Dioctyl Terephthalate (DOTP) from Korea

Investigation No. 731-TA-1330 (Preliminary)

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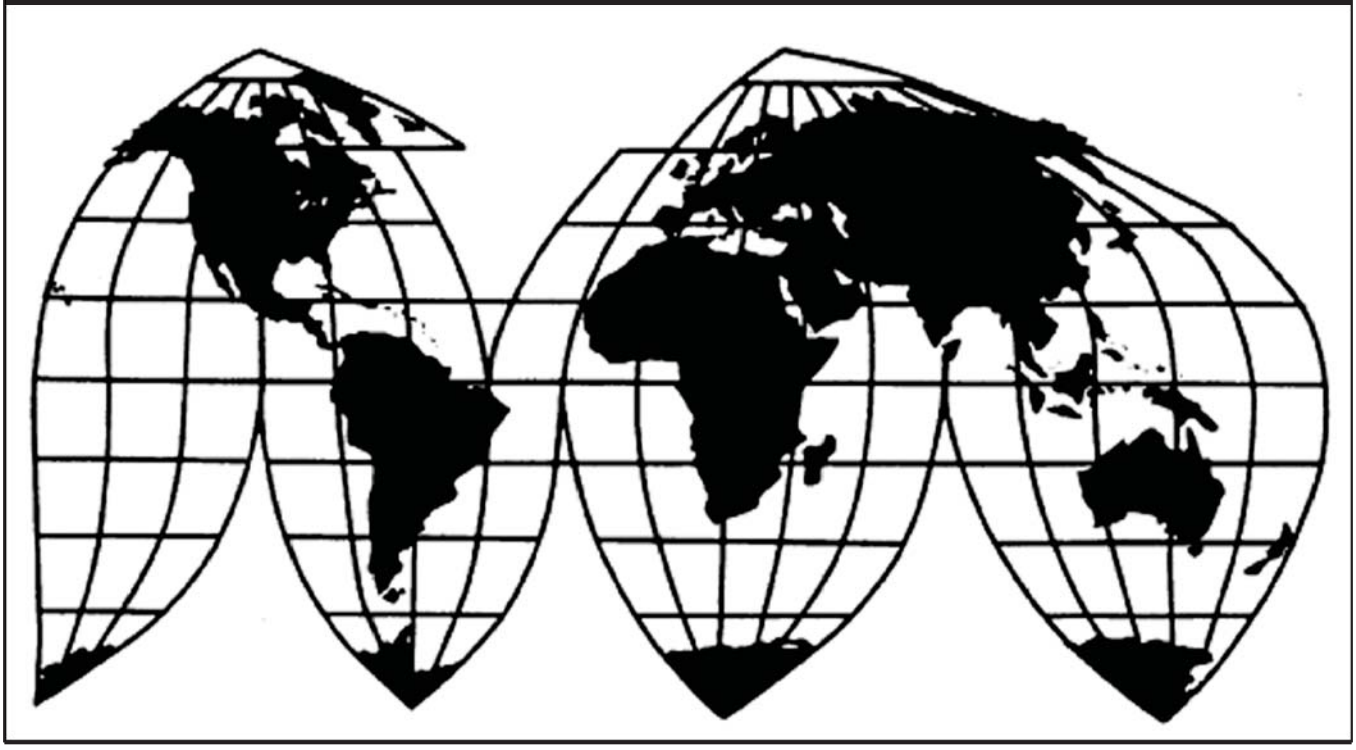
U.S. International Trade Commission



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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1330 (Preliminary)

Dioctyl Terephthalate (DOTP) from Korea

DETERMINATION

On the basis of the record[1] developed in the subject investigation, 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 dioctyl terephthalate ("DOTP") from Korea, provided for in subheading 2917.39.20 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").[2]

COMMENCEMENT OF FINAL PHASE INVESTIGATION

Pursuant to section 207.18 of the Commission's rules, the Commission also gives notice of the commencement of the final phase of its investigation. 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 Department of Commerce ("Commerce") of an affirmative preliminary determination in the investigation under section 733(b) of the Act, or, if the preliminary determination is negative, upon notice of an affirmative final determination in that investigation under section 735(a) of the Act. Parties that filed entries of appearance in the preliminary phase of the investigation need not enter a separate appearance for the final phase of the investigation. 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 investigation.

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

[2] Commissioner F. Scott Kieff dissenting.

BACKGROUND

On June 30, 2016, Eastman Chemical Company, Kingsport, Tennessee filed a petition with the Commission and Commerce, alleging that an industry in the United States is materially injured by reason of LTFV imports of DOTP from Korea. Accordingly, effective June 30, 2016, the Commission, pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)), instituted antidumping duty investigation No. 731-TA-1330 (Preliminary).

Notice of the institution of the Commission's investigation 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 July 7, 2016 (81 FR 44329). The conference was held in Washington, DC, on July 21, 2016, and all persons who requested the opportunity were permitted to appear in person or by counsel.

Views of the Commission

Based on the record in the preliminary phase of this investigation, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of dioctyl terephthalate ("DOTP") from Korea that are allegedly sold in the United States at less than fair value.[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

On June 30, 2016, Eastman Chemical Company ("Eastman"), a domestic producer of DOTP, filed the antidumping duty petition in this investigation. Eastman appeared at the staff conference and submitted a postconference brief.

ALAC International, Inc. ("ALAC"), an importer of subject merchandise from Korea, participated as a respondent in this investigation. ALAC appeared at the staff conference and submitted a postconference brief.

U.S. industry data are based on the questionnaire response of one domestic producer (Eastman) accounting for all known U.S. production of DOTP in 2015.[4] U.S. import data are based on the questionnaire responses of 13 U.S. importers that are believed to have accounted

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[1] Commissioner Kieff determines that an industry in the United States is not materially injured or threatened with material injury by reason of imports of subject DOTP from Korea. *See* Dissenting Views of Commissioner F. Scott Kieff. He joins sections I to VI.B. of these Views.

