015 to *** percent in 2017, and was *** percent in interim 2018 and was projected to be *** percent in 2019. CR/PR at Table VII-2. U.S. importers' inventories increased slightly as a ratio to U.S. shipments of the imports of subject merchandise, rising from *** percent in 2015 to *** percent in interim 2017. CR/PR at Table VII-4.

DSM *** report the production of any out-of-scope products on the same equipment and machinery used to produce magnesium. CR at VII-7; PR at VII-5.

There are no known trade barriers in third-country markets covering Israeli exports of in-scope magnesium. CR at VII-11; PR at VII-8.

On November 20, 2018, Commerce published a notice in the Federal Register in which it identified 12 government programs in Israel on which it initiated the CVD investigation on magnesium from Israel. CR at I-11; PR at I-9.

IV. Conclusion

For the reasons stated above, I determine that there is no reasonable indication that an industry in the United States is materially injured, or threatened with material injury, by reason of subject imports of magnesium from Israel that are allegedly sold in the United States at less than fair value and subsidized by the government of Israel.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by US Magnesium LLC ("US Magnesium"), Salt Lake City, Utah, on October 24, 2018, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized and less-than-fair-value ("LTFV") imports of magnesium[1] from Israel. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
October 24, 2018	Petition filed with Commerce and the Commission; institution of Commission investigations (83 FR 54778, October 31, 2018)
November 13, 2018	Commerce's notice of initiation AD (83 FR 58533, November 20, 2018)
November 13, 2018	Commerce's notice of initiation CVD (83 FR 58529, November 20, 2018)
November 14, 2018	Commission's conference
December 7, 2018	Commission's vote
December 11, 2018	Commission's determinations
December 18, 2018	Commission's views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

Section 771(7)(B) of the Tariff Act of 1930 (the "Act") (19 U.S.C. § 1677(7)(B)) provides that in making its determinations of injury to an industry in the United States, the Commission--

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for domestic like products, and (III) the impact of imports of such merchandise on domestic producers of domestic like products, but only in the context of production operations within the United States; and. . . may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.*

---

[1] See the section entitled "The Subject Merchandise" in *Part I* of this report for a complete description of the merchandise subject in this proceeding.

[2] Pertinent *Federal Register* notices are referenced in appendix A, and may be found at the Commission's website (www.usitc.gov).

[3] A list of witnesses appearing at the conference is presented in appendix B of this report.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[4]

> *In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.. . .In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether. . .(I) there has been significant price underselling by the imported merchandise as compared with the price of domestic like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.. . . In examining the impact required to be considered under subparagraph (B)(i)(III), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to. . . (I) actual and potential decline in output, sales, market share, gross profits, operating profits, net profits, ability to service debt, productivity, return on investments, return on assets, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and (V) in {an antidumping investigation}, the magnitude of the margin of dumping.*

In addition, Section 771(7)(J) of the Act (19 U.S.C. § 1677(7)(J)) provides that—[5]

> *(J) EFFECT OF PROFITABILITY.—The Commission may not determine that there is no material injury or threat of material injury to an industry in the United States merely because that industry is profitable or because the performance of that industry has recently improved.*

[4] Amended by PL 114-27 (as signed, June 29, 2015), Trade Preferences Extension Act of 2015.
[5] Ibid

Organization of report

Part I of this report presents information on the subject merchandise, alleged subsidy/dumping margins, and domestic like product. *Part II* of this report presents information on conditions of competition and other relevant economic factors. *Part III* presents information on the condition of the U.S. industry, including data on capacity, production, shipments, inventories, and employment. *Parts IV* and *V* present the volume of subject imports and pricing of domestic and imported products, respectively. *Part VI* presents information on the financial experience of U.S. producers. *Part VII* presents the statutory requirements and information obtained for use in the Commission's consideration of the question of threat of material injury as well as information regarding nonsubject countries.

MARKET SUMMARY

Magnesium is used in a variety of applications, including as an alloying element in the production of aluminum; in the production of cast and wrought products; in iron and steel desulfurization; as a reducing agent in the production of titanium and other nonferrous metals; in defense applications such as flares, and in various chemical and electrochemical applications. The leading U.S. producers of magnesium are US Magnesium Corporation LLC, ***, while the sole producer of magnesium in Israel is Dead Sea Magnesium Ltd ("DSM"). The leading U.S. importer of magnesium from Israel is DSM. The leading importers of magnesium from nonsubject countries (primarily Russia, Canada, and Taiwan) include ***. U.S. purchasers of magnesium include firms that produce aluminum products; leading purchasers include ***.

Apparent U.S. consumption of magnesium totaled approximately *** in 2017. Currently, nine firms are believed to produce magnesium in the United States, three of which are primarily grinders. U.S. producers' U.S. shipments of magnesium totaled *** in 2017, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from Israel totaled 11,450 metric tons ($44,668,000) in 2017 and accounted for 16.1 percent of apparent U.S. consumption by quantity and 18.2 percent by value. U.S. imports from nonsubject sources totaled 12,248 metric tons ($47,082,000) in 2017 and accounted for 17.3 percent of apparent U.S. consumption by quantity and 19.1 percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of four firms that accounted for more than 80 percent of U.S. production of magnesium during 2017.[6] U.S. imports are based on official import statistics, with additional data provided by 13 firms accounting for approximately 70 percent of U.S. imports of magnesium, including all such imports from Israel.

[6] For U.S. producers' magnesium production by type see table III-1.

PREVIOUS AND RELATED INVESTIGATIONS

As a result of a petition filed on October 17, 2000, on behalf of Magcorp, Salt Lake City Utah, the United Steel Workers of America ("USWA"), Local 8319, Salt Lake City, Utah, and the USWA International, the Commission conducted countervailing and antidumping duty investigations concerning magnesium from Israel. On November 13, 2001, the Commission determined that an industry in the United States was not materially injured or threatened with material injury, and the establishment of an industry in the United States was not materially retarded by reason of imports from Israel of pure magnesium provided for in subheadings 8104.11.00, 8104.19.00, and 8104.30.00 of the HTSUS, that had been found by the Department of Commerce to be sold in the United States at LTFV and to be subsidized by the Government of Israel.[7]

The Commission has conducted a series of countervailing and antidumping duty investigations regarding magnesium from Canada, China, Israel, Norway, Russia, and Ukraine. Currently China is under separate antidumping dumping orders concerning pure magnesium, alloy magnesium, and pure granular magnesium. Table I-1 summarizes the Commission's investigations and five-year reviews regarding magnesium.

[7] *Pure Magnesium from China and Israel*, 66 FR 224, November 20, 2001.

Table I-1
Magnesium: Actions taken by the Commission

Date	Action	Cited Federal Register Notice
Canada:[1]		
August 26, 1992	Commission's affirmative determinations in 701-TA-309 and 731-TA-528 (Final)	57 FR 38696
August 31, 1992	Countervailing duty ("CVD") orders issued (C-122-814) *(pure and alloy ingot)*	57 FR 39390
August 31, 1992	Antidumping duty ("AD") order issued (A-122-814) *(pure ingot)*	57 FR 39392
August 2, 1999	Institution of first five-year reviews of AD and CVD orders (full)	64 FR 41961
August 2, 2000	Commission's affirmative determinations in first five-year reviews	65 FR 47517
August 16, 2000	Continuation of AD and CVD orders	65 FR 49964
December 7, 2004	Revocation of AD order	69 FR 70649
July 1, 2005	Institution of second five-year reviews of CVD orders (full)	70 FR 38199
June 26, 2006	Commission's negative CVD determinations in second five-year reviews	71 FR 36359
July 6, 2006	Revocation of CVD orders	71 FR 38382
China (Inv. No. 731-TA-696):		
May 17, 1995	Commission's affirmative determination in 731-TA-696 (Final)[2]	60 FR 26456
May 12, 1995	AD order issued (A-570-832) (*pure ingot*)	60 FR 25691
April 3, 2000	Institution of first five-year review (expedited)	65 FR 17531
September 12, 2000	Commission's affirmative determination in first five-year review	65 FR 55047
October 27, 2000	Continuation of AD order	65 FR 64422
July 10, 2005	Institution of second five-year review (full)	70 FR 38101
June 26, 2006	Commission's affirmative determination in second five-year review	71 FR 36359
July 10, 2006	Continuation of AD order	71 FR 38860
June 1, 2011	Institution of third five-year review (expedited)	76 FR 31635
November 8, 2001	Commission's affirmative determination in third five-year review	76 FR 69284
November 11, 2011	Continuation of AD order	76 FR 72172
October 3, 2016	Institution of fourth five-year review (expedited)	81 FR 68046
April 10, 2017	Commission's affirmative determination in fourth five-year review	82 FR 17280
China (Inv. No. 731-TA-895):		
November 20, 2001	Commission's affirmative determination in 731-TA-895 (Final)	66 FR 58162
November 19, 2001	AD order issued (A-570-864) (*pure granular*)	66 FR 57936
October 2, 2006	Institution of first five-year review (expedited)	71 FR 58001
March 7, 2007	Commission's affirmative determination in first five-year review	72 FR 10258
March 26, 2007	Continuation of AD order	72 FR 14076
February 1, 2012	Institution of second five-year review (expedited)	77 FR 5049
October 1, 2012	Commission's affirmative determination in second five-year review	77 FR 59979
October 17, 2012	Continuation of AD order	77 FR 63787
September 1, 2017	Institution of third five-year review (expedited)	82 FR 41651
March 5, 2018	Commission's affirmative determination in third five-year review (expedited)	83 FR 9337

Table continued on next page.

Table I-1–Continued
Magnesium: Actions taken by the Commission

China (Inv. No. 731-TA-1071):[3]		
April 15, 2005	Commission's affirmative determination in 731-TA-1071 (Final)	70 FR 19969
April 15, 2005	AD order issued (A-570-896) *(alloy)*	70 FR 19928
March 1, 2010	Institution of first five-year review (full)	75 FR 9252
March 3, 2011	Commission's affirmative determination in first full five-year review	76 FR 11813
March 11, 2011	Continuation of AD order	76 FR 13356
February 1, 2016	Institution of second five-year review (expedited)	81 FR 5136
July 7, 2016	Commission's affirmative determination in second five-year review	81 FR 44328
Israel:		
October 25, 2000	Commission's institution of 701-TA-403 and 731-TA-896 (Preliminary)	65 FR 63888
November 20, 2001	Commission's negative determinations in 701-TA-403 and 731-TA-896 (Final)	66 FR 58162
Norway:		
September 12, 1991	Commission's institution of 701-TA-310 and 731-TA-529 (Preliminary) 09/12/1991 56 FR 46443	56 FR 46443
October 1, 1991	Commerce's dismissal of CVD petition and termination of CVD proceeding 10/01/1991 56 FR 49748	56 FR 49748
October 23, 1991	Commission's termination of CVD investigation (701-TA-310 (Preliminary)) 10/23/1991 56 FR 54887	56 FR 54887
July 13, 1992	Commerce's final negative AD determination (A-403-803) *(pure)* and rescission of investigation and partial dismissal of petition (alloy)	57 FR 30942
August 4, 1992	Investigation and partial dismissal of petition *(alloy)*	57 FR 30942
Russia (731-TA-697):[4]		
May 17, 1995	Commission's affirmative determination in 731-TA-697 (Final)	60 FR 26456
May 12, 1995	AD issued (A-821-805) *(pure ingot)*	60 FR 25691
April 3, 2000	Institution of five-year review (expedited)	65 FR 17531
July 7, 2000	Revocation of AD order	65 FR 41944
July 17, 2000	Termination of five-year review	65 FR 44076
Russia (731-TA-897):		
October 25, 2000	Institution of 731-TA-897 (Preliminary)	65 FR 63888
September 27, 2001	Commerce's negative final AD determination (A-821-813) (*pure ingot and granules*)	66 FR 49347
October 4, 2001	Commission terminates 731-TA-897 (Final)	66 FR 50680

Table continued on next page.

Table I-1–Continued
Magnesium: Actions taken by the Commission

Russia (731-TA-1072):		
April 15, 2005	Commission's affirmative determination in 731-TA-1072 (Final)	70 FR 19969
April 15, 2005	AD order issued (A-821-819) (*pure and alloy*)	70 FR 19930
March 1, 2010	Institution of first five-year review (full)	75 FR 9252
March 3, 2011	Commission's negative determination in first five-year review	76 FR 11813
March 10, 2011	Revocation of the AD order	76 FR 13128
Ukraine:		
May 17, 1995	Commission's affirmative determination in 731-TA-698 (Final)[5]	60 FR 26456
May 12, 1995	AD order issued (A-823-806) (*pure ingot*) 05/12/1995 60 FR 25691	60 FR 25691
June 1998	Commission's negative determination on remand June	([6])
August 24, 1999	Revocation of the AD order	64 FR 46182

[1] Excluded from the AD and CVD orders was Timminco Canada. On October 7, 2004, an Extraordinary Challenge Committee issued a determination which affirmed the final remand opinion of the Binational panel concerning alloy magnesium from Canada (69 FR 67703, November 19, 2004). Subsequently, Commerce revoked the AD order on pure magnesium ingot from Canada retroactively effective August 1, 2000, after the NAFTA Binational Panel's final decision. Commerce revoked the CVD orders on pure and alloy magnesium ingot from Canada retroactively effective August 16, 2005 after the Commission's negative second five-year review determinations.
[2] The Commission made a negative determination with respect to alloy magnesium.
[3] In its original determination and its expedited first five-year review determination, Commerce found the weighted-average AD margin for Tianjin Magnesium International Co., Ltd. and Beijing Guangling Jinghua Science & Technology Co., Ltd. to be 49.66 percent *ad valorem* and 141.49 percent *ad valorem* for all other manufacturers and exporters in China (70 FR 19928, April 15, 2005; and 75 FR 38983, July 7, 2010).
[4] The Commission made a negative determination with respect to alloy magnesium. On September 5, 2000, Commerce issued a correction to the revocation order making the effective date of revocation May 12, 2000, the fifth anniversary of the date of publication of the original order (65 FR 53700, September 5, 2000).
[5] The Commission made a negative determination with respect to alloy magnesium.
[6] No corresponding *Federal Register* citation.

Source: Cited *Federal Register* Notices.

Other investigations

On December 17, 1999, the Commission received a request from the United States Trade Representative ("USTR") for an investigation under section 332(g) of the Tariff Act of 1930 for the purpose of providing advice concerning possible modifications to the U.S. Generalized System of Preferences ("GSP") for several products including alloy and granular magnesium. Subsequently, on December 23, 1999, the Commission instituted investigation No. 332-410.[8] After a public hearing was held on February 2, 2000, the Commission presented its advice to the USTR on March 16, 2000. In a Presidential Proclamation of June 29, 2000, the President added granular magnesium to the list of GSP-eligible articles.[9]

[8] *Advice Concerning Possible Modifications to the U.S. Generalized System of Preferences*, 64 FR 73574, December 30, 1999.
[9] *Proclamation 7325 of June 29, 2000 to Modify Duty-Free Treatment Under the Generalized System of Preferences and for Other Purposes*, 65 FR 41313, July 3, 2000.

Sections 232 and 301

Magnesium is currently not covered under any section 232 proceeding. During the 232 proceeding on aluminum, however, US Magnesium requested that domestically produced magnesium necessary to supply the domestic aluminum industry be included in any relief given to the industry.[10] Magnesium was not covered in Commerce's report, although products that use magnesium are covered.

On April 26, 2017, Commerce initiated an investigation under section 232 of the Trade Expansion Act of 1962, as amended (19 U.S.C. 1862), to determine the effects on the national security of imports of aluminum.[11] A public hearing in this investigation was held on June 23, 2017. On January 19, 2018, the Secretary of Commerce transmitted to the President Commerce's report of its findings and remedy recommendations on U.S. aluminum imports. On March 8, 2018, the President announced his decision to impose 10 percent ad-valorem duties on U.S. imports of various aluminum products.[12]

On August 18, 2017, the Office of the U.S. Trade Representative ("USTR") initiated an investigation into certain acts, policies, and practices of the government of China related to technology transfer, intellectual property and innovation.[13] On April 6, 2018, the USTR, pursuant to Section 301(b) of the Trade Act of 1974, determined it was appropriate to impose a 25 percent duty on certain products from China.[14] Additional duties were applied in two tranches to include 818 tariff subheadings and 279 tariff subheadings.[15] On August 7, 2018, the USTR announced that supplemental action may be taken to impose additional duties on imports from China,[16] and subsequently held a 6-day public hearing from August 20-27, 2018.

---

[10] Petitioner's postconference brief, exhibit 16.

[11] U.S. Department of Commerce webpage: https://www.commerce.gov/page/section-232-investigation-effect-imports-steel-us-national-security, retrieved October 3, 2018.

[12] Presidential Proclamation on Adjusting Imports of Aluminum into the United States, March 8, 2018, https://www.whitehouse.gov/presidential-actions/presidential-proclamation-adjusting-imports-aluminum-united-states/, retrieved November 22, 2018.

[13] *Initiation of Section 301 Investigation; Hearing; and Requests for Public Comments: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 82 FR 40213, August 24, 2017.

[14] *Notice of Determination and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and innovation*, 83 FR 14906, April 6, 2018.

[15] *Notice of Action and Request for Public Comment Concerning Proposed Determination of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and innovation*, 83 FR 28710, June 20, 2018; and *Notice of Action Pursuant to Section 301: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 40823, August 16, 2018.