[2] 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States, 2*0 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] Confidential Report, Memorandum INV-OO-068 (Aug. 8, 2016), as modified by INV-OO-071 (Aug. 10, 2016) ("CR") at I-5, Public Report ("PR") at I-4.

for virtually all U.S. imports of DOTP from Korea and other sources.[5] The Commission received responses to its questionnaires from two Korean producers of subject merchandise (Aekyung Petrochemical Co., Ltd. ("Aekyung") and LG Chem Ltd. ("LG Chem")), which are believed to account for approximately *** percent of DOTP production in Korea and whose reported exports accounted for all U.S. imports of DOTP from Korea in 2015.[6]

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."[7] 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."[8] 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."[9]

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.[10] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[11] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[12] Although the Commission must accept

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[5] CR at IV-1, PR at IV-1.

[6] CR at VII-3, PR at VII-3.

[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(4)(A).

[9] 19 U.S.C. § 1677(10).

[10] *See*, *e.g.*, *Cleo Inc. v. United States*, 501 F.3d 1291, 1299 (Fed. Cir. 2007); *NEC Corp. v. Department of Commerce*, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); *Nippon Steel Corp. v. United States*, 19 CIT 450, 455 (1995); *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).

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

[12] *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

(*continued*...)

Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,[13] the Commission determines what domestic product is like the imported articles Commerce has identified.[14] The Commission may, where appropriate, include domestic articles in the domestic like product in addition to those described in the scope.[15]

A. Product Description

In its notice of initiation, Commerce defined the imported merchandise within the scope of this investigation as:

> . . . dioctyl terephthalate ("DOTP"), regardless of form. DOTP that has been blended with other products is included within this scope when such blends include constituent parts that have not been chemically reacted with each other to produce a different product. For such blends, only the DOTP component of the mixture is covered by the scope of this investigation.
>
> DOTP that is otherwise subject to this investigation is not excluded when commingled with DOTP from sources not subject to this investigation. Commingled refers to the mixing of subject and nonsubject DOTP. Only the subject component of such commingled products is covered by the scope of the investigation.
>
> DOTP has the general chemical formulation $C_6H_4(C_8H_{17}COO)_2$ and a chemical name of "bis (2-ethylhexyl) terephthalate" and has a

(…*continued*)
product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

[13] *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).

[14] *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).

[15] *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).

> Chemical Abstract Service ("CAS") registry number of 6422-86-2. Regardless of the label, all DOTP is covered by this investigation.
>
> Subject merchandise is currently classified under subheading 2917.39.2000 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Subject merchandise may also enter under subheadings 2917.39.7000 or 3812.20.1000 of the HTSUS. While the CAS registry number and HTSUS classification are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.[16]

DOTP is a colorless, almost odorless, slightly viscous liquid that is used to make resins more flexible and easier to process as plastics. It is a synthetic organic chemical that is part of a group of chemical products known as plasticizers.[17]

There are various types of plasticizers (and an even greater number of formulations that contain a blend of plasticizers) available for commercial use, and the decision to use a particular plasticizer is influenced by the physical-chemical interaction of the plasticizer with the resin (typically polyvinyl chloride ("PVC") resins in the U.S. market); the desired performance characteristics of the finished product, ranging from stiff to soft; material cost; and the ease and speed of processing.[18] Frequently, a specifically formulated plasticizer will be used to fulfill detailed, unique requirements in the production process or the final product.[19]

B. Arguments of Parties

Petitioner's Arguments. Eastman contends that the Commission should find a single domestic like product, consisting of all DOTP, that is coextensive with the scope of the investigation. It disputes respondent's contention that diisononyl phthalate ("DINP") should be included in the domestic like product.[20] Eastman asserts that although DOTP and DINP are general purpose plasticizers, DINP is chemically distinct from and possesses a different CAS registry number, molecular weight, and toxicological profile than DOTP.[21] Eastman argues that DOTP is a non-phthalate plasticizer that has received positive risk assessments from several government agencies around the world, while DINP is a phthalate plasticizer that has become subject to increasing regulatory restrictions due to carcinogenic and reproductive concerns.[22]

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[16] *Dioctyl Terephthalate from the People's Republic of Korea*, 81 Fed. Reg. 49628 (July 28, 2016) (initiation of less than fair value investigation) ("Commerce Antidumping Initiation").

[17] CR at I-7, PR at I-6.

[18] CR at I-8, PR at I-6.

[19] CR at I-8, PR at I-6.

[20] Petitioner Postconference Br. at 4-5; Petition at 9; Transcript of July 21, 2016 Staff Conference ("Conference Tr.") at 7 (Streatfeild).

[21] Petition at 9; Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[22] Petition at 15, Ex. Gen-2; Conference Tr. at 25-26 (Cullen), 33-34 (Yobst).

Eastman further contends that because DINP's use is restricted by regulatory frameworks, DOTP and DINP are not interchangeable.[23] Eastman recognizes that both DOTP and DINP are sold directly to end users and distributors.[24] Eastman claims, however, that it sells and markets DOTP specifically as a non-phthalate plasticizer and that customers and producers perceive DOTP to be a safe non-phthalate plasticizer alternative to DINP.[25] Eastman also argues that DOTP and DINP have different inputs, production processes, and manufacturing facilities, and that DOTP is sold at a premium to DINP.[26]

Respondent's Arguments. Respondent contends that the Commission should define the domestic like product to include both DOTP and DINP because there are no clear dividing lines between the two products.[27] Respondent recognizes that DOTP and DINP are different chemicals, but argues that both products are colorless liquids used as general purpose plasticizers in many of the same applications.[28] Respondent maintains that like DOTP, DINP is commonly used as a plasticizer in flexible PVC applications.[29]

Respondent further contends that the regulatory framework imposes only minor limitations on DOTP's interchangeability with DINP and that the two products share the same channels of distribution.[30] Respondent asserts that although it is unclear whether or to what extent consumers perceive DOTP and DINP to be distinct products based on their environmental profiles, the Commission should consider that end users, particularly producers of vinyl flooring, routinely use these products interchangeably.[31] It also recognizes that due to the fact that DOTP and DINP are chemically different, they use different production processes. Respondent, however, maintains that the overall process of making plasticizers is similar and that there are no consistent price differences between the two products.[32]

C. Domestic Like Product Analysis

Based on the following analysis, we define a single domestic like product consisting of DOTP corresponding to the investigation's scope.

Physical Characteristics and Uses. The product described in the scope of the investigation is DOTP, which has the chemical formulation $C_6H_4(C_8H_{17}COO)_2$ (or, written in a

[23] Petition at 9, 15; Conference Tr. at 25-26 (Cullen), 33 (Yobst); Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[24] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[25] Petitioner Postconference Br. at 6; Petition at 10; Conference Tr. at 26 (Cullen); Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[26] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[27] Respondent Postconference Br. at 10.

[28] Respondent Postconference Br. at 11, 15.

[29] Respondent Postconference Br. at 11.

[30] Respondent Postconference Br. at 11-15.

[31] Respondent Postconference Br. at 15-16.

[32] Respondent Postconference Br. at 15-16.

different manner, $C_{22}H_{38}O_4$) and a CAS registry number of 6422-86-2.[33] DINP, on the other hand, has the chemical formulation $C_{26}H_{42}O_4$ and a CAS registry number of 28553-12-0.[34]

DOTP and DINP are general purpose plasticizers and consequently have similar end uses in flooring and PVC applications.[35] The record indicates, however, that there are several products in addition to DOTP and DINP that are used in these applications.[36] One characteristic that distinguishes DOTP from DINP is toxicity. Unlike DOTP, a non-phthalate plasticizer with a clean toxicological profile[37] and positive risk assessments from several government agencies, DINP is a phthalate plasticizer that has become subject to an increasing number of federal and state regulations due to carcinogenic and reproductive concerns.[38] Specifically, the U.S. Consumer Product Safety Commission ("CPSC") has banned phthalate plasticizers in toys and child care articles pursuant to the Consumer Product and Safety Improvement Act of 2008 ("CPSIA").[39] Additionally, California has listed several phthalate plasticizers including DINP on its Proposition 65 list of chemicals, which alerts consumers to chemicals that may cause cancer, birth defects, or reproductive harm.[40] As discussed below, certain purchasers have also indicated a preference for non-phthalate plasticizers, which further restricts the end use for DINP.

Manufacturing Facilities, Production Processes and Employees. DOTP and DINP are different chemicals and are produced using different inputs and production processes.[41] Specifically, DOTP is produced using 2-ethylhexanol ("2-EH") and dimethyl terephthalate ("DMT") or purified terephthalic acid ("PTA") as primary inputs.[42] Alternatively, DINP requires isononyl alcohol and phthalic anhydride as primary inputs.[43] Eastman is the sole U.S. producer of DOTP. It produces DOTP at its Kingsport, Tennessee and Texas City, Texas facilities and

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[33] CR at I-6 and I-10, PR at I-5 and I-8.

[34] CR at I-12, PR at I-10.

[35] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016); Respondent Postconference Br. at 11.

[36] Di(2-propylheptyl) phthalate ("DPHP") and bio-plasticizers are also used in flooring applications. DPHP and dioctyl phthalate ("DOP") are also used in PVC applications. DPHP, DOP, and linear phthalates are also used as plasticizers. CR at II-10, PR at II-7.

[37] DOTP is described as having a "clean toxicological profile" because there is no evidence that it causes any adverse toxicity effects. Petition at 15, Ex. Gen-2.

[38] Petition at 15, Ex. Gen-2; Conference Tr. at 25-26 (Cullen), 33-34 (Yobst), 85 (Fisher).

[39] Petition at 15, Ex. Gen-2; Conference Tr. at 33 (Yobst).

[40] Petition at 15; Conference Tr. at 33 (Yobst), 85 (Fisher). California Proposition 65 is a voter-approved initiative that requires businesses to notify Californians about significant amounts of chemicals known to cause cancer or birth defects that are contained in certain consumer products, homes or workplaces and that are released into the environment. CR at II-9, PR at II-6.

[41] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016); Respondent Postconference Br. at 15 ("DOTP and DINP are chemically different; therefore the production processes are necessarily somewhat different").

[42] Eastman Questionnaire Response at IV-17 (July 14, 2016); Conference Tr. at 23 (Cullen).

[43] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

dedicates those facilities wholly to the production of DOTP.[44] Eastman does not produce DINP and contends that although its DOTP facilities could potentially produce other products, the existing equipment would require significant capital expenditure and modification due to their inability to process the various raw materials and by-products associated with other plasticizers.[45]

Channels of Distribution. Eastman and respondent agree that DOTP and DINP are sold through similar channels of distribution. Both products are sold to distributors and end users.[46]

Interchangeability. Eastman argues that DOTP and DINP are distinct chemical products that are not interchangeable because DINP is subject to regulatory restrictions.[47] By contrast, respondent contends that DOTP and DINP are highly interchangeable because both are used as a general purpose plasticizer in flexible PVC applications and regulations impose only minor limitations on DINP's interchangeability with DOTP.[48] The record indicates that although purchasers may prefer to use DOTP over DINP due to the regulatory pressures on DINP, the two products are largely interchangeable because both may be used as general purpose plasticizers in most PVC applications; federal regulation bans DINP use only in children's toys or child care articles.[49] As previously stated, however, there are several products in addition to DINP that may be substituted for DOTP in flooring and PVC applications.[50] Toy and child care applications account for a *** share of Eastman's U.S. shipments of DOTP.[51]

Producer and Customer Perceptions. Eastman argues that producers and customers perceive DOTP and DINP as different products.[52] Specifically, Eastman, the sole domestic producer of DOTP, maintains that it sells and markets DOTP as a non-phthalate plasticizer.[53] In marketing literature available on its website, Eastman stresses that it produces "non-phthalate plasticizers," "non-phthalate alternatives," or "non-phthalate solutions" that can be safely used

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[44] Conference Tr. at 23, 49-50 (Cullen).

[45] Eastman Questionnaire Response at II-3e (July 14, 2016); Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016); Conference Tr. at 23, 49-51 (Cullen) ("Generally, converting a dedicated chemical plant to the manufacture of another product is not a trivial event. . . . you're talking generally about millions of dollars of capital modification and significant amounts of time").

[46] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016); Respondent Postconference Br. at 15; CR at II-1.

[47] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[48] Respondent Postconference Br. at 10-11.

[49] Eastman contends that the desire to avoid controversy has caused companies to shift from using DINP to using DOTP in their consumer products. Conference Tr. at 65 (Cullen). Respondent also acknowledges that marketing considerations have driven a transition from the use of DINP to DOTP. *See id.* at 93, 96 (Fisher).

[50] CR at II-10, PR at II-7.

[51] Eastman reports that ***. *See* Email from K. O'Brien to K. Martinez (Aug. 3, 2016).