[16] *Extension of Public Comment Period Concerning Proposed Modification of Action Pursuant to Section 301: China's Acts, Policies, and Practices related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 38760, August 7, 2018.

On September 21, 2018, the USTR modified its section 301 tariff to impose additional duties on products imported from China to include magnesium[17] raspings, turnings and granules graded according to size; and magnesium powers. [18] The initial duty rate on or after September 24, 2018 is 10 percent ad valorem with an increase to 25 percent ad valorem on January 1, 2019.[19]

NATURE AND EXTENT OF ALLEGED SUBSIDIES AND SALES AT LTFV

Alleged subsidies

On November 20, 2018, Commerce published a notice in the *Federal Register* of the initiation of its countervailing duty investigation on magnesium from Israel.[20] Commerce identified the following government programs in Israel:

- Grant programs
    - Grants for industries in disadvantaged regions with export capabilities
    - Grants for industrial companies to perform research and development
    - Israel-United States Binational Industrial Research and Development (BIRD) Foundation grants to assist with research and development projects between the United States and Israel
    - Grants to co-finance the cost of finding a permanent solution to maintain a consistent Dead Sea water level
- Tax programs/treatment
    - Reduction of corporate tax rate for companies deemed "priority enterprises"
    - Allowed to claim accelerated depreciation on taxes
    - Industrial companies allowed to file a consolidated tax return
    - Industrial companies may deduct from taxable income expenses involved with the issuance and listing shares on a stock market.
    - Industrial companies allowed to amortize patents and know-how over an 8-year period
    - May depreciate capital equipment at an accelerated rate.
    - Industrial users of natural resources exempt from corporate taxes
- Financial support for companies connecting plants to the natural gas distribution system

[17] HTS subheading 8104.30.00.

[18] *Notice of Modification of Section 301 action: China's Acts, Policies, and Practices Related to Technology Transfer, Intellectual Property, and Innovation*, 83 FR 47974, September 21, 2018.

[19] Ibid.

[20] *Magnesium from Israel: Initiation of Countervailing Duty Investigation*, 83 FR 58529, November 20, 2018.

Alleged sales at LTFV

On November 20, 2018, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation on magnesium from Israel.[21] Commerce has initiated the antidumping duty investigation based on estimated dumping margins of 92.06 to 130.61 percent for magnesium from Israel.

THE SUBJECT MERCHANDISE

Commerce's scope

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

> The products covered by this investigation are primary and secondary pure and alloy magnesium metal, regardless of chemistry, raw material source, form, shape, or size. Magnesium is a metal or alloy containing by weight primarily the element magnesium. Primary magnesium is produced by decomposing raw materials into magnesium metal. Secondary magnesium is produced by recycling magnesium-based scrap into magnesium metal. The magnesium covered by this investigation also includes blends of primary magnesium, scrap, and secondary magnesium.
>
> The subject merchandise includes the following pure and alloy magnesium metal products made from primary and/or secondary magnesium, including, without limitation, magnesium cast into ingots, slabs, t-bars, rounds, sows, billets, and other shapes, and magnesium ground, chipped, crushed, or machined into raspings, granules, turnings, chips, powder, briquettes, and other shapes: (1) products that contain at least 99.95 percent magnesium, by weight (generally referred to as "ultra-pure" or "high purity" magnesium); (2) products that contain less than 99.95 percent but not less than 99.8 percent magnesium, by weight (generally referred to as "pure" magnesium); and (3) chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, whether or not conforming to an "ASTM Specification for Magnesium Alloy."
>
> The scope of this investigation excludes: (1) magnesium that is in liquid or molten form; and (2) mixtures containing 90 percent or less magnesium in granular or powder form by weight and one or more of certain non-magnesium granular materials to make magnesium-based reagent mixtures, including lime, calcium metal, calcium silicon, calcium carbide, calcium carbonate, carbon, slag coagulants, fluorspar, nephaline syenite, feldspar, alumina (A1203), calcium aluminate, soda ash, hydrocarbons, graphite, coke, silicon, rare earth

[21] *Magnesium from Israel: Initiation of Less-Than-Fair-Value Investigation*, 83 FR 58533, November 20, 2018.

metals/mischmetal, cryolite, silica/fly ash, magnesium oxide, periclase, ferroalloys, dolomite lime, and colemanite.

The merchandise subject to this investigation is classifiable under items 8104.11.00, 8104.19.00, and 8104.30.00 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Although the HTSUS items are provided for convenience and customs purposes, the written description of the merchandise under investigation is dispositive.

Tariff treatment

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to these investigations is imported under the following subheadings of the Harmonized Tariff Schedule of the United States ("HTS"): 8104.11.00 (pure magnesium ingots); 8104.19.00 (alloy magnesium ingots); and 8104.30.00 (magnesium granules).

The special rate of duty for goods the product of Israel under the United States-Israel Free Trade Area is free for all subject subheadings, where this treatment is properly claimed by the importer. For other shipments, the 2018 column-1 general rate of duty is 8 percent for subheading 8104.11.00; 6.5 percent for subheading 8104.19.00; and 4.4 percent for subheading 8104.30.00.[22] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

THE PRODUCT

Description and applications[23]

Magnesium, the eighth most abundant element in the earth's crust and the third most plentiful element dissolved in seawater, is a silver-white metallic element. It is the lightest of all structural metals with a density approximately 63 percent of that of aluminum, the principal metal with which it competes in the U.S. market. Magnesium's light weight and high vibrational-dampening properties have encouraged the development of magnesium-based alloys with improved physical and mechanical properties for use as a structural metal in applications where minimizing weight is an important design consideration.

[22] USITC, Chapter 81 of the HTSUS Tariff Schedule, 2018 HTSA Basic Edition.

[23] Unless otherwise noted, information in this section is based on *Pure Granular Magnesium from China, Inv. No. 731-TA-895 (Third Review),* USITC Publication 4761, February 2018, pp. I-15-18.

The principal end-uses for magnesium in the United States in 2016 were, in descending order, metals production from reduction processes, aluminum alloying, die casting, and iron and steel desulfurization.[24] Magnesium is available in two principal forms: pure[25] and alloy.

Pure magnesium

Pure magnesium in unwrought form[26] contains at least 99.8 percent magnesium by weight, and includes both ultra-pure or ultra-high purity ("UHP") and commodity-grade magnesium.[27] Pure magnesium is widely used in commercial and industrial applications because it is easily machined and lightweight, has a high strength-to-weight ratio, and has beneficial chemical and electrical properties. Its metallurgical and chemical properties allow pure magnesium to readily alloy with metals, such as aluminum. Pure magnesium is typically sold to end users who then combine it with other elements for use in a final product. Generally, a magnesium ingot in its pure state has little direct commercial application except when alloyed. Pure magnesium is typically used in the production of aluminum alloys for use in beverage cans, die cast automotive parts, and iron and steel desulfurization; as a reducing agent for various other nonferrous metals (e.g., titanium, zirconium, hafnium, uranium, and beryllium); and in magnesium anodes for the protection of iron and steel in underground pipe and water tanks and other various marine applications. Pure magnesium is also used in the production of titanium sponge, which is a precursor metal product in the production of titanium metal products for use in aerospace, medical, and industrial applications.

Magnesium alloy

Magnesium alloy (or alloy magnesium) consists of chemical combinations of magnesium and other metals (typically aluminum and zinc) and contains less than 99.8 percent magnesium by weight but more than 50 percent magnesium by weight, with magnesium being the largest metallic element in the alloy by weight. Alloy magnesium is typically produced to meet various industry-recognized American Society for Testing and Materials ("ASTM") specifications for

---

[24] Bray, E. Lee, "Magnesium," *2016 Minerals Yearbook*, USGS, August 2018, p. 45.2.

[25] Unless otherwise noted, the term "pure magnesium" applies to pure magnesium ingot and pure granular magnesium.

[26] "Unwrought" magnesium is pure magnesium that has not been worked in any way. "Wrought" magnesium is magnesium that has been worked into a desired shape, for example the working of the magnesium to produce extrusions, rolled product, forgings, etc.

[27] Ultra-high purity ("UHP") magnesium is unwrought magnesium containing at least 99.95 percent magnesium by weight and is used as a reagent in the pharmaceutical and chemical industries. Commodity-grade pure magnesium is unwrought magnesium containing at least 99.8 percent magnesium but less than 99.95 percent magnesium by weight and is most commonly used in the aluminum alloying industry.

alloy magnesium, such as AM50A, AM60B, and AZ91D.[28] Magnesium alloy has a high strength-to-weight ratio and is easily machined, making it ideal for use in a number of structural components; for example, the alloying elements contained in magnesium alloy are critical in imparting to the product the structural characteristics necessary for use in die-casting applications. Thus, it is principally used in structural applications, primarily in castings (die, permanent mold, and sand) and extrusions for the automotive industry. Magnesium alloy has certain properties that improve its strength, ductility, workability, corrosion resistance, density, or castability compared to pure magnesium. In contrast, pure magnesium is not used in structural applications because of its low tensile and yield strengths.

Off-specification pure magnesium

Off-specification pure magnesium is pure primary magnesium that also contains magnesium scrap, secondary magnesium, oxidized magnesium, or impurities (whether or not intentionally added) that cause the primary magnesium content to fall below 99.8 percent of weight. Off-specification pure magnesium products contain between 50 percent and 99.8 percent primary magnesium by weight; do not conform to ASTM specifications for magnesium alloy; and generally do not contain individually or in combination 1.5 percent or more, by weight, any of the following alloying elements: aluminum, manganese, zinc, silicon, thorium, zirconium, and rare earths. Typically, producers do not set out to produce off-specification pure magnesium. Rather, its production results from stopping and re-starting, or some malfunction in, the primary magnesium production process, or some malfunction in the production process.

Primary versus secondary magnesium

Primary magnesium refers to unwrought magnesium metal shapes (typically ingots) which are produced by decomposing virgin raw materials into magnesium metal. Secondary magnesium is pure or magnesium alloy that is produced by recycling (or melting) magnesium-based scrap. Most primary and secondary magnesium alloy is similar physically or chemically. However, primary pure magnesium is not used in automotive die castings. Only primary alloy magnesium and higher purity secondary magnesium alloy, typically produced from scrap recovered from used automotive parts, is acceptable for use in automotive die-casting applications.

[28] The ASTM specifications designate the chemical composition of the alloy. The first two letters designate the two alloying elements most prevalent in the alloy (e.g., “A” for aluminum, “M” for manganese, or “Z” for zinc), while the numbers represent the percent of other elements contained in the alloy, by weight. For example, AZ91D contains 9 percent aluminum, 1 percent zinc, and 90 percent magnesium.

Magnesium scrap

Magnesium scrap is typically separated into two categories, depending upon its origin. Old (postconsumer) scrap becomes available to producers of secondary magnesium when durable and nondurable consumer products are discarded from end-use categories, such as packaging, building and construction, consumer durables (such as automobiles), electrical, and machinery and equipment, etc.

New (process) scrap is metal that never reaches the consumer, but rather is generated by fabricators in the process of converting wrought and cast products into consumer or industrial products. Home scrap is new scrap that is recycled within the company that generating the scrap and seldom enters the commercial secondary magnesium market. Prompt scrap is new scrap from a fabricator that does not recycle the scrap. This scrap then enters the secondary magnesium market. New scrap may include solids, clippings, stampings, and cuttings; borings and turnings that are generated during machining operations; and melt residues, such as skimmings, drosses, spillings, and sweepings.

Cast versus granular magnesium

Cast magnesium is the solid, cooled form (ingots) of molten magnesium metal. Most pure and magnesium alloy ingots are sold in standard bar sizes ranging in weight from 12 to 500 pounds per bar. Ingots may vary in dimension as some die casters require bars of certain dimensions to fit the specific configuration of their furnaces. Granular magnesium is cast magnesium that has been ground, chipped, crushed, machined, or atomized into raspings, granules, turnings, chips, powder, or briquettes and is different from cast magnesium in size, dimensions, and shape. Granular magnesium includes all non-molten physical forms of magnesium other than castings. Although the chemical compositions of cast magnesium and granular magnesium are identical, granular magnesium is much more volatile than cast magnesium. Granular magnesium may either be pure or magnesium alloy. However, based on information obtained from previous investigations of granular magnesium from China, granular magnesium is typically pure magnesium or off-specification pure magnesium. Most aluminum producers purchase large pure cast shapes, such as rounds, billets, peg-lock ingots, or T-shapes. Die casters sometimes require magnesium in the form of ingots as an input for their furnace. Other die casters can purchase ingots and granular primary magnesium alloy for use in magnesium alloy castings, and/or recycle scrap magnesium generated in their die-casting operations into secondary magnesium alloy.[29] Granular magnesium, on the other hand, is typically used in the production of magnesium-based desulfurizing reagent mixtures that are

[29] Normally, die-casting companies pay to have magnesium metal slivers removed because they are difficult to recycle, but some facilities have a process to economically recycle the turnings. Kramer, Deborah A., Mineral Industry Surveys, Magnesium in the First Quarter 2011, USGS, May 2011.

used in the steelmaking process to reduce the sulfur content of steel.[30] Lesser amounts of granular magnesium are used in defense applications, such as military ordnance and flares.

Manufacturing processes[31]

Primary magnesium

Worldwide, most magnesium is derived from magnesium-bearing ores—dolomite, (calcium-magnesium carbonite), magnesite (magnesium carbonate), brucite (magnesium hydroxide), and olivine (iron-magnesium silicate)— seawater, well, and lake brines.[32] Large deposits of dolomite are widely distributed throughout the world, and are mined by open-pit methods. However, in the United States, US Magnesium produces primary magnesium by extracting magnesium from brines of the surface waters of the Great Salt Lake in Utah.

Magnesium metal is normally produced by either an electrolytic process or a silicothermic process. Most of the world's production of magnesium uses the silicothermic process. In previous investigations, the silicothermic process was reported to be less cost-effective than the electrolytic process for production of magnesium.[33]

US Magnesium uses the electrolytic method to produce magnesium. Figure I-1 is a schematic diagram of US Magnesium's production process. In the electrolytic process, seawater or brine is evaporated and treated to produce a concentrated solution of magnesium chloride, which is further concentrated and dried to yield magnesium chloride powder.[34] The powder is

---

[30] Firms that grind magnesium ingots into granular form are known as "grinders." U.S. grinders typically sell three different steel desulfurization blends: (1) containing 90 percent pure magnesium powder and 10 percent lime (calcium oxide); (2) containing 25 percent magnesium and 75 percent lime; and (3) containing 8-10 percent magnesium with the remainder lime and calcium carbonate. Fluorspar (calcium fluoride) and a fluidizer are also incorporated in these products.

[31] Unless otherwise noted, information in this section is based on *Pure Granular Magnesium from China, Inv. No. 731-TA-895 (Third Review),* USITC Publication 4761, February 2018, pp. I-18-22.

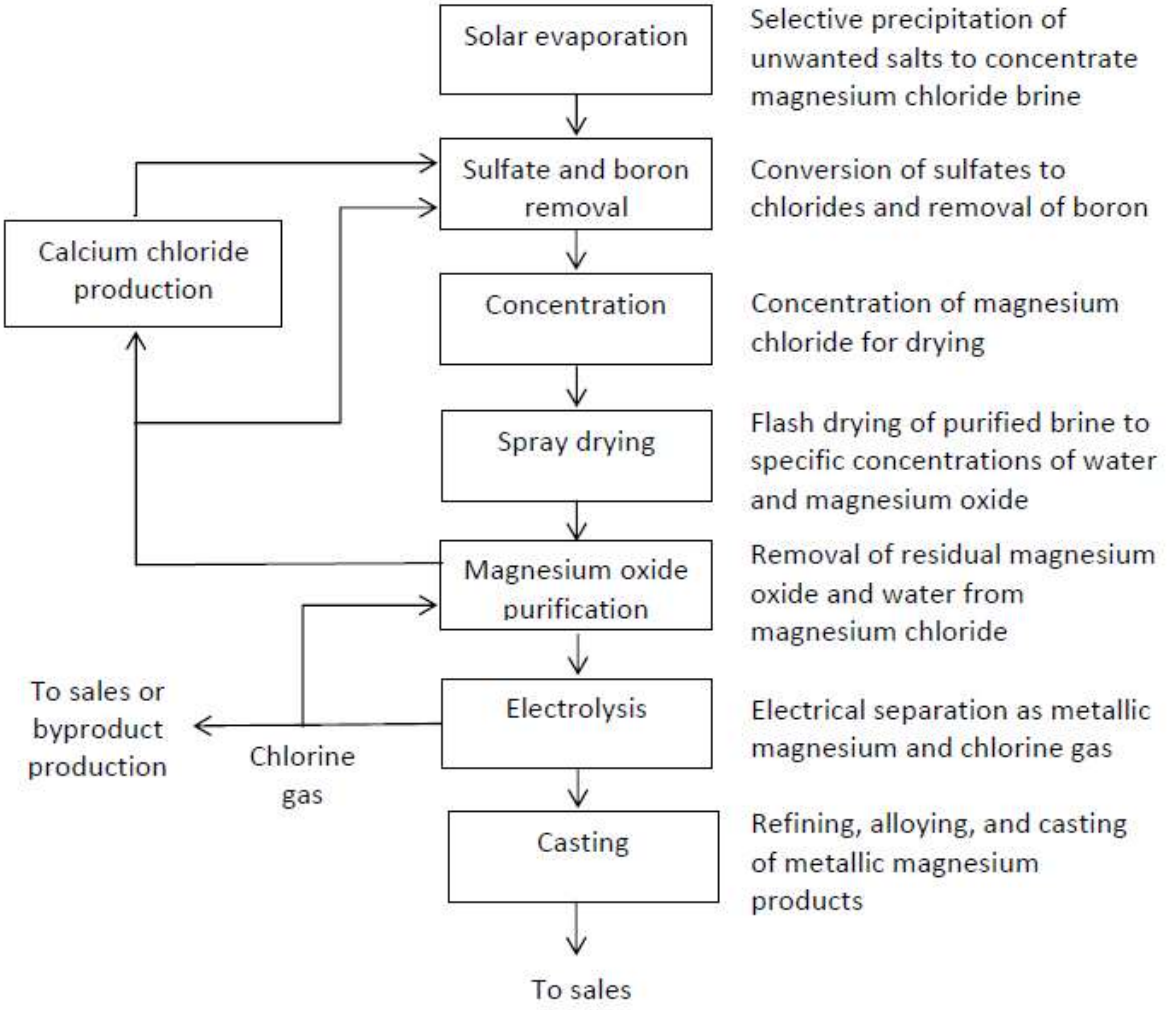
[32] The magnesium content of magnesium-bearing ores typically ranges from nearly 22 percent for dolomite to 69 percent for brucite. The magnesium content of seawater is 0.13 percent, which is much lower than that of the lowest grade of magnesium ore deposits; however, seawater has the advantage of being abundant, accessible, and extremely uniform in its magnesium content, allowing for easier standardization of the refining process.