[52] Petitioner Postconference Br. at 6; Petition at 10; Conference Tr. at 26 (Cullen); Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[53] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

in PVC products.[54] Additionally, in other literature entitled "Why Eastman 168 is a non-phthalate plasticizer," also available on its website, Eastman provides a detailed discussion of existing scientific literature and environmental, food, drug, cosmetics, and consumer protection laws that treat DOTP as a separate product from phthalate plasticizers such as DINP.[55]

Information on the record regarding customer perceptions indicates that customers recognize the difference between DOTP and DINP. Although respondent contends that it is unclear whether or to what extent consumers perceive DOTP and DINP as distinct products based on their environmental profiles, it concedes customers have shifted from using DINP to DOTP in their products due to the regulatory pressures on DINP.[56] Specifically, respondent acknowledges that the "regulated phthalate compliance is key to some customers," and that consumer products manufacturers have made a marketing choice to shift toward the use of DOTP in end uses such as flooring, a significant segment of the U.S. market.[57] For example, Hoffman Plastics Compounds, Inc. ("Hoffman Plastics"), ***,[58] emphasizes that its products contain non-phthalate plasticizers.[59] On the home page of its website, Hoffman Plastics states that it "is proud to announce all of our flexible compounds contain non-phthalate or phthalate free plasticizers. Our compounds conform with {European Chemicals Agency}, {Registration, Evaluation, Authorization and Restriction of Chemicals}, {Restriction of Hazardous Substances Directive}, and more."[60] Additionally, major retailers such as Lowe's, Home Depot, Menard's, and Lumber Liquidators have begun to phase out the use of phthalate plasticizers in favor of DOTP in flooring products.[61] This evidence supports the view that purchasers are able to differentiate between the two products and that they perceive DOTP to be a safe non-phthalate plasticizer alternative to DINP.

Price. Eastman and respondent disagree on whether DOTP commands higher prices than DINP. Eastman contends that DOTP has historically been sold at a premium to DINP due to the fact that DOTP is a non-phthalate plasticizer.[62] Respondent, however, contends that no significant price differential exists between DOTP and DINP because they are highly interchangeable and subject to similar market dynamics.[63] The pricing data in the record are

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[54] Petitioner Postconference Br. at Ex. 3.

[55] Petition at Ex. Gen-2. Additionally, literature published by ExxonMobil Chemical Company, a producer of DINP, distinguishes non-phthalate plasticizers as "specialty products." Respondent Postconference Br. at Ex. 3.

[56] Conference Tr. at 32-33 (Yobst), 65 (Cullen), 85, 93 (Fisher).

[57] Conference Tr. at 96 (Fisher).

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

[59] http://www.hoffmanplastic.com (visited and printed on Aug. 8, 2016).

[60] http://www.hoffmanplastic.com (visited and printed on Aug. 8, 2016).

[61] Petition at 10, Exs. 6-9 (announcements of plans to stop selling products containing phthalate plasticizers); Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016); Conference Tr. at 33 (Yobst), 93 (Fisher).

[62] Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016).

[63] Respondent Postconference Br. at 16.

limited to DOTP products. Moreover, as previously stated, Eastman, the sole domestic DOTP producer, does not produce DINP.

Conclusion. The record in the preliminary phase of this investigation indicates that there are some similarities between DOTP and DINP; both products are general purpose plasticizers and can be used interchangeably in the manufacture of flooring and most flexible PVC products, and both are sold through the same channels of distribution. Nevertheless, the record also indicates that this does not distinguish DOTP and DINP from several other products that do not fall within respondent's proposed domestic like product definition. Moreover, there is no dispute that DOTP and DINP are different chemicals that are produced using different inputs, production processes, and manufacturing facilities. They also fall in different plasticizer categories; DINP is a phthalate plasticizer that is subject to federal and state regulation due to its toxicological profile whereas DOTP is a non-phthalate plasticizer that has received positive risk assessments from government agencies and is considered to be a safe alternative to phthalate plasticizers. The record indicates that these distinctions lead producers and purchasers to perceive DOTP and DINP to be distinct products. Consequently, the current record indicates that there is a clear dividing line between DOTP and DINP. We therefore define a single domestic like product consisting of all DOTP coextensive with the scope of the investigation.

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."[64] 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.

Eastman argues that there is a single domestic industry consisting of all producers of DOTP.[65] Respondent does not make any arguments regarding the Commission's definition of the domestic industry.[66] Eastman is the only domestic producer of DOTP. There are no related party issues in this investigation.[67] Accordingly, and in light of our domestic like product definition, we define the domestic industry as Eastman, the sole domestic producer of DOTP.

[64] 19 U.S.C. § 1677(4)(A).

[65] Petitioner Postconference Br. at 9-10.

[66] *See generally*, Respondent Postconference Br.

[67] CR at III-2, PR at III-1. The related parties provision of the statute, 19 U.S.C. § 1677(4)(B), allows the Commission to exclude certain producers from the domestic industry under appropriate circumstances.

V. Negligible Imports

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.[68]

Available data, based on questionnaire responses, indicate that subject imports from Korea exceed the requisite three percent statutory negligibility threshold. In the most recent 12-month period prior to the filing of the petition for which data are available, April 2015 to March 2016, U.S. imports from Korea accounted for *** percent of total imports of DOTP by quantity.[69] We consequently find that imports from Korea are not negligible.

VI. Reasonable Indication of Material Injury by Reason of Subject Imports

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.[70] 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.[71] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[72] 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.[73] No single factor

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[68] 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)).

[69] CR at IV-5, PR at IV-2-3. Because imports of DOTP may enter the United States under one of several HTSUS categories, each of which contains out-of-scope merchandise, the 12-month period corresponding to the data covered by the questionnaire responses was the most recent 12-month period for which reliable data concerning DOTP import volumes were available.

[70] 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. We have applied these amendments here.

[71] 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).

[72] 19 U.S.C. § 1677(7)(A).

[73] 19 U.S.C. § 1677(7)(C)(iii).

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."[74]

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 traded imports,[75] 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.[76] 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.[77]

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.[78] In performing its examination, however, the Commission need not isolate

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[74] 19 U.S.C. § 1677(7)(C)(iii).

[75] 19 U.S.C. §§ 1671b(a), 1673b(a).

[76] *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).

[77] 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).