[33] *Pure Granular Magnesium from China, Inv. No. 731-TA-895 (Third Review),* USITC Publication 4761, February 2018, p. I-22.

[34] The electrolytic cells are large steel boxes with ceramic lining – wherein electrolyzed molten magnesium chloride separates to produce magnesium and chloride (Conference transcript, p. 53 (Tissington)). The process for replacing electrolytic cells involves the deconstruction of the ceramic linings and mortars to strip the cell down to the steel envelopment via jack hammers (Conference transcript, pp. 53-54 (Tissington)). Electrolytic cells must be replaced every four to five years or cells begin to deteriorate lowering the cell's productivity (Conference transcript, p. 20 (Tissington)). The cost to replace electrolytic cells are approximately $450,000 per cell. Installing new capacity requires an additional expense of $500,000 to include an upstream chlorinator (DSM's postconference brief, p. 1).

then melted, further purified, and fed into electrolytic cells operating at 700 degrees Celsius. Direct electrical current is sent through the cells to break down the magnesium chloride into chlorine gas and molten magnesium metal.[35] The metal rises to the surface where it is guided into storage wells and cast into ingots.

Figure I-1
Magnesium: Schematic diagram of US Magnesium's production process flow chart



Source: US Magnesium from *Pure Granular Magnesium from China, Inv. No. 731-TA-895 (Third Review),* USITC Publication 4761, February 2018, pp. I-18-22.

[35] The electrolytic cells must be kept in constant operation. If they are shut down, a "refractory lining" requires rebuilding, which is costly and time consuming.

Once the electrolytic or silicothermic reduction of magnesium is completed, the manufacturing processes used for the production of both pure and magnesium alloy ingot are very similar. In US Magnesium's facility which produces both pure and alloy magnesium, the same production employees work on both lines.

Both primary pure and alloy magnesium begin with the production of molten pure magnesium. For US Magnesium, the production process for the pure and magnesium alloy is identical to the point when alloys are added to the molten pure magnesium to make magnesium alloy. US Magnesium makes both pure and alloy magnesium using the same machinery, equipment, and workers. Molten pure magnesium is either cast directly into pure magnesium ingots or alloyed by the addition of alloying elements (typically aluminum and zinc) and scrap magnesium and then cast to produce magnesium alloy ingots. In previous cases, US Magnesium reported that the amount of value added to the magnesium in the alloying phase is small.[36]

Primary magnesium is typically cast into ingots or slabs. Aluminum producers typically purchase larger pure cast shapes such as rounds, billets, peg-lock ingots, or T-shapes. Producers of magnesium powder for steel desulfurization applications typically purchase smaller ingots or magnesium "chips" that are then ground into powder[37] and used internally to produce magnesium-based reagent mixtures or, to a lesser extent, pyrotechnic products. Die casters purchase ingots and granular primary magnesium alloy for use in magnesium alloy castings, and/or recycle scrap magnesium generated in their die casting operations into secondary magnesium alloy. The production facilities, processes, and employees of cast and granular magnesium do not overlap. Primary and secondary producers of cast magnesium in ingot form extract magnesium from raw materials or scrap and cast it into magnesium ingots or slabs. Granular production facilities (known as "grinders") purchase cast magnesium in ingot form, transform the physical shape by grinding it, and then sell powdered/granule magnesium to end users.

Magnesium, in a molten or ingot form, is also used in the production of titanium sponge, which is a precursor metal product in the production of titanium metal products. In the Kroll reduction process, titanium sponge results from the reduction of titanium tetrachloride with magnesium.[38]

---

[36] *Pure Granular Magnesium from China,* Inv. No. 731-TA-895 (Third Review) USITC Publication 4761, February 2018, p. I-21.

[37] Magnesium chips are ground into powder using a particle reduction process. Magnesium powder can also be produced from molten pure magnesium by atomization (spraying through nozzles); however, this technique is less frequently used than grinding.

[38] The titanium tetrachloride is reacted in a molten pool of magnesium metal in which the temperature and composition of the mixture are carefully controlled. Along with pure titanium metal sponge, molten magnesium chloride (the result of magnesium reacting with the titanium tetrachloride liquid) is a product of the reaction. The magnesium chloride can be further refined back to pure magnesium in an electrolytic cell. The electrolytic cell separates the magnesium metal from the chlorine which is also collected for sale. All titanium tetrachloride producers use chlorine gas in the production of titanium tetrachloride. For more information, see: "Manufacturing Process" in *Titanium Sponge from*

Secondary magnesium

Secondary magnesium is produced from recycling magnesium-based scrap.[39] The magnesium scrap arrives at the recycler, either in a loose form or contained in boxes. After the magnesium is separated out from other alloys by the recycler, the sorted magnesium is heated in a steel crucible to nearly 675 degrees Celsius. Alloying elements (such as aluminum, manganese, or zinc) can be added to the liquid magnesium and the alloyed magnesium can then be cast in ingot molds by hand ladling, pumping, or tilt pouring. Secondary magnesium ingot can be processed by direct grinding into powder for iron and steel desulfurization applications.

DOMESTIC LIKE PRODUCT ISSUES

No issues with respect to domestic like product have been raised in these investigations. The petitioner proposes that the Commission define the domestic like product to be coexistence with the scope of these investigations, which includes primary and secondary magnesium, pure and alloy magnesium, and granular or powered magnesium as it has in prior investigations and reviews of the same product.[40] For purposes of the preliminary determination, DSM agrees with the petitioner's proposed definition of the domestic like product.[41]

Japan and Kazakhstan, Inv. Nos. 701-TA-587 and 731-TA-1385-1386 (Preliminary), USITC Publication 4736, October 2017, pp. I-10 through I-12.

[39] However, recycled magnesium alloy contained in used aluminum beverage cans ("UBCs") often remains within the UBC material flow cycle, since an approximately two-third (67 percent in 2012) of all U.S. UBCs are recovered for melting, casting, and rolling into can stock for the production of new aluminum beverage cans. According to statistics of the Aluminum Association, Can Manufacturers Institute ("CM"), and Institute of Scrap Recycling Industries ("ISRI"), the U.S. aluminum industry recycled some 62 billion domestic and imported UBCs, and shipped some 92 billion new cans, in 2012. Aluminum Association, "Aluminum Can Continues Leadership in Sustainable Packing As Most Recycled Beverage Container," October 24, 2013.

Conversely, aluminum beverage can manufacturers are sensitive to the presence of beryllium in melted scrap. Therefore, these firms generally do not purchase recycled magnesium alloy produced from scrap. *Pure Granular Magnesium from China, Inv. No. 731-TA-895 (Third Review)*, USITC Publication 4761, February 2018, p. I-22.

[40] Conference transcript, pp. 29-30 (Bay).

[41] Conference transcript, p. 114 (Levy).

`

PART II: CONDITIONS OF COMPETITION IN THE U.S. MARKET

U.S. MARKET CHARACTERISTICS

The four principal uses of magnesium in the U.S. market are aluminum alloying, desulfurization of iron and steel, die casting, electrochemical and other uses. Traditionally, magnesium markets are characterized by three general product distinctions: primary vs. secondary magnesium, pure vs. alloy magnesium, and cast vs. granulated magnesium. Pure primary magnesium is used in cast form for aluminum alloying and in cast or granular form for iron and steel desulfurization, while primary alloy magnesium is used in die casting, which requires alloy magnesium and cannot use pure magnesium. [1] Consumption of these downstream products, including automotive and aluminum products, follow general macroeconomic trends.

Apparent U.S. consumption of magnesium decreased by *** between 2015 and 2017, but was *** percent higher during January-September 2018 than January-September 2017.

CHANNELS OF DISTRIBUTION

U.S. producers and importers sold mainly to end users as shown in table II-1.

Table II-1
Magnesium: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2015-17

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Share of U.S. shipments (percent)				
U.S. producers: to Distributors	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Israel to Distributors	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: Nonsubject to Distributors	***	***	***	***	***
to End users	***	***	***	***	***
U.S. importers: All sources to Distributors	***	***	***	***	***
to End users	***	***	***	***	***

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

[1] *Magnesium from China and Russia, Invs. Nos. 731-TA-1071-1072 (Review)*, USITC Publication 4214, February 2011, p. II-1.

`

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling magnesium to all regions in the contiguous United States (table II-2). The only importer of magnesium from Israel, DSM reported selling to ***. For U.S. producers, *** percent of sales were within 100 miles of their production facilities, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. The subject importer, DSM, sold *** percent within 100 miles of its U.S. point of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

Table II-2
Magnesium: Geographic market areas in the United States served by U.S. producers and importers

Region	U.S. producers	Subject U.S. importers
Northeast	3	***
Midwest	4	***
Southeast	3	***
Central Southwest	3	***
Mountains	2	***
Pacific Coast	2	***
Other[1]	---	***
All regions (except Other)	2	***
Reporting firms	4	1

[1] All other U.S. markets, including AK, HI, PR, and VI.

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Table II-3 provides a summary of the supply factors regarding magnesium from U.S. producers and Israeli producers. As noted in Part I, producers of magnesium must operate near full capacity to prevent the deterioration of electrolytic cells.[2]

[2] Conference transcript, p. 34 (Lutz).

`

Table II-3
Magnesium: Supply factors that affect the ability to increase shipments to the U.S. market

Item	Capacity (metric tons)		Capacity utilization (percent)		Inventories as a ratio to total shipments (percent)		Ability to shift production[1]	Home market shipments	Exports to non-U.S. markets
	2015	2017	2015	2017	2015	2017		Shipments by market in 2017 (percent)	
United States	***	***	***	***	***	***	*** of 4	***	***
Israel	***	***	***	***	***	***	*** of 1	***	***

[1] *** U.S. producers reported that they are unable to shift production from magnesium to other products, but U.S. producer ***.

Note.--Responding U.S. producers accounted for more than 75 percent of U.S. production of magnesium in 2017. Responding foreign producer/exporter firms accounted for more than half of U.S. imports of magnesium from Israel during 2017. For additional data on the number of responding firms and their share of U.S. production and of U.S. imports from each subject country, please refer to Part I, "Summary Data and Data Sources."

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

Domestic production

Based on available information, U.S. producers of magnesium have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced magnesium to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of large amounts of unused capacity, the ability to shift shipments from alternate markets, and some available inventories. U.S. producers are not able to shift production to or from alternative products, but *** indicated that *** able to switch between pure and alloy magnesium.

Respondent DSM stated that some of its customers have reported that producer U.S. Magnesium is unable to supply additional spot volumes of pure magnesium for the remainder of 2018, and that they will be put on allocation in 2019.[3]

Subject imports from Israel

Based on available information, producers of magnesium from Israel have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of magnesium to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability inventories and the ability to shift shipments from alternate

[3] Conference transcript, p. 98 (Wanless).

`

markets. Factors mitigating responsiveness of supply include a limited availability of unused capacity and an inability to shift production to or from alternate products.

Respondent DSM stated that its ability to ship additional magnesium to the United States is constrained by the ability of one Israeli importer to consume the chlorine generated when it produces magnesium.[4]

Imports from nonsubject sources

Nonsubject imports accounted for 51.7 percent of total U.S. imports in 2017.[5] The largest sources of nonsubject imports during January 2015-September 2018 were Russia, Canada, and Taiwan. Combined, these countries accounted for 37.5 percent of nonsubject imports in 2017.

Supply constraints

All responding U.S. producers reported that they did not face any supply constraints since 2015 and were able to fulfill all of their orders. Respondent DSM highlighted that several purchasers have reported concerns about a lack of magnesium supply as demand for end products rebounds.[6]

Supplier qualification

Supplier qualification processes vary from the very minimal to very elaborate, and for the most part, both U.S. Magnesium and DSM are able to fulfill the most extreme qualification requirements.[7] A large consumer of magnesium, ATI, stated that its production of zirconium sponge requires an extremely strict specification for aluminum content, and that U.S. Magnesium cannot consistently meet its strict specifications but DSM can.[8]

U.S. demand

Based on available information, the overall demand for magnesium is likely to experience small changes in response to changes in price. The main contributing factors are the

---

[4] DSM claims that its capacity is limited by ICL's demand for chlorine used in the production of bromine. Conference transcript, p. 90 (Lerer). U.S. Magnesium stated that ICL (DSM's parent company) has the capacity to absorb significantly more chlorine output than DSM's current magnesium production levels produce, and argue that the chlorine output is not a true constraint. Petitioner postconference brief, p. 47.

[5] Based on official trade statistics. For more information, see Part IV.

[6] Respondent DSM's postconference brief, p. 39. For specific purchaser responses, see Part V.

[7] Conference transcript, pp. 69 (Tissington), 131 (Wanless).

[8] ATI postconference brief, pp. 2-4. ***.

limited range substitute products and the small cost share of magnesium in most of its end-use products.

End uses and cost share

U.S. demand for magnesium depends on the demand for U.S.-produced downstream products. Reported end uses include aluminum alloys and ferroalloys, military powder, and die casting for automotive parts, for which reported cost shares range from 1 to 90 percent, depending on the end use reported. However, magnesium accounts for a very small share of the cost of the ultimate end-use products in the aluminum and automotive sectors in which it is used.[9]

Business cycles

Most responding firms (2 of 4 U.S. producers and 7 of 13 importers) indicated that the market was not subject to business cycles or conditions of competition. U.S. producer *** and importer *** both indicated that demand for magnesium is driven by the demand for downstream products, and that demand can be influenced by business cycles within the end-use market segments. Two producers and two importers indicated that there are distinctive conditions of competition in the magnesium market. U.S. producer *** stated that ***. This technological condition, relevant both to U.S. Magnesium and the subject producer in Israel, provides a strong incentive to produce at full capacity. U.S. importer *** reported that Chinese magnesium makes up a majority of the global market for magnesium and that Chinese prices indirectly affect prices for U.S.-produced magnesium.

Most U.S. producers reported decreasing or fluctuating U.S. demand for magnesium since January 1, 2015, and most importers reported fluctuating demand (table II-4). Three U.S. producers reported that demand for magnesium outside the United States increased since 2015, while most importers reported that demand outside of the United States fluctuated.

Table II-4
Magnesium: Firms' responses regarding U.S. demand and demand outside the United States

Item	Number of firms reporting			
	Increase	No change	Decrease	Fluctuate
Demand inside the United States:				
U.S. producers	1	---	2	1
Importers	2	4	---	7
Demand outside the United States:				
U.S. producers	3	---	---	---
Importers	1	2	---	7

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

[9] Conference transcript, p. 34 (Lutz); DSM's postconference brief, p. 22.

`

The North American Die Casting Association (NADCA) stated that after the 2005 imposition of duties on magnesium imports from China and Russia, many vehicle and other manufacturers began shifting their focus from magnesium-based products to other materials.[10]

Purchasers most frequently reported that their purchases of U.S.-produced magnesium remained constant since 2015, and most reported that their purchases of magnesium from Israel decreased (table II-5). Purchase patterns of magnesium from other countries varied.

Table II-5
Magnesium: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	1	---	3	5	4
Israel	1	8	---	4	1
All other sources	4	2	2	1	4
Sources unknown	10	---	---	---	1

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

Both the petitioner and respondent stated that recent increases in the demand for magnesium in the aluminum sector was influenced by the recent 232 and AD/CVD proceedings in the aluminum sector.[11] The petitioner also stated that demand has also increased in the die casting segment of the market.[12]

Substitute products

Substitutes for magnesium are limited and vary by end use. Most U.S. producers (3 of 4), and importers (10 of 12) reported that there were no substitutes. The firms that did report substitutes, U.S. producer *** and importers ***, reported that aluminum can be used a substitute in casting automotive, electronic, or hand tool parts. U.S. producer *** also stated that calcium carbonate can be used a substitute in steel desulferization, and sodium can be used a substitute in titanium sponge production. The producer also noted that although there are limited substitutes, they do not affect magnesium prices. The producer also noted that while cast parts can be cast from alternative products, the substitution occurs at the design level, not at the caster level. Importer *** noted that there is no substitute for magnesium as an alloying element.

[10] NADCA postconference brief, p. 2.

[11] Conference transcript, pp. 35 (Lutz), 50-51 (Slade), 95 (Wanless); Petitioner's postconference brief, pp. 48-49. According to the petitioner, the 232 remedy encourages more primary aluminum production in the United States, and antidumping orders on common alloy sheet, foil, and raw products encourage the production of aluminum products in the United States that contain modest amounts of magnesium.

[12] Conference transcript, p. 52 (Slade).

`

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported magnesium depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Based on available data, staff believes that there is a high degree of substitutability between domestically produced magnesium and magnesium imported from Israel.

Lead times

Magnesium is primarily sold from inventory. U.S. producers reported that *** percent of their U.S. commercial shipments were sold from U.S. inventories, with lead times averaging 23 days. The remaining *** percent of their commercial shipments were produced-to-order.[13] The subject importer reported that *** percent of its commercial shipments were sold from U.S. inventories with an average lead time of *** days. The remaining *** percent of shipments from Israel were produced-to-order, with an average lead time of *** days.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations[14] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for magnesium. The major purchasing factors identified by firms include diversity and security of supply (13 purchasers), price (11), quality (9), service (6), meets qualifications (3), and producer reputation, safety, and quick reaction times (1 each). Purchaser *** reported that in addition to diversity of suppliers, it also factors in the diversity of metal sourced from primary producers and from the secondary scrap market.

NADCA stated that access to magnesium is critical to its members that manufacture a wide range of non-ferrous castings, from automobile engine and transmission parts to intricate components for computers and medical devices, and that since there is only one major producer of magnesium in the United States, U.S. Magnesium would face very little competition without imports.[15] DSM stated that it has been able to maintain its presence in the U.S. market at higher prices on the basis of its reputation for being a second source and a reliable supplier of quality product.[16]

---

[13] No U.S. producer provided information on lead times for magnesium produced-to-order.

[14] This information is compiled from responses by purchasers identified by the petitioner in its lost sales lost revenue allegations. See Part V for additional information.

[15] NADCA's postconference brief, p. 1. NADCA also stated that after duties on magnesium from China and Russia were applied in 2005, U.S. Magnesium made no attempt to maintain or increase its sales of alloy magnesium to NADCA members.

[16] Respondent DSM's postconference brief, pp. 8, 22.

`

Comparison of U.S.-produced and imported magnesium

In order to determine whether U.S.-produced magnesium can generally be used in the same applications as imports from Israel, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-6, most U.S. producers reported that U.S.-produced magnesium and magnesium from Israel (and other sources) can always or frequently be used interchangeably. Similarly, most U.S. importers reported that U.S.-produced magnesium and magnesium from Israel can always be used interchangeably, and most U.S.-produced magnesium and magnesium from other sources could always or frequently be used interchangeably.

Table II-6
Magnesium: Interchangeability between magnesium produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Israel	2	1	1	---	5	3	1	---
United States vs. Other	2	1	1	---	4	5	1	---
Israel vs. Other	2	1	1	---	4	4	---	---

Note.—A=Always, F=Frequently, S=Sometimes, N=Never.

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

Both the petitioner and respondent stated that end users generally view magnesium products as technically interchangeable.[17]

In addition, producers and importers were asked to assess how often differences other than price were significant in sales of magnesium from the United States, subject, or nonsubject countries. As seen in table II-7, all U.S. producers reported that differences other than price were only sometimes or never significant. Most U.S. importers reported that differences between U.S.-produced magnesium and magnesium from Israel were never significant.

Table II-7
Magnesium: Significance of differences other than price between magnesium produced in the United States and in other countries, by country pairs

Country pair	U.S. producers				U.S. importers			
	A	F	S	N	A	F	S	N
United States vs. Israel	---	---	2	2	---	2	1	4
United States vs. Other	---	---	1	2	---	4	1	4
Israel vs. Other	---	---	1	2	---	2	---	4

Note.--A = Always, F = Frequently, S = Sometimes, N = Never.

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

[17] Conference transcript, pp. 32 (Bay), 114-15 (Levy).

PART III: U.S. PRODUCERS' PRODUCTION, SHIPMENTS, AND EMPLOYMENT

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the subsidies and dumping margins were presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and *Part VI* and (except as noted) is based on the questionnaire responses of four firms that accounted for more than 80 percent of U.S. production of magnesium during 2017.

U.S. PRODUCERS

The Commission issued U.S. producers questionnaires to nine firms based on information contained in the petition, US Magnesium Corporation LLC ("US Magnesium"), Advanced Magnesium Alloys Corporation ("AMACOR"), MagPro LLC ("Magpro"), and Spartan Light Metal Products ("Spartan") provided usable data on their productive operations.[1] Staff believes that these responses represent more than 80 percent of U.S. production of magnesium.

Table III-1 lists U.S. producers of magnesium, their production locations, positions on the petition, shares of total production, and production type.

Table III-1
Magnesium: U.S. producers of magnesium, their positions on the petition, production locations, shares of reported production, and production type, 2017

Firm	Position on petition	Production location(s)	Share of production (percent)	Primary magnesium producer	Die caster	Recycler (other than die caster)	Grinder	Other
AMACOR	***	Anderson, IN	***	***	***	***	***	***
Magpro	***	Camden, TN Waverly, TN	***	***	***	***	***	***
Spartan	***	Sparta, IL Mexico, MO	***	***	***	***	***	***
US Magnesium	Petitioner	Salt Lake City, UT Rowley, UT	***	***	***	***	***	***
Total			100.0	***	***	***	***	***

Note.—Die casting is the processing of melting a magnesium ingot and injecting it under high pressure into a steel die in order to make a part. This process often generates scrap which can then be recycled into the process again. Conference transcript, pp. 81-82, (Tissington and Jones).
Note.—***.

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

[1] Luxer Magtech, Inc. ***. MagReTech, LLC ***. ***.

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms of magnesium. As indicated in table III-2, no U.S. producers are related to foreign producers of magnesium or are related to U.S. importers of magnesium.

Table III-2
Magnesium: U.S. producers' ownership, related and/or affiliated firms, 2017

* * * * * * *

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2015.

Table III-3
Magnesium: U.S. producers' reported changes in operations, since January 1, 2015

* * * * * * *

U.S. producers were asked to provide details on their magnesium production processes. Table III-4 presents production descriptions provided by U.S. producers.

Table III-4
Magnesium: U.S. producers' production process

* * * * * * *

U.S. producers' tolling operations

*** U.S. producers, ***, conducted at least some tolling operations. In 2017, ***.[2] *** reported tolling on behalf of *** firms, most of which are ***.[3] In 2016, US Magnesium's toll operations, pursuant to a recycling agreement with ATI, represented *** percent of its commercial shipments.[4] Under an agreement US Magnesium received magnesium chloride from ATI's adjoining titanium plant, processed and then produced magnesium for ATI for use in titanium production.[5] US Magnesium has not tolled since ATI ceased its titanium operations in late 2016.[6] *** indicated a *** amount of tolling, less than *** percent of total production in 2016.[7] *** has not engaged in toll operations since ***.[8]

[2] *** supplemental tolling questionnaire.
[3] Staff telephone interview with ***.
[4] US Magnesium, postconference brief, exhibit 9.
[5] Conference transcript, p. 43 (Tissington).
[6] Conference transcript, p. 13 (Cannon).
[7] ***.
[8] Ibid.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-5 and figure III-1 present U.S. producers' production, capacity, and capacity utilization.[9] U.S. producers' production capacity fluctuated during 2015-17, increasing by *** percent between 2015 and 2016 and then declining by *** percent in 2017, ending the period *** percent higher than in 2015. Capacity was the *** in January-September 2018 compared with January-September 2017. The capacity increase between 2015 and 2016 was largely due to *** and the capacity decline between 2016 and 2017 was largely due to ***.[10]

Table III-5
Magnesium: U.S. producers' production, capacity, and capacity utilization, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

Figure III-1
Magnesium: U.S. producers' production, capacity, and capacity utilization, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

U.S. producers' production remained stable between 2015 and 2016 but decreased by *** percent between 2016 and 2017. The magnesium industry's overall production decrease was *** due to U.S. Magnesium's curtailment of production after ATI shut down its titanium operations. As part of a toll agreement with ATI,[11] US Magnesium would pick up molten magnesium chloride and process the material in its electrolytic cells and then send back the finished product to ATI.[12]

U.S. producers' capacity utilization has declined since 2015. From 2015-17, overall capacity utilization decreased by *** percentage points. Capacity utilization was *** percentage points lower in January-September 2017 compared with January-September 2018.

[9] ***.

[10] *** U.S. producer questionnaire response, section II-2.

[11] ATI's production resulted in a byproduct of magnesium chloride. Conference transcript, p. 43 (Tissington).

[12] Conference transcript, p. 43 (Tissington).

Alternative products

U.S. producers did not indicate the production of any out-of-scope products on the same equipment used to produce magnesium. Additionally, the petitioner testified that certain equipment could be retrofitted to produce other products but the electrolytic cells and casting equipment used in the magnesium production process is specifically designed for magnesium production and any modifications would be capital intensive.[13]

U.S. PRODUCERS' U.S. SHIPMENTS AND EXPORTS

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. Only ***, reported internal consumption and transfers to related firms.[14] Two firms, ***. U.S. producers' U.S. shipments, by quantity, declined by *** percent between 2015 and 2017 but were *** percent higher in January-September 2018 compared with January-September 2017.

In addition, exclusive of tolling operations, U.S. producers' U.S. shipments, by quantity, declined by *** percent between 2015 and 2017 but were *** percent higher in January-September 2018 compared with January-September 2017 (see tabulation following table III-6).

[13] Conference transcript, p. 83 (Tissington and Lutz).

[14] ***. *** producer questionnaire, section I-8a

Table III-6
Magnesium: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Value (1,000 dollars)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Unit value (dollars per metric ton)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	***	***	***	***	***
	Share of quantity (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. shipments	***	***	***	***	***
Export shipments	***	***	***	***	***
Total shipments	100.0	100.0	100.0	100.0	100.0

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

* * * * * * *

Table III-7 presents data U.S. producers' U.S. shipments by product type.[15] Throughout the period for which data were collected, a majority of U.S. producers' U.S. shipments, by quantity and value, have consisted of pure magnesium During 2015-17, average unit values of pure magnesium and alloy magnesium shipments ranged from $*** and $***, respectively.

[15] The Commission questionnaire defined pure magnesium to include products that contain less than 99.95 percent but not less than 99.8 percent magnesium and also includes "ultra pure magnesium" containing at least 99.95 percent magnesium by weight. Alloy magnesium is defined as chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, whether or not conforming to ASTM specification for magnesium alloy.

Table III-7
Magnesium: U.S. producers' U.S. shipments, by product type, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Value (1,000 dollars)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Unit value (dollars per metric ton)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Share of quantity (percent)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	100.0	100.0	100.0	100.0	100.0

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

U.S. PRODUCERS' INVENTORIES

Table III-8 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. U.S. producers' end-of-period inventories fluctuated during the period examined, overall from 2015-17, inventories decreased by *** percent. Overall, the ratios of inventories to U.S. production, U.S. shipments, and total shipments increased from 2015 to 2017, but were *** lower in January-September 2018 compared to January-September 2017 due to *** lower end-of-period inventories in January-September 2018, *** metric tons, compared to its January-September 2017, end-of-period inventories, *** metric tons.[16]

Table III-8
Magnesium: U.S. producers' inventories, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

[16] *** producer questionnaire, section II-7.

U.S. PRODUCERS' IMPORTS AND PURCHASES

Responding U.S. producers reported no imports of purchases of magnesium from Israel or any nonsubject country.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. Between 2015 and 2017 production related workers ("PRWs") declined by *** percent although hours per PRW remained unchanged. Productivity has fluctuated between 2015 and 2017 and was highest in 2016. Productivity in January-September 2018 was lower than in January-September 2017. Hourly wages increased by $*** between 2015 and 2016 and then increased $*** between 2016 and 2017. Hourly wages in January-September 2018 were $*** lower than in January-September 2017.

Table III-9
Magnesium: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2015-17, January-September 2017, and January-September 2018

* * * * * * *

PART IV: U.S. IMPORTS, APPARENT U.S. CONSUMPTION, AND MARKET SHARES

U.S. IMPORTERS

The Commission issued importer questionnaires to 37 firms believed to be importers of magnesium, as well as to all U.S. producers of magnesium.[1] Usable questionnaire responses[2] were received from 13 companies,[3] representing more than 70.0 percent of U.S. imports in 2017 under HTS subheadings 8104.11.00, 8104.19.00, and 8104.30.00.[4] Five firms, *** responded to the Commission's questionnaire certifying that they had not imported subject magnesium since January 1, 2015. Table IV-1 lists all responding U.S. importers of magnesium from Israel and other sources, their locations, and their shares of U.S. imports, in 2017.

Table IV-1
Magnesium: U.S. importers, their headquarters, and share of total imports by source, 2017

* * * * * * *

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of magnesium from Israel and all other sources. U.S. imports from Israel, by quantity, decreased by 11.2 percent between 2015 and 2017 and were 15.8 percent lower in January-September 2018 compared with January-September 2017. U.S. imports from Israel, by value, decreased by 21.9 percent between 2015 and 2017 and were 17.1 percent lower in January-September 2018 compared with January-September 2017.

---

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS subheadings 8104.11.00, 8104.19.00, and 8104.30.00 in 2017.

[2] *** responded to the Commission questionnaire indicating imports of magnesium, however, the response was incomplete and therefore not included in importer data presented in this report.

[3] Three firms reported temporary imports under bond. ***.

[4] Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Table IV-2
Magnesium: U.S. imports, by source, 2015-17, January to September 2017, and January to September 2018

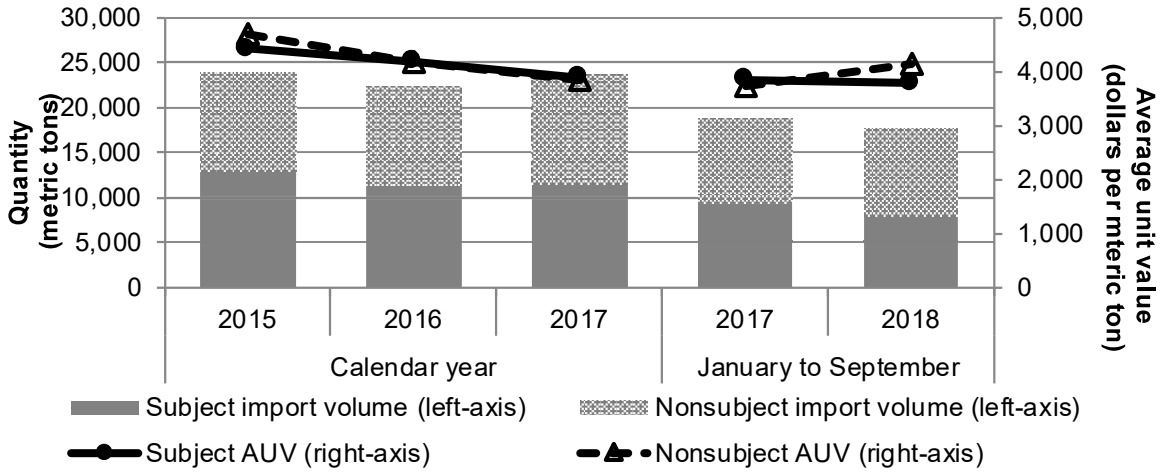
Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
U.S. imports from.--					
Israel	12,890	11,335	11,450	9,362	7,882
Nonsubject sources	11,181	11,182	12,248	9,573	9,910
All import sources	24,071	22,517	23,697	18,934	17,792
	Value (1,000 dollars)				
U.S. imports from.--					
Israel	57,225	47,586	44,668	36,074	29,909
Nonsubject sources	52,521	46,986	47,082	35,796	41,273
All import sources	109,745	94,572	91,749	71,870	71,182
	Unit value (dollars per metric ton)				
U.S. imports from.--					
Israel	4,439	4,198	3,901	3,853	3,795
Nonsubject sources	4,697	4,202	3,844	3,739	4,165
All import sources	4,559	4,200	3,872	3,796	4,001
	Share of quantity (percent)				
U.S. imports from.--					
Israel	53.6	50.3	48.3	49.4	44.3
Nonsubject sources	46.4	49.7	51.7	50.6	55.7
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.--					
Israel	52.1	50.3	48.7	50.2	42.0
Nonsubject sources	47.9	49.7	51.3	49.8	58.0
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.--					
Israel	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Note. --The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; ***, Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018.

Figure IV-1
Magnesium: U.S. import volumes and prices, 2015-2017, January to September 2017, and January to September 2018



Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.
Note. --The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; ***, Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018.

Overall, U.S. imports from nonsubject sources increased by quantity, ending 9.5 percent higher, but declined by value, ending 10.4 percent lower in 2017 than in 2015. U.S. imports from nonsubejct sources, by quantity, were comparable in January-September 2018 compared with January-September 2017, although by value, U.S. imports from nonsubject sources were 15.3 percent higher in January-September 2018 compared with January-September 2017.