[78] 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,

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the injury caused by other factors from injury caused by unfairly traded imports.[79] Nor does 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.[80] It is clear that the existence of injury caused by other factors does not compel a negative determination.[81]

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."[82] [83] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[84]

(…*continued*)
developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[79] 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 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.").

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

[81] *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.").

[82] *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*, 792 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[83] Commissioner Pinkert and Commissioner Kieff do not join this paragraph or the following three paragraphs. They point out that the Federal Circuit, in *Bratsk*, 444 F.3d 1369, and *Mittal Steel*, held that the Commission is *required*, in certain circumstances when analyzing present material injury, to consider
(*continued*...)

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 market presence of price-competitive nonsubject imports.[85] 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.[86] 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.[87]

(…*continued*)
a particular issue with respect to the role of nonsubject imports, without reliance upon presumptions or rigid formulas. The Court has not prescribed a specific method of exposition for this consideration. *Mittal Steel* explains as follows:

> What *Bratsk* held is that "where commodity products are at issue and fairly traded, price competitive, non-subject imports are in the market," the Commission would not fulfill its obligation to consider an important aspect of the problem if it failed to consider whether non-subject or non-LTFV imports would have replaced LTFV subject imports during the period of investigation without a continuing benefit to the domestic industry. 444 F.3d at 1369. Under those circumstances, *Bratsk* requires the Commission to consider whether replacement of the LTFV subject imports might have occurred during the period of investigation, and it requires the Commission to provide an explanation of its conclusion with respect to that factor.

542 F.3d at 878.

[84] *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.").

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

[86] *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).

[87] 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 (*continued*...)

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.[88] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[89]

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.

1. Demand Conditions

DOTP is used to make resins more flexible and easier to process as plastics.[90] Demand for DOTP is therefore derived from demand for the downstream products in which it is used, primarily flooring and PVC applications.[91]

Eastman contends that demand for DOTP is not only derived from the manufacture of downstream products, but is also generally driven by the U.S. regulatory framework.[92] Eastman asserts that as regulations restricting the use of phthalate plasticizers came into effect, demand for DOTP increased during the period of investigation as purchasers chose DOTP as a safe non-phthalate plasticizer in various applications. Additionally, major retailers such as Lowe's, Home Depot, Menard's, and Lumber Liquidators began to phase out the use of phthalate plasticizers in favor of DOTP in flooring products.[93] Respondent agrees that demand for DOTP increased during the period of investigation due to the increased regulatory pressures on phthalate plasticizers.[94] Additionally, most questionnaire respondents reported an increase in demand

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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.

[88] We provide in our respective discussions of volume, price effects, and impact a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

[89] *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.").

[90] CR at I-7, PR at I-6.

[91] CR at II-7, PR at II-5.

[92] Petitioner Postconference Br. at 12; Conference Tr. at 25 (Cullen), 34 (Yobst).

[93] Petitioner Postconference Br. at 12-13; Petition at 10, Exs. 6-9 (announcements of plans to stop selling products containing phthalate plasticizers); Eastman Supplemental Questionnaire Response at V-1 (July 28, 2016); Conference Tr. at 32-33 (Yobst), 93 (Fisher).

[94] Respondent Postconference Br. at 6; Conference Tr. at 85 (Fisher).

for DOTP in the United States since January 1, 2013 due to the shift away from phthalate plasticizers.[95]

Apparent U.S. consumption of DOTP increased from *** short tons in 2013 to *** short tons in 2014 and *** short tons in 2015. It was *** short tons in January-March ("interim") 2015 and higher, at *** short tons, in interim 2016.[96]

2. Supply Conditions

Eastman is the sole domestic producer and largest supplier of DOTP to the U.S. market. Its share of the U.S. market decreased by *** percentage points from 2013 to 2015, falling from *** percent in 2013 to *** percent in 2014, before increasing to *** percent in 2015. Its market share was *** percent in interim 2015 and *** percent in interim 2016.[97] Eastman produces DOTP at two facilities, one located in Kingsport, Tennessee and the other in Texas City, Texas.[98] Eastman acquired its Texas City facility in 2011 from Sterling Chemicals, Inc. and began production at this facility in April 2012.[99] Throughout the period of investigation, Eastman has continuously expanded its production capacity and has maintained a high and increasing capacity utilization rate.[100]

Aekyung and LG Chem accounted for *** of DOTP production in Korea and *** DOTP exported from Korea to the United States in 2015.[101] Subject imports from Korea increased their U.S. market share by *** percentage points from 2013 to 2015, increasing from *** percent in 2013 to *** percent in 2014 and *** percent in 2015. Their market share was *** percent in interim 2015 and *** percent in interim 2016.[102] Under the provisions of the U.S.-

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[95] CR at II-9-10, PR at II-6.

[96] CR/PR at Table IV-3. Apparent U.S. consumption and market shares were calculated using questionnaire data, which are believed to have accounted for virtually all U.S. imports and U.S. shipments of imports of DOTP from Korea and other sources. CR at IV-1, PR at IV-1. Official import data were not used because, as previously discussed, imports of DOTP may enter the United States under one of several HTSUS categories, each of which contains out-of-scope merchandise.

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

[98] CR at III-2, VI-1, PR at VI-1.

[99] CR at III-2, PR at III-2.

[100] CR at III-2-3, PR at III-2; Conference Tr. at 57 (Cullen). Eastman's capacity increased from *** short tons in 2013 to *** short tons in 2014 and *** short tons in 2015. Its capacity was *** short tons in interim 2015 and was higher, at *** short tons, in interim 2016. Eastman's capacity utilization rate increased from *** percent in 2013 to *** percent in 2014 and *** percent in 2015. It was *** percent in interim 2015 and higher, at *** percent, in interim 2016. CR/PR at Table III-2. In any final phase of this investigation, we intend to explore whether there have been any constraints on Eastman's production of DOTP.

[101] CR at VII-3, PR at VII-3. Aekyung and LG Chem account for *** percent of overall production of DOTP in Korea. CR at VII-3, PR at VII-3. Hanwha Chemical is also believed to produce DOTP in Korea, but it did not respond to the Commission's questionnaire. *See id.* at n.4.