Average unit values of U.S. imports from Israel and nonsubject sources declined between 2015 and 2017. U.S. imports from Israel were lower in January-September 2018 compared with January-September 2017 but U.S. imports from nonsubject sources were higher in January-September 2018 compared with January-September 2017. The Average unit value of U.S. imports from Israel was consistently above that of U.S. imports from nonsubject sources, except in January-September 2018. The average unit value of magnesium imports from Israel ranged from $3,795 per metric ton in January-September 2018 to $4,439 in 2015.[5]

[5] Appendix D presents quarterly U.S. import data of magnesium by individual HTS number.

U.S. imports from Israel as a ratio to U.S. production decreased 2.2 percentage points between 2015 and 2016 but increased 3.8 percentage points between 2016 and 2017 for an overall increase of 1.6 percentage points between 2015 and 2017. U.S. imports from Israel as a ratio to U.S. production were 1.5 percentage points lower in January-September 2018 compared with January-September 2017.

Table IV-3 presents U.S. imports from nonsubject sources. During the period for which data were collected Russia was the largest nonsubject source for U.S. imports of magnesium, followed by Canada and Taiwan. The United States imported little magnesium from China which is currently under multiple antidumping duty orders covering the magnesium subject to this proceeding.

U.S. imports of magnesium from Turkey increased by 98.5 percent between 2015 and 2017 and were 71.5 percent higher in January-September 2018 compared to January-September 2017. U.S. imports from Turkey as a share of total imports in January-September 2018 were 9.6 percent. The petitioner notes that the sole Turkish producer, ESAN, shut down its magnesium plant, Eczacibasi, around May 2018, it sold its inventory to a trader in the United States, and is currently not producing any magnesium.[6]

[6] Conference transcript, p. 45 (Slade); and Petitioner's postconference brief, p. 9, exhibit 2.

Table IV-3
Magnesium: U.S. imports, by nonsubject source, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
U.S. imports from.--					
Russia	2,014	1,870	5,397	4,055	2,434
Canada	2,794	2,559	2,219	1,643	1,481
Taiwan	2,379	2,230	1,261	1,163	821
China	0	9	1	---	140
United Kingdom	816	690	693	493	622
Turkey	9	347	581	498	1,749
Germany	611	1,093	473	402	1,536
Austria	218	370	423	306	417
Czech Republic	357	296	355	241	117
Brazil	594	738	250	250	140
All other countries	1,389	981	595	522	454
Nonsubject sources	11,181	11,182	12,248	9,573	9,910
	Value (1,000 dollars)				
U.S. imports from.--					
Russia	7,526	5,468	15,732	11,785	7,345
Canada	7,599	6,552	5,878	4,162	4,185
Taiwan	7,467	6,220	3,693	3,403	2,553
China	6	49	11	(2,065)	813
United Kingdom	16,166	13,608	11,963	8,480	10,911
Turkey	110	1,151	1,664	1,402	5,771
Germany	2,198	3,780	1,734	1,525	5,001
Austria	1,264	1,811	2,182	1,520	1,999
Czech Republic	1,564	1,120	1,053	656	142
Brazil	3,277	3,403	1,100	1,100	614
All other countries	5,344	3,826	2,072	3,827	1,939
Nonsubject sources	52,521	46,986	47,082	35,796	41,273
	Unit value (dollars per metric ton)				
U.S. imports from.--					
Russia	3,737	2,925	2,915	2,907	3,018
Canada	2,720	2,560	2,649	2,533	2,825
Taiwan	3,139	2,789	2,929	2,926	3,112
China	12,903	5,539	8,576	---	5,808
United Kingdom	19,818	19,729	17,265	17,186	17,542
Turkey	12,171	3,316	2,863	2,816	3,301
Germany	3,597	3,459	3,668	3,797	3,255
Austria	5,787	4,888	5,163	4,970	4,791
Czech Republic	4,379	3,788	2,964	2,722	1,216
Brazil	5,517	4,611	4,402	4,402	4,388
All other countries	3,847	3,901	3,483	7,330	4,274
Nonsubject sources	4,697	4,202	3,844	3,739	4,165

Table continued on next page.

Table IV-3—Continued
Magnesium: U.S. imports, by nonsubject source, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity share of total U.S. imports (percent)				
U.S. imports from.--					
Russia	8.4	8.3	22.8	21.4	13.7
Canada	11.6	11.4	9.4	8.7	8.3
Taiwan	9.9	9.9	5.3	6.1	4.6
China	0.0	0.0	0.0	---	0.8
United Kingdom	3.4	3.1	2.9	2.6	3.5
Turkey	0.0	1.5	2.5	2.6	9.8
Germany	2.5	4.9	2.0	2.1	8.6
Austria	0.9	1.6	1.8	1.6	2.3
Czech Republic	1.5	1.3	1.5	1.3	0.7
Brazil	2.5	3.3	1.1	1.3	0.8
All other countries	5.8	4.4	2.5	2.8	2.5
Nonsubject sources	46.4	49.7	51.7	50.6	55.7
	Value share of total U.S. imports (percent)				
U.S. imports from.--					
Russia	6.9	5.8	17.1	16.4	10.3
Canada	6.9	6.9	6.4	5.8	5.9
Taiwan	6.8	6.6	4.0	4.7	3.6
China	0.0	0.1	0.0	(2.9)	1.1
United Kingdom	14.7	14.4	13.0	11.8	15.3
Turkey	0.1	1.2	1.8	2.0	8.1
Germany	2.0	4.0	1.9	2.1	7.0
Austria	1.2	1.9	2.4	2.1	2.8
Czech Republic	1.4	1.2	1.1	0.9	0.2
Brazil	3.0	3.6	1.2	1.5	0.9
All other countries	4.9	4.0	2.3	5.3	2.7
Nonsubject sources	47.9	49.7	51.3	49.8	58.0

Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Note. --The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; ***, Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018.

U.S. MARKET BY PRODUCT TYPE

U.S. importers were asked to report their U.S. shipments of pure magnesium and alloy magnesium.[7] Tables IV-4a and IV-4b present U.S. importers' subject and nonsubject U.S. shipments by product type. DSM, the only importer of magnesium from Israel, reported importing ***. In 2017, *** percent of reported U.S. shipments of imports from Israel consisted of pure magnesium. The share of U.S. shipments of imports from Israel consisting of pure magnesium increased by *** percentage points between 2015 and 2017.

In 2017, nine firms reported importing pure magnesium from nonsubject sources and six firms reported importing alloy magnesium nonsubject sources. The distribution of pure and alloy magnesium imports from nonsubject sources fluctuated between 2015 and 2017. In 2015, a majority of nonsubject imports, 70.3 percent, consisted of alloy magnesium while in 2017, the majority of magnesium imports, 61.5 percent, consisted of pure magnesium.

[7] The Commission's questionnaire defined pure magnesium to include products that contain less than 99.95 percent but not less than 99.8 percent magnesium and also includes "ultra pure magnesium" containing at least 99.95 percent magnesium by weight. Alloy magnesium is defined as chemical combinations of magnesium and other material(s) in which the magnesium content is 50 percent or greater, but less than 99.8 percent, by weight, whether or not conforming to ASTM specification for magnesium alloy.

Table IV-4a
Magnesium: U.S. importers' U.S. shipments of subject imports, by product type, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Value (1,000 dollars)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Unit value (dollars per metric ton)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Share of quantity (percent)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	100.0	100.0	100.0	100.0	100.0

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

Table IV-4b
Magnesium: U.S. importers' U.S. shipments of nonsubject imports, by product type, 2015-17, January to September 2017, January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Value (1,000 dollars)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Unit value (dollars per metric ton)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	***	***	***	***	***
	Share of quantity (percent)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
Pure magnesium	***	***	***	***	***
Alloy magnesium	***	***	***	***	***
All products	100.0	100.0	100.0	100.0	100.0

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

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[8] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[9] Imports from Israel accounted for 44.2 percent of total imports of magnesium by quantity during October 2017-September

[8] Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

[9] Section 771 (24) of the Act (19 U.S.C § 1677(24)).

2018. U.S. imports from Israel in the 12-month period proceeding the filling of the petition are shown in table IV-5.

Table IV-5
Magnesium: U.S. imports in the twelve month period preceding the filing of the, October 2017 through September 2018

Item	October 2017 through September 2018	
	Quantity (metric tons)	Share quantity (percent)
U.S. imports from.--		
Israel	9,970	44.2
Nonsubject sources	12,585	55.8
All import sources	22,555	100.0

Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Note. --The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; ***, Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018.

APPARENT U.S. CONSUMPTION

Table IV-6 presents data on apparent U.S. consumption and U.S. market shares for magnesium. Apparent U.S. consumption, by quantity, decreased by *** percent between 2015 and 2017 and was *** percent higher in January-September 2018 compared with January-September 2017. Apparent U.S. consumption, by value, decline *** percent between 2015 and 2017 but was *** percent higher in January-September 2018 compared with January-September 2017.

Table IV-6
Magnesium: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, 2015-17, January to September 2017, and January to September 2018

Item	Calendar year			January to September	
	2015	2016	2017	2017	2018
	Quantity (metric tons)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from.--					
Israel	12,890	11,335	11,450	9,362	7,882
Nonsubject sources	11,181	11,182	12,248	9,573	9,910
All import sources	24,071	22,517	23,697	18,934	17,792
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from.--					
Israel	57,225	47,586	44,668	36,074	29,909
Nonsubject sources	52,521	46,986	47,082	35,796	41,273
All import sources	109,745	94,572	91,749	71,870	71,182
Apparent U.S. consumption	***	***	***	***	***

Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Note.--The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; *** Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from data submitted in response to Commission questionnaires and from official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018.

U.S. MARKET SHARES

U.S. market share data are presented in table IV-7 and figure IV-2. U.S. producers' share of apparent U.S. consumption, by quantity, decreased by *** percentage points in 2016 and declined *** percentage points in 2017 for an overall decrease of *** percentage points between 2015 and 2017. U.S. producers' share of apparent U.S. consumption, by quantity, was *** percentage points higher in January-September 2018 compared to January-September 2017. Share of U.S. imports from Israel increased *** percentage points between 2015 and 2017 but were *** percentage points lower in January-September 2018 compared to January-September 2017.

Table IV-7
Magnesium: U.S. consumption and market shares, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

Figure IV-2
Magnesium: Apparent U.S. consumption, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The principle raw material used in the production of magnesium is magnesium chloride which is derived from magnesium rich brines.[1] Raw materials as a ratio to the cost of goods sold (COGS) remained relatively stable over the period at approximately *** percent. Other factory costs also were constant over the period and accounted for more than *** percent of COGS. Two U.S. producers reported that raw material prices had increased since 2015 and both stated that they were unable to pass on the increased costs to customers because of fixed price contracts and competitive pricing. One producer reported *** raw material prices, and the other reported *** in raw material prices. Seven of 10 responding importers reported that raw material prices fluctuated since 2015.

The domestic industry's COGS was influenced by the cost of electricity and the fixed costs of maintaining the electrolytic cells. The cost of electricity is seasonal and has fluctuated since 2015 (figure V-1). The petitioner stated that it has seen an increase in the cost of its production due to increases in the costs of electricity, labor, and raw materials, and noted that its unit cost of production has also increased as its electrolysis cells have been extended past their useful life.[2]

[1] Conference transcript, p. 17 (Tissington).

[2] Conference transcript, p. 61 (Slade).

Figure V-1
Electricity: Average retail price of electricity, industrial sector, monthly, January 2015-September 2018

Source: U.S. Energy Information Administration, Average retail price of electricity quarterly, https://www.eia.gov/electricity/data/, accessed November 27, 2018.

U.S. inland transportation costs`

Most responding U.S. producers (*** of 4) reported that purchasers typically arrange transportation, while most importers (4 of 5) reported arranging transportation for their customers. U.S. producer *** reported that both it and its customers may arrange transportation. U.S. producers *** reported that their U.S. inland transportation costs were *** percent, while importers *** reported transportation costs of *** percent to *** percent.

PRICING PRACTICES

Pricing methods

As presented in tables V-1 and V-2, U.S. producers and importers sell primarily on a contractual basis, and supplement these sales with sales on the spot market.

Table V-1
Magnesium: U.S. producers' and importers' reported price setting methods, by number of responding firms[1]

Method	U.S. producers	U.S. importers
Transaction-by-transaction	3	10
Contract	3	7
Set price list	---	---
Other	---	1
Responding firms	4	12

[1] The sum of responses down may not add up to the total number of responding firms as each firm was instructed to check all applicable price setting methods employed.

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

As shown in table V-2, U.S. producers and importers reported their 2017 U.S. commercial shipments of magnesium by type of sale. U.S. producers and importers both reported selling most of their magnesium under annual contracts, which are negotiated during the fourth quarter for the following year.[3]

Table V-2
Magnesium: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2017

Item	U.S. producers	Subject U.S. importers
	Share (percent)	
Long-term contracts	***	16.0
Annual contract	***	62.0
Short-term contracts	***	21.0
Spot sales	***	1.0

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

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

U.S. producer *** reported offering long-term contracts lasting for more than three years, and *** reported offering short-term contracts for three months. U.S. producers reported that their contracts fix both price and quantity and do not allow for price renegotiation. Additionally, contract prices are not indexed to raw materials. Similarly, U.S. importers primarily offer annual contracts. *** reported offering short-term contracts of three months, and long-term contracts lasting 36 months. Most responding U.S. importers reported

[3] Conference transcript, p. 95 (Wanless).

not allowing for price renegotiation, and reported that they do not index their contract prices to raw material indices.[4]

Both U.S. Magnesium and DSM stated that they do not specifically reference published price indices during price negotiations.[5] The petitioner stated that its customers sometimes quote competitors' prices during negotiations.[6] Respondent DSM stated that it is rare for customers to quote competing prices during negotiations, but rather that they signal if a price is too high.[7]

Purchasers provided a general description of their firms' method of purchase for magnesium. All responding purchasers reported that contracts are generally negotiated on a yearly basis in the fourth quarter for the next year, and purchasers *** reported that they sometimes will supplement contracts with purchases on the spot market. Purchaser *** reported that it generally purchases ***.

Sales terms and discounts

U.S. producers reported quoting prices on both f.o.b. and delivered bases, and importer DSM reported quoting prices on *** basis. All U.S. producers and importers, with one exception, reported that they offer no discounts.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following magnesium products shipped to unrelated U.S. customers during January 2015-September 2018.

Product 1.--Pure magnesium ingots containing at least 99.95 percent magnesium ("high purity magnesium").[8]

Product 2.--Pure magnesium ingots containing at least 99.8 percent magnesium, but less than 99.95 percent magnesium ("pure magnesium").[9]

---

[4] The price indices available for magnesium are based on surveys rather than actual transactions, and these price indices "don't get a lot of profile in this industry." Instead, the industry relies on published import statistics and AUVs. Conference transcript, pp. 133 (Wanless) and p. 140 (Levy).

[5] Conference transcript, p. 71 (Slade).

[6] Conference transcript, p. 80 (Slade).

[7] Conference transcript, p. 118 (Wanless).

[8] DSM described pricing product 1 as a niche product that gets used in the semiconductor industry and represents less than 5 percent of the market. Conference transcript, p. 92 (Wanless).

[9] DSM described pricing product 2 as "the heart of the market," and where its sales are concentrated. Conference transcript, p. 92 (Wanless).

Product 3.--Alloy magnesium ingots containing less than 99.8 percent magnesium, meeting ASTM specifications for alloy magnesium.[10]

Three U.S. producers and one importer (***) provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[11] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of magnesium and *** percent of U.S. shipments of subject imports from Israel in 2017. All firms reporting price data confirmed that prices were reported f.o.b., excluding transportation costs.[12]

Price data for products 1-3 are presented in tables V-3 to V-5 and figures V-2 to V-4.

Table V-3
Magnesium: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2015-September 2018

* * * * * * *

Table V-4
Magnesium: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2015-September 2018

* * * * * * *

Table V-5
Magnesium: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarter, January 2015-September 2018

* * * * * * *

[10] DSM stated that pricing product 3 is used for die casting and as a hardener in aluminum alloying. Conference transcript, p. 93 (Wanless). This product includes a range of products and ASTM specifications, but all of which are similarly priced. Conference transcript, p. 132 (Levy).

[11] Per-unit pricing data are calculated from total quantity and total value data provided by U.S. producers and importers. The precision and variation of these figures may be affected by rounding, limited quantities, and producer or importer estimates.

[12] Compiled from questionnaire data. See also staff email with ***, November 21, 2018.

Figure V-2
Magnesium: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2015-September 2018

* * * * * * *

Figure V-3
Magnesium: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2015-September 2018

* * * * * * *

Figure V-4
Magnesium: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2015-September 2018

* * * * * * *

Price trends

In general, prices decreased during January 2015-September 2018. Table V-6 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from *** percent to *** percent during January 2015-September 2018, while import price decreases ranged from *** percent to *** percent.

Table V-6
Magnesium: Summary of weighted-average f.o.b. prices for products 1-3 from the United States and Israel

Item	Number of quarters	Low price (dollars per metric ton)	High price (dollars per metric ton)	Change in price over period[1] (percent)
Product 1:				
United States	15	***	***	***
Israel	15	***	***	***
Product 2:				
United States	15	***	***	***
Israel	15	***	***	***
Product 3:				
United States	15	***	***	***
Israel	15	***	***	***

[1] Percentage change from the first quarter in which data were available to the last quarter in which price data were available.