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

Korea Free Trade Agreement, the applicable duty for U.S. imports of DOTP originating in Korea was eliminated, effective March 15, 2012.[103]

Nonsubject imports held the smallest share of the U.S. market during the period of investigation. Their market share initially increased from *** percent in 2013 to *** percent in 2014, and then declined to *** percent in 2015. Their market share was *** percent in interim 2015 and was lower, at *** percent, in interim 2016.[104] The largest volumes of nonsubject imports of DOTP during the period of investigation came from China and Mexico.[105]

3. Substitutability and Other Conditions

We find that there is a high degree of substitutability between domestically produced DOTP and the subject imports. Eastman and respondent agree that DOTP is a commodity product,[106] and a majority of importers reported that the domestic like product and subject imports are always interchangeable.[107]

We also find that price is an important factor in purchasing decisions in the U.S. DOTP market. When asked about the significance of differences other than price between the domestic like product and subject imports, Eastman and a majority of importers reported that factors other than price were sometimes or never important.[108] [109] Purchasers reported that price was among the top three purchasing factors.[110]

Raw materials costs accounted for a relatively large share of DOTP production costs and were a ***.[111] During the period of investigation, raw materials costs accounted on an annual basis for *** percent to *** percent of the cost of goods sold ("COGS") for DOTP.[112] Raw materials costs for DOTP fell over the period of investigation. Specifically, raw materials costs increased from $*** per short ton in 2013 to $*** per short ton in 2014, before falling to $*** per short ton in 2015. These costs were lower in interim 2016, at $*** per short ton, than in interim 2015, at $*** per short ton.[113] Eastman reports that ***.[114] [115]

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[103] CR at I-7, PR at I-6. The normal trade relations import duty for DOTP is 6.5 percent *ad valorem*. *See id.*

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

[105] CR at II-7, PR at II-5.

[106] Petitioner Postconference Br. at 2; Conference Tr. at 7 (Streatfeild), 105 (Fisher).

[107] CR/PR at Table II-5.

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

[109] Commissioner Kieff does not join this sentence. *See* Dissenting Views of Commission F. Scott Kieff.

[110] CR/PR at Table II-4. The record indicates that DINP is one of multiple plasticizers that could be substituted for DOTP in major end-use applications. CR at II-10, PR at II-7. In any final phase of the investigation, we intend to explore any effect prices for these substitute products, and regulatory constraints concerning them, have on DOTP prices.

[111] CR/PR at Table VI-2; Petitioner Postconference Br. at Ex. 2.

[112] CR/PR at Table VI-2.

[113] CR/PR at Table VI-2.

[114] Petitioner Postconference Br. at Ex. 2.

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."[116]

The volume of subject imports increased during the period of investigation, both in absolute terms and relative to apparent U.S. consumption. Subject import volume increased from *** short tons in 2013 to *** short tons in 2014 and *** short tons in 2015.[117] Subject imports increased their share of the U.S. market by *** percentage points from 2013 to 2015, increasing from *** percent in 2013 to *** percent in 2014 and *** percent in 2015.[118] Meanwhile, Eastman's market share decreased by *** percentage points during this period, falling from *** percent in 2013 to *** percent in 2014, before increasing to *** percent in 2015.[119]

Based on the current record, we find that the increase in the volume of subject imports from Korea is significant both in absolute terms and relative to apparent U.S. consumption in the United States.

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
>
> (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.[120]

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[115] Commissioner Kieff has made a negative determination and does not join the remainder of the opinion. *See* Dissenting Views of Commissioner F. Scott Kieff.

[116] 19 U.S.C. § 1677(7)(C)(i).

[117] CR/PR at Table IV-2. Subject import volume was *** short tons in interim 2015 and was higher, at *** short tons, in interim 2016. *See id.*

[118] CR/PR at Table C-1. Subject imports' market share was *** percent in interim 2015 and *** percent in interim 2016. *See id.*

[119] CR/PR at Table IV-3. Eastman's market share was *** percent in interim 2015 and *** percent in interim 2016. *See id.*

[120] 19 U.S.C. § 1677(7)(C)(ii).

As stated above, the record indicates that there is a high degree of substitutability between subject imports from Korea and domestically produced DOTP and that price is an important factor in purchasing decisions.

In the preliminary phase of this investigation, the Commission requested that Eastman and importers provide quarterly weighted-average sales price data for two DOTP products shipped to unrelated U.S. customers between January 2013 and March 2016.[121] Eastman and 13 importers submitted usable pricing data on sales of the requested products, although not all firms reported pricing for all products for all quarters.[122] Reported pricing data accounted for *** percent of Eastman's commercial U.S. shipments of DOTP and *** percent of reported U.S. shipments of subject imports from Korea in 2015.[123]

Subject imports from Korea undersold the domestic like product in *** of *** possible quarterly comparisons at underselling margins that ranged from *** to *** percent and oversold the domestic like product in the remaining *** comparisons at overselling margins that ranged from *** to *** percent.[124] There were *** short tons of subject import shipments involved in the underselling comparisons, equivalent to *** percent of the volume of subject imports accounted for in the pricing data.[125] For purposes of our preliminary determination, we do not find that subject imports undersold the domestic like product to a significant degree.

We also examined changes in prices of the domestic like product and subject imports over the period of investigation. As a preliminary point, we note that the majority of Eastman's U.S. commercial shipments of DOTP were in 20 metric ton truckloads (product 1) while the majority of importers' U.S. commercial shipments of subject imports were in bulk (product 2).[126] These pricing data show the weighted-average price for product 1 manufactured in the United States fell *** percent between January 2013 and March 2016,[127] and the weighted-average price for product 2 manufactured in the United States fell *** percent during this

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[121] CR at V-3, PR at V-3. The pricing products are: (1) DOTP in 20 metric ton containers; and (2) DOTP in bulk. *See id.*

[122] CR at V-4, PR at V-3.

[123] CR at V-4, PR at V-3.

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

[125] CR/PR at Table V-6. There were *** short tons of subject import shipments involved in the overselling comparisons. *See id.*

[126] CR/PR at Tables V-3-4. Eastman contends that consistent with the commodity nature of DOTP, prices of a 20 metric ton truckload of DOTP affect prices of DOTP sold in bulk in a railcar. Petitioner Postconference Br. at 22 n.55; Hearing Tr. at 42 (Rogers) ("{A}ll Korean DOTP competes against Eastman's product. That is, the price of a 20 metric ton truckload of this commodity chemical impacts the price of the identical product sold in bulk and in a railcar and vice versa"). In any final phase of this investigation, we will explore the extent to which DOTP sold in different size containers compete against each other and affect prices for the other product.