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

Price comparisons

As shown in table V-7, prices for product imported from Israel were below those for U.S.-produced product in 14 of 45 instances (*** metric tons); margins of underselling ranged from *** percent to *** percent. In the remaining 31 instances (*** metric tons), prices for product from Israel were between *** percent and *** percent above prices for the domestic product. There were *** instances of underselling of pure magnesium (pricing product 2), which was the highest volume pricing product and accounted for nearly three-fourths of reported pricing product data.

Table V-7
Magnesium: Instances of underselling/overselling and the range and average of margins, by country, January 2015-September 2018

* * * * * * *

LOST SALES AND LOST REVENUE

The Commission requested that U.S. producers of magnesium report purchasers where they experienced instances of lost sales or revenue due to competition from imports of magnesium from Israel during January 2015-September 2018. Of the four responding U.S. producers, *** reported that they had to reduce prices and *** firms reported that they had lost sales. *** submitted lost sales and lost revenue allegations. *** identified 20 firms where they lost sales or revenue (15 consisting of both lost sales and lost revenue allegations, and 5 consisting of lost sales allegations only) during January 2015-September 2018.

Staff contacted 20 purchasers and received responses from 14 purchasers. Responding purchasers reported purchasing *** metric tons of magnesium during January 2015-September 2018 (table V-8).

Table V-8
Magnesium: Purchasers' responses to purchasing patterns

* * * * * * *

During 2017, responding purchasers purchased *** percent from U.S. producers, *** percent from Israel, *** percent from nonsubject countries, and *** percent from "unknown source" countries. Of the responding purchasers, five reported constant purchases from domestic producers, three reported increasing purchases, and four reported fluctuating purchases. One purchaser did not purchase any domestic magnesium. Eight of 13 purchasers that bought magnesium from Israel reported decreasing purchases, four reported no change in their purchases, and one reported fluctuating purchases. Regardless of any change in their purchasing patterns, purchasers stated that their purchases were driven by demand from their customers and that their sourcing decisions were mostly focused on reliability of supply and a desire to diversify their supply.

Of the 14 responding purchasers, 11 reported that they had purchased imported magnesium from Israel instead of U.S.-produced product since 2015. Seven of these purchasers reported that subject import prices were lower than U.S.-produced product, but only 2 of these 11 purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. These two purchasers estimated that they purchased *** metric tons and *** metric tons, respectively, instead of domestic product because of price (table V-9). Seven of the 11 purchasers identified diversification of supply as a non-price reason for purchasing imported rather than U.S.-produced product, and others identified quality and customer service preferences for subject magnesium.

Table V-9
Magnesium: Purchasers' responses to purchasing subject imports instead of domestic product

* * * * * * *

Of the 14 responding purchasers, one reported that U.S. producers had reduced prices in order to compete with lower-priced imports from Israel (table V-10; seven reported that they did not know). The reported estimated price reduction was *** percent. In describing the price reductions, purchaser *** reported that there is very little difference between U.S.-produced magnesium and magnesium from Israel.

Table V-10
Magnesium: Purchasers' responses to U.S. producer price reductions

* * * * * * *

In responding to the lost sales lost revenue survey, some purchasers provided additional information on purchases and market dynamics. Some purchasers further highlighted the importance of diversity of supply for continued downstream production of important products. Purchaser *** reported that magnesium is a raw material required to produce *** and without a steady supply of *** magnesium, it would have to severely curtail its *** production, which is the beginning of the *** supply chain. ***.

Purchaser *** stated that "***." Purchaser *** reported that ***. Purchaser *** reported that it did not purchase magnesium from Israel instead of domestic sources and noted that ***. It also stated that the sole U.S. source was unwilling to commit to provide the purchaser with the full amount that it requested, and as a result it was obliged to seek additional material elsewhere.[13] Purchaser *** reported that some of its key customers require that it always has two fully-qualified supply sources to mitigate any supply risk, and in some cases, there are only two producers that are qualified. Additionally, it stated that "***."

Another purchaser, ***, highlighted frustration with the domestic producer, stating that "***."

[13] During the conference, the petitioner stated that it cannot require that purchasers source only from them. Conference transcript, pp. 70, 85 (Tissington).

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

INTRODUCTION

Four U.S. producers provided usable financial data on their operations on magnesium. *** accounted for the majority of total net sales value in 2017 (*** percent), followed by *** (*** percent), *** (*** percent), and *** (*** percent). The net sales value of magnesium consisted of commercial sales (*** percent), internal consumption (*** percent), and transfers to related firms (*** percent) in 2017.[1] All U.S. producers reported their financial results on the basis of U.S. generally accepted accounting principles. *** reported its financial results using a fiscal year ending ***. All other U.S. producers used a calendar year to report their financial results.

OPERATIONS ON MAGNESIUM

Table VI-1 presents aggregated data on U.S. producers' operations in relation to magnesium. Table VI-2 shows the changes in average unit values ("AUVs") of select financial indicators. Table VI-3 presents selected company-specific financial data.

Net sales

As shown in table VI-1, the domestic industry's quantity of net sales decreased irregularly from 2015 to 2017, while the domestic industry's value of net sales declined consistently during this time. The industry's net sales quantity and value were higher in January-September 2018 compared to January-September 2017. U.S. producers reported mixed directional trends in terms of volume and value, as shown in table VI-3.[2]

The domestic industry's average unit net sales value decreased irregularly from $*** per metric-ton in 2015 to $*** per metric-ton in 2017, but was higher in January-September 2018 at $*** per metric-ton compared to January-September 2017 at $*** per metric-ton.[3] ***. Although tolling activity represented a minority of commercial activity among magnesium producers during the period for which data were collected, shifts in the relative volume did have an impact on trends.

[1] ***. Email from ***, November 13, 2018.

[2] ***. Petitioner's postconference brief, exh. 9.

[3] Results of operations of U.S. producers excluding tolling and operations of U.S. producers excluding ***'s tolling on behalf of *** are presented on the tabulations following table VI-1.

Table VI-1
Magnesium: Results of operations of U.S. producers, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

The following two tabulations present net sales excluding toll operations and profitability excluding ***, respectively. The average unit values of net sales (excluding toll operations) of magnesium declined more noticeably during 2015-17, and were lower, rather than higher, in January-September 2018 relative to January-September 2017. Profitability by all measures was lower in fiscal year 2015 and 2016, excluding tolling operations on behalf of ***.

* * * * * * *

Table VI-2
Magnesium: Changes in AUVs, between fiscal years and between partial year periods
Source: Compiled from data presented in table VI-1.

* * * * * * *

Table VI-3
Magnesium: Select results of operations of U.S. producers, by company, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

Cost of goods sold and gross profit or (loss)

COGS are comprised of raw material, direct labor, and other factory costs ("OFC"). OFC represented the largest component of COGS, accounting for between *** percent (January-September 2017) and *** percent (2016). As shown in table VI-3, the industry's per metric-ton OFC irregularly increased by *** percent from 2015 to 2017, and were *** percent higher in January-September 2018 compared to January-September 2017. ***.[4] [5] ***.

The second largest component of COGS is direct labor, which accounted for between *** percent (January-September 2018) and *** percent (January-September 2017) of total COGS. As shown in table VI-3, the industry's per metric-ton direct labor costs irregularly

[4] ***. Email from ***, November 20, 2018.

[5] ***. Petitioners' postconference brief, pp. A-8 and 9. US Magnesium uses solar energy to increase the concentration of magnesium chloride in brine from the Great Salt Lake. A spokesman for US Magnesium testified that solar energy is not a cost item on the firm's financial statements. Conference transcript, p. 76 (Tissington), and US Magnesium's website, http://usmagnesium.com/environment/solar-energy/.

increased by *** percent from 2015 to 2017, but were *** percent lower in January-September 2018 compared to January-September 2017.[6]

Lastly, raw materials are the smallest component of COGS, representing between *** percent (2016) and *** percent (January-September 2018) of total COGS. Table VI-3 shows that the industry's per metric-ton raw material costs irregularly increased by *** percent from 2015 to 2017, and were *** percent higher in January-September 2018 compared to January-September 2017.[7] Raw materials consist of carnallite/other magnesium, process magnesium, and other raw materials such as ***. *** reported by-product revenue which were subtracted from COGS. By-product revenue accounted for between *** percent (2016) and *** percent (January-September 2018) of total COGS.[8]

The industry's gross profit declined from $*** in 2015 to a gross loss of $*** in 2017. The decrease in total net sales value was greater than the decrease in COGS from 2015 to 2017. Gross profit was lower in January-September 2018 (negative $***) than in January-September 2017 ($***) as the change in COGS was greater than change in net sales value. As shown in table VI-3, ***.

SG&A expenses and operating income or (loss)

As shown in table VI-1, the industry's SG&A expense ratio (i.e., total SG&A expenses divided by total net sales value) ranged from *** percent in 2016 to *** percent in 2017.[9]

The industry's operating income declined from $*** in 2015 to an operating loss of $*** in 2017. The operating loss was higher in January-September 2018 ($***) than in January-September 2017 ($***). As shown in table VI-3, ***.

Other expenses and net income or (loss)

Classified below the operating income level are interest expense, other expense, and other income, which are usually allocated to the product line from high levels in the corporation.

Interest expense increased from $*** in 2015 to $*** in 2017 and was higher in January-September 2018 compared to January-September 2017. Other expenses increased from $*** in 2015 to $*** in 2016 before decreasing to $*** in 2017, and were higher in interim 2018 than in interim 2017. The increase in 2016 is mainly attributable to ***.[10] [11] ***.

By definition, items classified at this level in the income statement only affect net income or (loss). As shown in table VI-3, the industry's net income declined from $*** in 2015 to a loss of $*** in 2016 before improving somewhat to a loss of $*** in 2017. The industry's

---

[6] ***. Petitioners' postconference brief, p. A-8.

[7] ***. Email from ***, November 26, 2018. ***. Email from ***, November 26, 2018.

[8] ***. Email from ***, November 13, 2018. ***.

[9] ***. Email from ***, November 13, 2018. ***. Email from ***, November 12, 2018.

[10] ***. Email from ***, November 30, 2018.

[11] ***.

net loss was higher at $*** in January-September 2018 compared to $*** in January-September 2017. ***.

Tolling of magnesium

In a tolling operation, one firm, the tollee, typically arranges for another firm, the toller, to produce usable magnesium metal alloy by recycling magnesium-containing scrap that is provided by the tollee. The tollee typically purchases the magnesium scrap raw materials and other materials and arranges delivery of the scrap to the toller. The toller processes it and charges a conversion charge, or tolling fee for the service. ***.[12] ***. ***.[13]

Total tolling operations represented *** percent (2015), *** percent (2016), *** percent (2017), *** percent (interim 2017), and *** percent (interim 2018) of the domestic industry's total net sales quantity. (See tabulations of quantity, value, and unit value of net sales of the industry's operations excluding toll following table VI-1).

Variance analysis

The variance analysis based upon the results of the U.S. producers on their operations producing magnesium (i.e., the data in table VI-1) is not presented here. That is because a variance analysis which provides an assessment of changes in profitability as a result of changes in volume, sales prices, and costs, is effective when the product under examination is homogeneous through the periods examined, with little or no variation in product mix. In these investigations, there are several considerations which limit the effectiveness of a variance analysis – e.g., cost structure differences and tolling operations as described earlier.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-4 presents capital expenditures by U.S producers. All responding U.S. producers but *** reported capital expenditure data, and no U.S. producers reported research and development expenses. Aggregate capital expenditures decreased from $*** in 2015 to $*** in 2017 and were higher in January-September 2018 compared to January-September 2017.[14]

Table VI-4
Magnesium: Capital expenditures for U.S. producers, by firm, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

[12] ***. Emails from ***, November 26, 2018.
[13] Email from ***, November 13, 2018.
[14] ***. Email from ***, November 13, 2018.

ASSETS AND RETURN ON ASSETS

Table VI-5 presents data on the U.S. producers' total assets and their operating return on assets.[15] Total assets decreased from $*** in 2015 to $*** in 2017. The return on assets declined from *** percent in 2015 to *** percent in 2018.

Table VI-5
Magnesium: Value of assets used in production, warehousing, and sales, and return on asset for U.S. producers by firm, 2015-17

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of magnesium to describe actual or potential negative effects of imports of magnesium from Israel on their firms' growth, investment, ability to raise capital, development and production efforts, or on the scale of capital investments. Table VI-6 presents U.S. producers' responses in a tabulated format and table VI-7 provides the narrative responses.

Table VI-6
Magnesium: Actual and anticipated negative effects of imports on investment and growth and development

* * * * * * *

Table VI-7
Magnesium: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2015

.

* * * * * * *

[15] With respect to a company's overall operations, staff notes that a total asset value (i.e., the bottom line number on the asset side of a company's balance sheet) reflects an aggregation of a number of assets which are generally not product specific. Accordingly, high-level allocation factors were required in order to report a total asset value for magnesium.

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

Section 771(7)(F)(i) of the Act (19 U.S.C. § 1677(7)(F)(i)) provides that—

> *In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of the subject merchandise, the Commission shall consider, among other relevant economic factors*[1]*--*
>
> *(I) if a countervailable subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the countervailable subsidy is a subsidy described in Article 3 or 6.1 of the Subsidies Agreement), and whether imports of the subject merchandise are likely to increase,*
>
> *(II) any existing unused production capacity or imminent, substantial increase in production capacity in the exporting country indicating the likelihood of substantially increased imports of the subject merchandise into the United States, taking into account the availability of other export markets to absorb any additional exports,*
>
> *(III) a significant rate of increase of the volume or market penetration of imports of the subject merchandise indicating the likelihood of substantially increased imports,*
>
> *(IV) whether imports of the subject merchandise are entering at prices that are likely to have a significant depressing or suppressing effect on domestic prices, and are likely to increase demand for further imports,*
>
> *(V) inventories of the subject merchandise,*

---

[1] Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "The Commission shall consider {these factors} . . . as a whole in making a determination of whether further dumped or subsidized imports are imminent and whether material injury by reason of imports would occur unless an order is issued or a suspension agreement is accepted under this title. The presence or absence of any factor which the Commission is required to consider . . . shall not necessarily give decisive guidance with respect to the determination. Such a determination may not be made on the basis of mere conjecture or supposition."

(VI) 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,

(VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),

(VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and

(IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).[2]

Information on the nature of the alleged subsidies was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators; and any dumping in third-country markets, follows. Also presented in this section of the report is information obtained for consideration by the Commission on nonsubject countries.

[2] Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other WTO member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

THE INDUSTRY IN ISRAEL

The Commission issued a foreign producer's/exporter's questionnaire to one firm, Dead Sea Magnesium LTD. ("DSM"), believed to produce and export magnesium from Israel.[3] This firm's exports to the United States accounted for all known U.S. imports of magnesium from Israel in 2017.[4] According to estimates requested of the responding Israeli producer, the production of magnesium in Israel reported in its questionnaire accounts for all known production of magnesium in Israel in 2017.[5] Table VII-1 presents information on the magnesium operations of the responding producer/exporter in Israel.

Table VII-1
Magnesium: Summary data for producer in Israel, 2017

Firm	Production (metric tons)	Share of reported production (percent)	Exports to the United States (metric tons)	Share of reported exports to the United States (percent)	Total shipments (metric tons)	Share of firm's total shipments exported to the United States (percent)
DSM	***	100.0	***	100.0	***	***
Total	***	100.0	***	100.0	***	***

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

Changes in operations

DSM *** report any operational or organizational changes since January 1, 2015.

Operations on magnesium

Table VII-2 presents information on the magnesium operations of DSM. During 2015-17, DSM's reported production capacity remained unchanged during the period in which data were collected, *** metric tons. DSM's reported production capacity, *** metric tons, is based on *** active cells and *** backup cells which are to be refurbished to replace cells at the end of their three-four year production life.[6] DSM notes that *** "dead" cells were not included in its capacity calculation because it would be costly to bring them into operation and would require additional corresponding upstream chlorinators to support them.[7] DSM's magnesium production capacity is limited the ability of its bromine plant to consume chlorine gas. One metric ton of magnesium generates *** metric tons of chlorine gas, and the Israeli market

[3] This firm was identified through a review of information submitted in the petition and contained in *** records.

[4] Hearing transcript, p. 87 (Lerer).

[5] Ibid.

[6] Respondent's postconference brief, Response to staff questions p. 1.

[7] Ibid.

reportedly can only absorb *** metric tons of chlorine gas.[8] Furthermore, chlorine gas can not be shipped by sea and there is no practical way to dispose of the gas.[9]

Table VII-2
Magnesium: Data on industry in Israel, 2015-17, January to September 2017, and January to September 2018 and projection calendar years 2018 and 2019

* * * * * * *

The petitioner notes that in ICL's 20-F disclosure to the Securities and Exchange Commission, DSM's parent company, ICL reported DSM's magnesium production capacity as 33,000 metric tons.[10] In 2016, the U.S. Geological Survey ("USGS") estimated DSM's nameplate capacity as 34,000 metric tons.[11] DSM explains the difference as follows:

> "Our production capacity is significantly lower than the nameplate capacity reported by USGS a few years ago. Today we are operating near 100 percent of our actual capacity. The reason why our capacity is lower is that before the period of investigation we made the business decision to idle several electrolytic cells. Because the cells were allowed to stay idle they can no longer be put back into production without significant new capital expense."[12]

Throughout the period for which data were collected, DSM's average capacity utilization ranged from *** percent in 2015 to *** percent in 2017.[13] From 2015 to 2017, DSM's export shipments to the United States decreased by *** percent whereas export shipments to other markets increased by *** percent. DSM shipped *** magnesium to its home market of Israel. In addition to the United States, DSM identified *** as other principle export markets.[14] DSM does not ship magnesium regionally to countries in the Middle East.[15] DSM projects that production will decrease to *** metric tons in 2018 and then increase to *** in 2019. DSM also projects that exports shipments to the United States will *** metric tons in 2018 and 2019, *** metric tons *** than its 2017 export shipments to the United States.

---

[8] Respondent's postconference brief, Response to staff questions pp. 1-2.

[9] Ibid.

[10] Petitioner's postconference brief, pp. 45-46, exhibit 10.

[11] Petitioner's postconference brief, p. 45; Petition, exhibit I-12.

[12] Conference transcript, p. 90 (Lerer).

[13] Based on the petitioner's reported capacity for DSM of 33,000 metric tons, DSM's capacity utilization ranged from *** percent in 2015 to *** percent in 2017.

[14] *** foreign producer questionnaire, section II-8.

[15] Conference transcript, p. 142 (Lerer).

Alternative products

DSM *** report the production of any out-of-scope products on the same equipment and machinery used to produce magnesium.

Exports[16]

Data on exports of magnesium from Israel are presented in table VII-3. According to the Global Trade Atlas ("GTA"), the United States, Brazil, and Canada were the largest export destinations for magnesium from Israel in terms of quantity, accounting for 56.9 percent, 14.7 percent and 9.8 percent of such exports in 2017, respectively. Exports of magnesium from Israel to the United States increased 40.2 percent from 2015 to 2016, and then declined 9.3 percent from 2016 to 2017. Overall, exports of magnesium from Israel to the United States increased by 27.1 percent from 2015 to 2017. During 2015-17, total exports of magnesium from Israel increased by 43.3 percent.

[16] Staff notes differences between GTA export data and *** reported questionnaire data. ***. Respondent provided official Israeli export data to further support data provided by DSM.

Table VII-3
Magnesium: Exports from Israel by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Quantity (metric tons)		
Exports from Israel to the United States	13,214	18,522	16,795
Exports from Israel to other major destination markets.--			
Brazil	4,901	5,935	4,347
Canada	---	979	2,884
United Kingdom	105	1,767	1,870
Belgium	618	337	1,717
Italy	644	1,340	1,712
France	752	1,420	87
Germany	2	104	53
Slovenia	---	5	15
All other destination markets	354	383	25
Total exports from Israel	20,589	30,792	29,504
	Value (1,000 dollars)		
Exports from Israel to the United States	54,807	44,309	41,215
Exports from Israel to other major destination markets.--			
Brazil	18,683	14,160	10,498
Canada	---	2,601	8,488
United Kingdom	333	4,685	5,490
Belgium	2,106	780	4,000
Italy	2,152	3,283	4,137
France	3,140	3,282	202
Germany	6	248	129
Slovenia	---	12	44
All other destination markets	1,549	897	57
Total exports from Israel	82,776	74,257	74,260

Table continued on next page.

Table VII-3--Continued
Magnesium: Exports from Israel by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Unit value (dollars per metric ton)		
Exports from Israel to the United States	4,148	2,392	2,454
Exports from Israel to other major destination markets.--			
Brazil	3,812	2,386	2,415
Canada	---	2,656	2,943
United Kingdom	3,183	2,652	2,937
Belgium	3,407	2,311	2,329
Italy	3,343	2,450	2,417
France	4,178	2,312	2,324
Germany	3,916	2,386	2,443
Slovenia	---	2,655	2,943
All other destination markets	4,372	2,340	2,323
Total exports from Israel	4,020	2,412	2,517
	Share of quantity (percent)		
Exports from Israel to the United States	64.2	60.2	56.9
Exports from Israel to other major destination markets.--			
Brazil	23.8	19.3	14.7
Canada	---	3.2	9.8
United Kingdom	0.5	5.7	6.3
Belgium	3.0	1.1	5.8
Italy	3.1	4.4	5.8
France	3.7	4.6	0.3
Germany	0.0	0.3	0.2
Slovenia	---	0.0	0.1
All other destination markets	1.7	1.2	0.1
Total exports from Israel	100.0	100.0	100.0

Note.--Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Source: Official exports statistics under HS subheading 8104.11, 8104.19, and 8104.30 as reported by UN comtrade in the Global Trade Atlas database, accessed November 1, 2018.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-4 presents data on U.S. importers' reported inventories of magnesium. While inventories of imports from Israel decreased in each year between 2015 and 2017, the ratio to U.S. imports, to U.S. shipments of imports, and to total shipments of imports fluctuated between 2015 and 2017. Inventories of imports from Israel were *** percent lower in January-September 2018 compared to January-September 2017 while inventories of imports from nonsubejct countries were *** percent lower in January-September 2018 compared to January-September 2017. Inventories of imports from nonsubject countries increased *** percent between 2015 and 2017.

Table VII-4
Magnesium: U.S. importers' end-of-period inventories of imports by source, 2015-17, January to September 2017, and January to September 2018

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of magnesium after September 30, 2018. Table VII-5 presents importers' arranged imports from October 2018 through September 2019. *** firm reported arranged imports from Israel and seven firms reported arranged imports from nonsubject sources.

Table VII-5
Magnesium: Arranged imports, October 2018 through September 2019

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

India reportedly applied definitive antidumping duties on imports of magnesium from China from July 24, 1998 until May 1, 2003. The duties were withdrawn upon a request by the affected domestic industry. Beginning in 1999, the EU had an antidumping duty order on imports of pure magnesium (unwrought unalloyed magnesium) from China. The EU orders on imports of pure magnesium expired in 2003.[17]

On April 29, 2003, Brazil initiated antidumping investigations on imports from China of magnesium ingot and magnesium powder and on October 11, 2004, imposed antidumping duties of $1.18 per kilogram ($0.535 per pound) on pure magnesium ingot and $0.99 per kilogram ($0.449 per pound) on magnesium granules. In October 2005, Brazil expanded duties to include alloy magnesium from China. On October 7, 2010, Brazil made public its decision to continue the application of antidumping duties for five more years on the imports of magnesium from China. On July 21, 2016, the second review concluded with the decision to continue the antidumping duties for another five years.[18]

[17] *Magnesium from China and Russia, Investigation Nos. 731-TA-1071-1072 (Review),* USITC Publication 4214, February 2011, IV-19.

[18] World Trade Organization (WTO), Committee on Anti-Dumping Practices, *Semi-Annual Report Under Article 16.4 of the Agreement, Brazil,* G/ADP/N/300/BRA, October 2, 2017, p. 11.

INFORMATION ON NONSUBJECT COUNTRIES

The USGS reported world primary magnesium production capacity of 2,000,000 metric tons and world magnesium production of 998,000 metric tons in 2015.[19] The primary sources of U.S. imports of magnesium in 2017, by quantity, were Israel, Russia, Canada, and Taiwan. Cumulatively these countries accounted for 86 percent of U.S. imports of magnesium by quantity in 2015.

Canada

According to USGS estimates, China accounted for 46.8 percent of U.S. imports of waste and scrap magnesium in 2016.[20] Norsk Hydro, a Canadian primary magnesium producer, ceased operations in 2006.[21] In December 2013, Wanfeng Auto Holdings Group acquired Meridian Lightweight Technologies.[22]

China

According to the USGS estimates, China accounted for 84.5 percent of global primary magnesium production in 2017. China also accounted for 68.4 percent of all exports of magnesium in 2017, see Table VII-6. The United States has three separate AD/CVD orders on Chinese magnesium. These duty orders cover primary, secondary, and granular magnesium.

Russia

According to the USGS estimates, Russia accounts for 5.8 percent of global primary magnesium production in 2016. Russia accounted for 0.9 percent of all exports of magnesium in 2017, see Table VII-6.

Taiwan

According to USGS estimates, Taiwan accounted for 14.8 percent of all U.S. imports of alloy magnesium by quantity in 2016.[23]

---

[19] Bray, E. Lee, "Magnesium Metal," U.S. Geological Survey, Mineral Commodity Summaries, January 2018, p. 102.

[20] Exports from Canada quantities were not sufficient to qualify for the top 10 global exporters of the various magnesium products.

[21] *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved December 3, 2018.

[22] *Meridian Lightweight Technologies News*, http://www.meridian-mag.com/news/wanfeng-auto-holding-group-acquires-meridian-1, retrieved December 3, 2019.

[23] Exports quantities from Taiwan were not sufficient to qualify for the top 10 global exporters of the various magnesium products.

Turkey

According to the USGS estimates, Turkey accounted for 0.5 percent of global primary magnesium production in 2016. Turkey accounted for 0.7 percent of all exports of magnesium in 2017, see Table VII-6. In 2018, the Turkish magnesium producer, ESAN, allegedly shut down operations.[24]

Table VII-6
Magnesium: Global exports by exporter, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Quantity (metric tons)		
United States	14,574	17,689	12,036
Israel	20,589	30,792	29,504
All other major reporting exporters.-- China	398,596	347,926	442,807
Netherlands	61,244	76,105	79,043
Germany	23,427	19,383	20,404
Slovenia	8,695	9,709	12,569
Hungary	5,023	5,567	7,834
Czech Republic	9,909	7,855	7,370
Russia	4,151	3,770	6,133
Italy	1,899	4,876	4,738
Turkey	1,180	1,742	4,539
Korea	1,807	2,337	3,384
All other exporters	19,713	19,572	16,909
Total global exports	570,806	547,322	647,270
	Value (1,000 dollars)		
United States	51,950	65,957	52,501
Israel	82,776	74,257	74,260
All other major reporting exporters.-- China	976,938	817,819	1,016,021
Netherlands	156,782	168,113	198,334
Germany	61,920	50,938	55,907
Slovenia	20,286	22,322	31,515
Hungary	11,199	12,159	16,991
Czech Republic	26,920	20,669	20,874
Russia	12,019	9,229	15,987
Italy	4,605	10,644	10,767
Turkey	2,477	4,817	11,213
Korea	4,555	6,435	7,345
All other exporters	75,587	65,155	64,034
Total global exports	1,488,013	1,328,515	1,575,749

Table continued on next page.

[24] Conference transcript, p. 45 (Ms. Slade).

Table VII-6—Continued
Magnesium: Global exports by exporter, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Unit value (dollars per metric ton)		
United States	3,565	3,729	4,362
Israel	4,020	2,412	2,517
All other major reporting exporters.-- China	2,451	2,351	2,295
Netherlands	2,560	2,209	2,509
Germany	2,643	2,628	2,740
Slovenia	2,333	2,299	2,507
Hungary	2,230	2,184	2,169
Czech Republic	2,717	2,632	2,832
Russia	2,895	2,448	2,607
Italy	2,425	2,183	2,273
Turkey	2,099	2,765	2,470
Korea	2,521	2,754	2,171
All other exporters	3,834	3,329	3,787
Total global exports	2,607	2,427	2,434
	Share of quantity (percent)		
United States	2.6	3.2	1.9
Israel	3.6	5.6	4.6
All other major reporting exporters.-- China	69.8	63.6	68.4
Netherlands	10.7	13.9	12.2
Germany	4.1	3.5	3.2
Slovenia	1.5	1.8	1.9
Hungary	0.9	1.0	1.2
Czech Republic	1.7	1.4	1.1
Russia	0.7	0.7	0.9
Italy	0.3	0.9	0.7
Turkey	0.2	0.3	0.7
Korea	0.3	0.4	0.5
All other exporters	3.5	3.6	2.6
Total global exports	100.0	100.0	100.0

Note.—because of rounding, figures may not add to total shown.

Source: Official exports statistics under HS subheading 8104.11, 8104.19, and 8104.30 reported by various national statistical authorities in the Global Trade Atlas database, accessed November 1, 2018. These data may be overstated as HS 8104.11, 8104.19, 8104.30 may contain magnesium products outside the scope of this proceeding.

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
83 FR 54778, October 31, 2018	*Magnesium from Israel; Institution of Anti-Dumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2018-10-31/pdf/2018-23758.pdf
83 FR 58533, November 20, 2018	*Magnesium From Israel: Initiation of Less-Than-Fair-Value Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2018-11-20/pdf/2018-25300.pdf
83 FR 58529, November 20, 2018	*Magnesium From Israel: Initiation of Countervailing Duty Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2018-11-20/pdf/2018-25293.pdf

APPENDIX B

LIST OF STAFF CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's preliminary conference:

Subject: Magnesium from Israel

Inv. Nos.: 701-TA-614 and 731-TA-1431 (Preliminary)

Date and Time: November 14, 2018 - 9:30 a.m.

Sessions were held in connection with these preliminary phase investigations in the Courtroom A (Room 100), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

In Support of Imposition (**Stephen A. Jones**, King & Spalding LLP)
In Opposition to Imposition (**James R. Cannon, Jr.**, Cassidy Levy Kent LLP)

In Support of the Imposition of
Antidumping and Countervailing Duty Orders:

King & Spalding LLP
Washington, DC
on behalf of

US Magnesium LLC

Cameron Tissington, Vice President of Sales, US Magnesium LLC

Susan Slade, Vice President of Marketing, US Magnesium LLC

Jennifer Lutz, Vice President, Economic Consulting Services LLC

Bonnie B. Byers, Senior International Trade Consultant,
King & Spalding LLP

Stephen A. Jones)
) – OF COUNSEL
Benjamin J. Bay)

In Opposition to the Imposition of
Antidumping and Countervailing Duty Orders:

Cassidy Levy Kent LLP
Washington, DC
on behalf of

Dead Sea Magnesium, Ltd.

Eli Lerer, Vice President, Dead Sea Magnesium, Ltd.

David Wanless, Sales Manager, ICL Americas

Kate Molamphy, General Counsel, ICL Americas

James R. Cannon, Jr.)
) – OF COUNSEL
Jack Levy **)**

REBUTTAL/CLOSING REMARKS:

In Support of Imposition (**Stephen A. Jones**, King & Spalding LLP)
In Opposition to Imposition (**Jack Levy**, Cassidy Levy Kent LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Magnesium: Summary data concerning the U.S. market, 2015-17, January to September 2017, and January to September 2018
(Quantity=metric tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per metric ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to September		Calendar year			Jan-Sep
	2015	2016	2017	2017	2018	2015-17	2015-16	2016-17	2017-18
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Israel	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Israel	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. imports from:									
Israel:									
Quantity	12,890	11,335	11,450	9,362	7,882	(11.2)	(12.1)	1.0	(15.8)
Value	57,225	47,586	44,668	36,074	29,909	(21.9)	(16.8)	(6.1)	(17.1)
Unit value	$4,439	$4,198	$3,901	$3,853	$3,795	(12.1)	(5.4)	(7.1)	(1.5)
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	11,181	11,182	12,248	9,573	9,910	9.5	0.0	9.5	3.5
Value	52,521	46,986	47,082	35,796	41,273	(10.4)	(10.5)	0.2	15.3
Unit value	$4,697	$4,202	$3,844	$3,739	$4,165	(18.2)	(10.5)	(8.5)	11.4
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	24,071	22,517	23,697	18,934	17,792	(1.6)	(6.5)	5.2	(6.0)
Value	109,745	94,572	91,749	71,870	71,182	(16.4)	(13.8)	(3.0)	(1.0)
Unit value	$4,559	$4,200	$3,872	$3,796	$4,001	(15.1)	(7.9)	(7.8)	5.4
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 (metric tons per 1,000 hours)	***	***	***	***	***	***	***	***	***
Unit labor costs	$***	$***	$***	$***	$***	***	***	***	***
Net sales:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	$***	$***	$***	$***	$***	***	***	***	***
Cost of goods sold (COGS)	***	***	***	***	***	***	***	***	***
Gross profit or (loss)	***	***	***	***	***	***	***	***	***
SG&A expenses	***	***	***	***	***	***	***	***	***
Operating income or (loss)	***	***	***	***	***	***	***	***	***
Net income or (loss)	***	***	***	***	***	***	***	***	***
Capital expenditures	***	***	***	***	***	***	***	***	***
Unit COGS	$***	$***	$***	$***	$***	***	***	***	***
Unit SG&A expenses	$***	$***	$***	$***	$***	***	***	***	***
Unit operating income or (loss)	$***	$***	$***	$***	$***	***	***	***	***
Unit net income or (loss)	$***	$***	$***	$***	$***	***	***	***	***
COGS/sales (fn1)	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1)	***	***	***	***	***	***	***	***	***

Notes:

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

Source: Compiled from data submitted to Commission questionnaires and adjusted official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018. Data for HTS 8104300000 from China were removed.