[127] Quarterly weighted-average prices of product 1 manufactured in the United States declined steadily from $*** per short ton in the first quarter of 2013 to $*** per short ton in the first quarter of 2016. CR/PR at Table V-3.

period.[128] Prices of subject imports from Korea also declined, but to a slightly lesser extent than prices of domestically produced DOTP. The weighted-average price for product 1 imported from Korea fell *** percent between January 2013 and March 2016,[129] and the weighted-average price for product 2 imported from Korea fell *** percent during this period.[130] While prices declined during the period of investigation, subject imports increased their absolute and relative presence in the market. Additionally, purchasers reported that Eastman had reduced prices in order to compete with lower-priced subject imports from Korea.[131]

Respondent argues that declines in raw materials costs explain the price declines.[132] As discussed above, raw materials costs fell over the period of investigation and were lower in interim 2016 than in interim 2015.[133] In light of the fact that ***, the declines in prices of the domestic like product appear, at least to some extent, to be a result of falling raw materials costs.[134] Nevertheless, the declines in U.S. prices outpaced the decrease in raw materials costs during the period of investigation, while demand as measured by apparent U.S. consumption increased.[135] Moreover, raw materials costs increased between 2013 and 2014 and cannot explain the declines in DOTP prices that occurred during that period.[136] Consequently, it does not appear that changes in raw materials costs can fully explain the price declines for the domestically produced product. It is possible, however, that price competition from other plasticizers may help explain the price declines for DOTP.[137]

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[128] Quarterly weighted-average prices of product 2 manufactured in the United States declined steadily from $*** per short ton in the first quarter of 2013 to $*** per short ton in the first quarter of 2016. CR/PR at Table V-4.

[129] Quarterly weighted-average prices of product 1 imported from Korea declined steadily from $*** per short ton in the first quarter of 2013 to $*** per short ton in the first quarter of 2016. CR/PR at Table V-3.

[130] Quarterly weighted-average prices of product 2 imported from Korea declined steadily from $*** per short ton in the first quarter of 2013 to $*** per short ton in the first quarter of 2016. CR/PR at Table V-4.

[131] CR/PR at Table V-9. Four of seven purchasers that responded to the lost sales/lost revenue survey reported that Eastman had reduced prices in order to compete with lower-priced subject imports from Korea. *See id.* Additionally, six purchasers reported that, since 2013 they had shifted purchases from domestically produced DOTP to subject imports, with three stating that price was a primary reason for the shift. CR/PR at Table V-8.

[132] Respondent Postconference Br. at 8; Conference Tr. at 11-12 (Burr), 88 (Fisher).

[133] CR/PR at Table VI-2.

[134] Petitioner Postconference Br. at Ex. 2.

[135] CR/PR at Tables VI-3, C-1.

[136] CR/PR at Tables V-3-4, VI-1.

[137] Respondent argues that, historically, DOTP was priced higher than DINP, the predominant plasticizer for many end users, and that Eastman decreased prices during the period of investigation to induce end users to switch from DINP to DOTP. Respondent Postconference Br. at 7. We do not have sufficient data in the preliminary phase of this investigation to evaluate this argument. We intend to explore DOTP's competition, if any, with DINP and/or other general purpose plasticizers in the U.S. market and the effect it had on DOTP's prices in any final phase of this investigation. We invite the

(*continued*...)

We do not find that subject imports prevented price increases for the domestic like product, which otherwise would have occurred, to a significant degree.[138] We recognize that the COGS to net sales ratio increased from *** percent in 2013 to *** percent in 2014 and *** percent in 2015, and that this ratio was higher in interim 2016, at *** percent, than in interim 2015, at *** percent.[139] However, with raw materials costs rising *** in 2014 and falling thereafter and Eastman ***, price increases would not have been likely.[140] Further, even though apparent U.S. consumption increased, the record does not show any unsuccessful attempts by Eastman to raise its prices during the period of investigation.[141]

Information on the record consequently shows that the subject imports predominantly oversold the domestic like product and that the subject imports were concentrated in a different pricing product than the majority of Eastman's shipments. The record also shows, however, that prices of the domestic like product declined while subject import volumes and market penetration rose, that the domestic like product and the subject imports are highly substitutable, and that purchasers indicated that import competition affected prices they received from domestic producers. In light of this, we cannot conclude, based on the record of the preliminary phase of this investigation, that at least some of the price declines for the domestic like product were not due to the subject imports.

E. Impact of the Subject Imports[142]

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,

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(…*continued*)
parties in their comments on any final phase questionnaires to suggest how the Commission can collect data pertinent to this issue.

[138] Commissioner Pinkert does not join the remainder of this section. He finds, based on the record of the preliminary phase of this investigation, that subject imports depressed domestic prices to a significant degree. As noted above, both parties agree that DOTP is a commodity product, and the record confirms that domestically produced DOTP and the subject imports are highly substitutable. Both the volume and U.S. market share of subject imports of this commodity product increased rapidly over the period of investigation, while prices for domestically produced DOTP and the subject imports dropped substantially. CR/PR at V-9 and Table V-5. As also noted above, a number of purchasers reported that Eastman had reduced its prices in order to compete with the lower prices of subject imports. CR/PR at Table V-9.

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

[140] CR/PR at Table VI-2; Petitioner Postconference Br. at Ex. 2. Eastman's unit COGS also decreased over the period of investigation from $*** in 2013 to $*** in 2015. Eastman's unit COGS was lower in interim 2016, at $***, than in interim 2015, at $***. CR/PR at Table C-1.

[141] Eastman Questionnaire Response at IV-21(a) (July 14, 2016). Eastman did not report that it had to roll back any announced price increases during the period of investigation. CR at V-10, PR at V-4.

[142] In its notice initiating the antidumping duty investigation on DOTP from Korea, Commerce reported estimated dumping margins ranging from 23.70 to 47.86 percent. Commerce Antidumping Initiation, 81 Fed. Reg. at 49631.