APPENDIX D

U.S. IMPORTS, BY SOURCE, BY QUARTER

Appendix D-1
Magnesium: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Israel			Russia		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	3,578	15,509	4,335	960	3,535	3,681
Apr.-Jun.	2,583	11,430	4,425	576	2,138	3,710
Jul.-Sep.	3,100	14,177	4,573	226	1,046	4,629
Oct.-Dec.	3,630	16,109	4,438	251	807	3,214
2016:						
Jan.-Mar.	3,031	14,114	4,656	440	1,300	2,955
Apr.-Jun.	2,879	11,433	3,972	307	950	3,092
Jul.-Sep.	3,200	12,689	3,966	431	1,266	2,936
Oct.-Dec.	2,225	9,350	4,202	691	1,952	2,824
2017:						
Jan.-Mar.	2,893	12,032	4,159	1,308	3,782	2,892
Apr.-Jun.	3,086	12,064	3,909	1,424	4,142	2,910
Jul.-Sep.	3,382	11,978	3,542	1,323	3,861	2,917
Oct.-Dec.	2,088	8,594	4,115	1,343	3,947	2,939
2018:						
Jan.-Mar.	2,281	8,823	3,869	893	2,661	2,979
Apr.-Jun.	2,583	9,818	3,801	994	3,007	3,023
Jul.-Sep.	3,018	11,267	3,734	546	1,677	3,071

Period	Canada			Taiwan		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	662	1,984	2,996	782	2,453	3,137
Apr.-Jun.	722	1,994	2,763	713	2,136	2,996
Jul.-Sep.	738	1,929	2,612	582	1,995	3,430
Oct.-Dec.	672	1,692	2,519	302	882	2,920
2016:						
Jan.-Mar.	479	1,423	2,971	669	1,805	2,698
Apr.-Jun.	830	1,941	2,338	355	978	2,755
Jul.-Sep.	625	1,631	2,611	947	2,684	2,835
Oct.-Dec.	626	1,557	2,488	259	752	2,904
2017:						
Jan.-Mar.	524	1,352	2,579	491	1,448	2,947
Apr.-Jun.	528	1,317	2,496	622	1,815	2,919
Jul.-Sep.	591	1,493	2,525	50	141	2,801
Oct.-Dec.	576	1,716	2,980	97	289	2,970
2018:						
Jan.-Mar.	530	1,433	2,703	268	795	2,966
Apr.-Jun.	437	1,288	2,947	389	1,198	3,080
Jul.-Sep.	514	1,464	2,846	164	561	3,427

Table continued on next page.

Appendix D-1—Continued
Magnesium: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	China			United Kingdom		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	243	4,192	17,271
Apr.-Jun.	0.031	3	92,871	211	4,771	22,595
Jul.-Sep.	---	---	---	201	4,019	20,036
Oct.-Dec.	0.454	3	7,443	161	3,185	19,743
2016:						
Jan.-Mar.	0.026	3	127,769	187	3,291	17,558
Apr.-Jun.	3.263	16	4,759	159	3,576	22,428
Jul.-Sep.	0.242	15	63,983	197	3,950	20,100
Oct.-Dec.	5.320	15	2,762	146	2,790	19,072
2017:						
Jan.-Mar.	---	---	---	193	3,421	17,748
Apr.-Jun.	---	---	---	148	2,327	15,776
Jul.-Sep.	---	---	---	153	2,732	17,836
Oct.-Dec.	1.244	11	8,576	199	3,483	17,459
2018:						
Jan.-Mar.	1.050	40	37,869	160	2,916	18,201
Apr.-Jun.	108.103	597	5,525	214	3,872	18,070
Jul.-Sep.	30.851	176	5,707	248	4,123	16,658

Table continued on the page.

Appendix D-1—Continued
Magnesium: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Turkey			All other sources		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	729	3,289	4,511
Apr.-Jun.	---	---	---	780	3,406	4,369
Jul.-Sep.	---	---	---	1,102	4,611	4,182
Oct.-Dec.	9	110	12,171	558	2,341	4,193
2016:						
Jan.-Mar.	39	155	3,998	899	3,837	4,266
Apr.-Jun.	48	157	3,277	939	3,677	3,914
Jul.-Sep.	114	385	3,384	778	3,229	4,151
Oct.-Dec.	147	454	3,097	861	3,197	3,714
2017:						
Jan.-Mar.	250	780	3,122	760	2,986	3,928
Apr.-Jun.	49	154	3,122	613	2,266	3,696
Jul.-Sep.	199	468	2,356	347	1,312	3,775
Oct.-Dec.	83	262	3,146	375	1,578	4,207
2018:						
Jan.-Mar.	104	312	2,997	779	2,917	3,744
Apr.-Jun.	1,280	4,347	3,396	951	3,632	3,820
Jul.-Sep.	364	1,112	3,053	934	3,146	3,369

Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Note.--The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; ***, Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting numbers 8104.11.0000, 8104.19.0000, and 8104.30.0000, accessed November 13, 2018.

Appendix D-2
Unwrought magnesium, containing at least 99.8 percent by weight of magnesium: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Israel			Russia		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	3,113	13,360	4,291	920	3,392	3,686
Apr.-Jun.	1,784	7,658	4,293	560	2,044	3,648
Jul.-Sep.	2,168	9,697	4,473	173	658	3,802
Oct.-Dec.	2,842	12,517	4,405	251	807	3,214
2016:						
Jan.-Mar.	2,384	10,007	4,197	440	1,300	2,955
Apr.-Jun.	2,352	9,046	3,846	294	881	2,998
Jul.-Sep.	2,470	9,556	3,869	431	1,266	2,936
Oct.-Dec.	1,629	6,618	4,062	691	1,952	2,824
2017:						
Jan.-Mar.	1,854	7,264	3,918	1,308	3,782	2,892
Apr.-Jun.	2,379	9,558	4,018	1,424	4,142	2,910
Jul.-Sep.	2,928	10,092	3,447	1,323	3,861	2,917
Oct.-Dec.	1,741	7,049	4,048	1,343	3,947	2,939
2018:						
Jan.-Mar.	1,712	6,740	3,937	893	2,661	2,979
Apr.-Jun.	1,579	6,153	3,897	994	3,007	3,023
Jul.-Sep.	2,330	8,844	3,796	546	1,677	3,071

Period	Canada			Taiwan		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	234	259	1,106	---	---	---
Apr.-Jun.	296	380	1,287	---	---	---
Jul.-Sep.	340	401	1,179	---	---	---
Oct.-Dec.	258	262	1,014	---	---	---
2016:						
Jan.-Mar.	172	246	1,432	---	---	---
Apr.-Jun.	443	415	935	---	---	---
Jul.-Sep.	305	313	1,026	---	---	---
Oct.-Dec.	318	394	1,238	7	17	2,522
2017:						
Jan.-Mar.	281	292	1,042	---	---	---
Apr.-Jun.	304	294	966	---	---	---
Jul.-Sep.	313	317	1,011	---	---	---
Oct.-Dec.	311	331	1,066	---	---	---
2018:						
Jan.-Mar.	296	365	1,233	---	---	---
Apr.-Jun.	257	324	1,261	---	---	---
Jul.-Sep.	326	589	1,803	---	---	---

Table continued on page.

Appendix D-2—Continued
Unwrought magnesium, containing at least 99.8 percent by weight of magnesium: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	China			United Kingdom		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	0	15	503,033
Apr.-Jun.	0	3	92,871	0	15	520,379
Jul.-Sep.	---	---	---	---	---	---
Oct.-Dec.	---	---	---	0	7	503,154
2016:						
Jan.-Mar.	0	3	127,769	0	13	503,154
Apr.-Jun.	0	6	122,080	0	7	384,765
Jul.-Sep.	0	6	68,066	0	7	384,765
Oct.-Dec.	---	---	---	0	5	552,000
2017:						
Jan.-Mar.	---	---	---	9	26	2,771
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---
Oct.-Dec.	1	11	8,576	---	---	---
2018:						
Jan.-Mar.	0	7	140,140	---	---	---
Apr.-Jun.	38	84	2,227	---	---	---
Jul.-Sep.	0	7	22,586	---	---	---

Table continued on next page.

Appendix D-2—Continued
Unwrought magnesium, containing at least 99.8 percent by weight of magnesium: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Turkey			All other sources		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	222	1,158	5,216
Apr.-Jun.	---	---	---	223	1,209	5,424
Jul.-Sep.	---	---	---	241	1,274	5,281
Oct.-Dec.	---	---	---	170	836	4,904
2016:						
Jan.-Mar.	25	84	3,364	241	1,042	4,329
Apr.-Jun.	48	157	3,277	259	1,215	4,686
Jul.-Sep.	100	314	3,142	289	1,190	4,119
Oct.-Dec.	147	454	3,097	291	1,172	4,026
2017:						
Jan.-Mar.	250	780	3,122	305	1,276	4,184
Apr.-Jun.	49	154	3,122	0	6	18,767
Jul.-Sep.	199	468	2,356	50	178	3,579
Oct.-Dec.	83	262	3,146	---	---	---
2018:						
Jan.-Mar.	104	312	2,997	94	375	3,973
Apr.-Jun.	1,280	4,347	3,396	181	641	3,549
Jul.-Sep.	349	1,051	3,011	153	549	3,597

Note.--The petitioner reports that the only known producer of pure magnesium in Canada, Norsk Hydro, ceased operations in 2007. Between 2015 and 2017, 85.9 percent of imports of pure magnesium into Canada reported under HTS number 8104.11.0000 were from China. From UN Comtrade data. Petitioner's postconference brief, p. A-3; ***, Email message with USITC staff, November 30, 2018; and *Reuters*, https://www.reuters.com/article/norskhydro-becancour/norsk-hydro-to-dismantle-quebec-magnesium-plant-idUSN2835967720070928, retrieved November 29, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 8104.11.0000, accessed November 13, 2018.

Appendix D-3
Magnesium, other, nesoi, unwrought: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Israel			Russia		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	464	2,149	4,628	40	143	3,564
Apr.-Jun.	799	3,772	4,719	---	---	---
Jul.-Sep.	932	4,480	4,806	---	---	---
Oct.-Dec.	788	3,592	4,557	---	---	---
2016:						
Jan.-Mar.	647	4,107	6,349	---	---	---
Apr.-Jun.	523	2,363	4,514	---	---	---
Jul.-Sep.	713	3,109	4,359	---	---	---
Oct.-Dec.	581	2,720	4,681	---	---	---
2017:						
Jan.-Mar.	1,025	4,756	4,642	---	---	---
Apr.-Jun.	707	2,506	3,543	---	---	---
Jul.-Sep.	454	1,886	4,149	---	---	---
Oct.-Dec.	347	1,545	4,453	---	---	---
2018:						
Jan.-Mar.	569	2,083	3,664	---	---	---
Apr.-Jun.	1,004	3,665	3,650	---	---	---
Jul.-Sep.	688	2,423	3,524	---	---	---

Period	Canada			Taiwan		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	130	384	2,953	782	2,453	3,137
Apr.-Jun.	52	139	2,652	713	2,136	2,996
Jul.-Sep.	136	394	2,897	582	1,995	3,430
Oct.-Dec.	157	378	2,408	302	882	2,920
2016:						
Jan.-Mar.	93	315	3,376	669	1,805	2,698
Apr.-Jun.	187	666	3,561	355	978	2,755
Jul.-Sep.	141	393	2,789	947	2,684	2,835
Oct.-Dec.	145	392	2,708	252	735	2,915
2017:						
Jan.-Mar.	61	125	2,053	491	1,448	2,947
Apr.-Jun.	70	248	3,539	622	1,815	2,919
Jul.-Sep.	41	66	1,605	50	141	2,801
Oct.-Dec.	---	---	---	97	289	2,970
2018:						
Jan.-Mar.	18	64	3,538	268	795	2,966
Apr.-Jun.	---	---	---	389	1,198	3,080
Jul.-Sep.	12	42	3,544	164	561	3,427

Table continued on next page.

Appendix D-3--Continued
Magnesium, other, nesoi, unwrought: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	China			United Kingdom		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	243	4,177	17,211
Apr.-Jun.	---	---	---	211	4,756	22,526
Jul.-Sep.	---	---	---	201	4,019	20,036
Oct.-Dec.	0	3	7,443	161	3,178	19,704
2016:						
Jan.-Mar.	---	---	---	187	3,278	17,491
Apr.-Jun.	3	9	2,934	159	3,569	22,390
Jul.-Sep.	0	9	61,523	197	3,944	20,069
Oct.-Dec.	5	15	2,762	146	2,785	19,039
2017:						
Jan.-Mar.	---	---	---	184	3,395	18,501
Apr.-Jun.	---	---	---	148	2,327	15,776
Jul.-Sep.	---	---	---	153	2,732	17,836
Oct.-Dec.	---	---	---	199	3,483	17,459
2018:						
Jan.-Mar.	1	33	32,755	160	2,916	18,201
Apr.-Jun.	70	513	7,292	214	3,872	18,070
Jul.-Sep.	31	170	5,547	248	4,123	16,658

Period	Turkey			All other sources		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	417	1,583	3,794
Apr.-Jun.	---	---	---	500	1,875	3,750
Jul.-Sep.	---	---	---	762	2,692	3,534
Oct.-Dec.	---	---	---	352	1,285	3,653
2016:						
Jan.-Mar.	---	---	---	543	2,017	3,715
Apr.-Jun.	---	---	---	566	1,901	3,356
Jul.-Sep.	---	---	---	340	1,233	3,632
Oct.-Dec.	---	---	---	434	1,385	3,193
2017:						
Jan.-Mar.	---	---	---	347	1,113	3,211
Apr.-Jun.	---	---	---	473	1,524	3,223
Jul.-Sep.	---	---	---	195	575	2,956
Oct.-Dec.	---	---	---	219	718	3,285
2018:						
Jan.-Mar.	---	---	---	524	1,736	3,315
Apr.-Jun.	---	---	---	531	1,607	3,024
Jul.-Sep.	---	---	---	622	1,872	3,011

Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 8104.19.0000, accessed November 13, 2018.

Appendix D-4
Magnesium raspings, turnings and granules, graded according to size; powders: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Israel			Russia		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	---	---	---	16	93	5,881
Jul.-Sep.	---	---	---	53	389	7,325
Oct.-Dec.	---	---	---	---	---	---
2016:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	3	24	8,298	14	70	5,113
Jul.-Sep.	16	25	1,526	---	---	---
Oct.-Dec.	15	12	809	---	---	---
2017:						
Jan.-Mar.	15	12	809	---	---	---
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---
Oct.-Dec.	---	---	---	---	---	---
2018:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---
Period	Canada			Taiwan		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	298	1,341	4,498	---	---	---
Apr.-Jun.	374	1,475	3,947	---	---	---
Jul.-Sep.	262	1,133	4,325	---	---	---
Oct.-Dec.	256	1,052	4,106	---	---	---
2016:						
Jan.-Mar.	213	861	4,034	---	---	---
Apr.-Jun.	200	861	4,313	---	---	---
Jul.-Sep.	178	924	5,183	---	---	---
Oct.-Dec.	163	772	4,730	---	---	---
2017:						
Jan.-Mar.	182	934	5,124	---	---	---
Apr.-Jun.	153	775	5,050	---	---	---
Jul.-Sep.	237	1,110	4,688	---	---	---
Oct.-Dec.	265	1,384	5,223	---	---	---
2018:						
Jan.-Mar.	216	1,004	4,653	---	---	---
Apr.-Jun.	180	963	5,355	---	---	---
Jul.-Sep.	176	834	4,731	---	---	---

Table continued on next page.

Appendix D-4--Continued

Magnesium raspings, turnings and granules, graded according to size; powders: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	China			United Kingdom		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---
Oct.-Dec.	---	---	---	---	---	---
2016:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---
Oct.-Dec.	---	---	---	---	---	---
2017:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---
Oct.-Dec.	---	---	---	---	---	---
2018:						
Jan.-Mar.	---	---	---	---	---	---
Apr.-Jun.	---	---	---	---	---	---
Jul.-Sep.	---	---	---	---	---	---

Table continued on next page.

Appendix D-4--Continued

Magnesium raspings, turnings and granules, graded according to size; powders: U.S. imports, by source, by quarter, January 2015 through September 2018

Period	Turkey			All other sources		
	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)	Quantity (metric tons)	Value ($1,000)	Unit value (dollars per metric ton)
2015:						
Jan.-Mar.	---	---	---	90	548	6,100
Apr.-Jun.	---	---	---	57	321	5,676
Jul.-Sep.	---	---	---	99	645	6,479
Oct.-Dec.	9	110	12,171	36	220	6,098
2016:						
Jan.-Mar.	14	70	5,166	116	778	6,715
Apr.-Jun.	---	---	---	114	561	4,937
Jul.-Sep.	14	70	5,166	149	805	5,390
Oct.-Dec.	---	---	---	136	640	4,708
2017:						
Jan.-Mar.	---	---	---	109	597	5,497
Apr.-Jun.	---	---	---	140	736	5,267
Jul.-Sep.	---	---	---	103	558	5,417
Oct.-Dec.	---	---	---	157	860	5,494
2018:						
Jan.-Mar.	---	---	---	161	806	5,002
Apr.-Jun.	---	---	---	239	1,385	5,794
Jul.-Sep.	15	62	4,008	160	725	4,542

Note.--Imports from China under HTS subheading 8104.30.0000 have been removed from the data set and are not included in official U.S. import statistics. According to *** certified that it had not imported the subject magnesium since January 1, 2015. Imports from China under HTS subheading, 8104.30.0000 are subject to a 305.56 percent cash deposit rate. *Pure Magnesium in Granular Form From the People's Republic of China: Final Results of Expedited Third Sunset Review of the Antidumping Duty Order,* 83 FR 1017, January 1, 2018.

Source: Compiled from official U.S. imports statistics using HTS statistical reporting number 8104.30.0000, accessed November 13, 2018.