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."[143]

As apparent U.S. consumption of DOTP increased during the period of investigation, Eastman's performance indicia were mixed, with its production-related factors improving overall and its financial indicators declining. Eastman increased its capacity from *** short tons in 2013 to *** short tons in 2014 and *** short tons in 2015.[144] Eastman's production increased from *** short tons in 2013 to *** short tons in 2014 and *** short tons in 2015.[145] Capacity utilization increased from *** percent in 2013 to *** percent in 2014 and *** percent in 2015.[146]

Eastman's U.S. shipments showed patterns similar to those for production. Total U.S. shipments increased from *** short tons in 2013 to *** short tons in 2014 and *** short tons in 2015.[147] Inventories fluctuated annually but increased overall from *** short tons in 2013 to *** short tons in 2015.[148] Although Eastman supplied the majority of apparent U.S. consumption, its market share declined from 2013 to 2015.[149]

Eastman's number of production-related workers decreased from *** in 2013 and 2014 to *** in 2015.[150] Total hours worked and wages paid declined but productivity increased.[151]

Eastman's overall financial performance was worse at the end of the period of investigation than at the beginning. The value of net sales increased from $*** in 2013 to $***

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[143] 19 U.S.C. § 1677(7)(C)(iii). This provision was recently amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[144] CR/PR at Table C-1. Eastman's capacity was higher in interim 2016, at *** short tons, than in interim 2015, at *** short tons. *See id.*

[145] CR/PR at Table C-1. Eastman's production was higher in interim 2016, at *** short tons, than in interim 2015, at *** short tons. *See id.*

[146] CR/PR at Table C-1. Capacity utilization was higher in interim 2016, at *** percent, than in interim 2015, at *** percent. *See id.*

[147] CR/PR at Table C-1. Eastman's U.S. shipments were higher in interim 2016, at *** short tons, than in interim 2015, at ***. *See id.*

[148] CR/PR at Table C-1. Inventories were higher in interim 2016, at *** short tons, than in interim 2015, at *** short tons. *See id.*

[149] CR/PR at Table C-1. Eastman's market share was *** percent in 2013, *** percent in 2014, and *** percent in 2015. It was *** percent in interim 2015 and *** percent in interim 2016. *See id.*

[150] CR/PR at Table C-1. There were *** workers in interim 2015 and *** workers in interim 2016. *See id.*

[151] CR/PR at Table C-1. Employees worked *** hours in 2013, *** hours in 2014, and *** hours in 2015 and worked *** hours in interim 2015 and in interim 2016. *See id.* The wages Eastman paid to its workers fell from $*** in 2013 to $*** in 2014 and $*** in 2015. Eastman paid its workers $*** in interim 2015 and $*** in interim 2016. *See id.* Productivity increased from *** short tons per hour in 2013 to *** short tons per hour in 2014 and *** short tons per hour in 2015. Productivity was *** short tons per hour in interim 2015 and *** short tons per hour in interim 2016. *See id.*

in 2014, but then decreased to $*** in 2015.[152] Eastman's COGS to net sales ratio increased from *** percent in 2013 to *** percent in 2014 and *** percent in 2015.[153] Eastman's gross profits declined from $*** in 2013 to $*** in 2014 and $*** in 2015.[154]

Similarly, Eastman's operating income declined from $*** in 2013 to $*** in 2014 and $*** in 2015.[155] Its ratio of operating income to net sales declined from *** percent in 2013 to *** percent in 2014 and *** percent in 2015.[156] Eastman's net income followed similar trends.[157] Eastman's capital expenditures fluctuated annually and increased overall.[158] Eastman claims that it has suspended plans for another capacity expansion by mid-2016 due to its deteriorating profitability.[159]

Based on the record in the preliminary phase of this investigation we cannot conclude that there is clear and convincing evidence of no material injury by the subject imports. Despite predominant overselling by the subject imports, they increased throughout the period of investigation and took market share from Eastman while prices declined and Eastman's financial condition deteriorated. Consequently, we cannot conclude that the subject imports did not have a significant impact on the domestic industry.[160]

We have also considered whether there are factors other than subject imports that may have had an adverse impact on the domestic industry during the period of investigation. Nonsubject imports had a small and declining presence in the U.S. market.[161] They lost market

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[152] CR/PR at Table C-1. The value of net sales was $*** in interim 2015 and lower, at $***, in interim 2016. *See id.*

[153] CR/PR at Table C-1. This ratio was *** percent in interim 2015 and higher, at *** percent, in interim 2016. *See id.*

[154] CR/PR at Table C-1. Gross profits were $*** in interim 2015 and lower, at $***, in interim 2016. *See id.*

[155] CR/PR at Table C-1. Eastman's operating income was $*** in interim 2015 and was lower, at $***, in interim 2016. *See id.*

[156] CR/PR at Table C-1. This ratio was *** percent in interim 2015 and was lower, at *** percent, in interim 2016. *See id.*

[157] CR/PR at Table C-1. Net income declined from $*** in 2013 to $*** in 2014 and $*** in 2016. It was $*** in interim 2015 and was lower, at ***, in interim 2016. *See id.*

[158] CR/PR at Table VI-5. Capital expenditures decreased from $*** in 2013 to $*** in 2014, before increasing to $*** in 2015. They were $*** in interim 2015 and were higher, at $***, in interim 2016. *See id.* Eastman reported that its capital expenditures were ***. CR at VI-10, PR at VI-5.

[159] CR/PR at Table VI-8; CR at III-3, PR at III-2.

[160] Commissioner Pinkert does not join this paragraph. As previously discussed, the domestic industry lost significant market share to the significantly increasing volumes of subject imports, which he finds to have depressed domestic prices to a significant degree. In turn, the significant decline in prices adversely affected Eastman's operating income and operating income ratio. Consequently, Commissioner Pinkert finds for purposes of this preliminary phase of the investigation that subject imports had a significant adverse impact on the domestic industry.

[161] As measured by quantity, nonsubject import market share was *** percent in 2013, *** percent in 2014, and *** percent in 2015. Nonsubject import market share was *** percent in interim 2015 and lower, at *** percent, in interim 2016. CR/PR at Table C-1.

share to subject sources and to Eastman notwithstanding that the pricing data show that they predominantly undersold both subject imports and the domestic like product.[162] We also recognize that the U.S.-Korea Free Trade Agreement eliminated a 6.5 percent duty on subject imports effective March 15, 2012.[163] Respondent contends that this duty-free status gave imports from Korea a competitive advantage over imports from nonsubject sources.[164] We note, however, that imports of DOTP from Korea did not merely replace nonsubject imports in the market but also took market share from Eastman. Therefore, neither nonsubject imports nor the U.S. Korea-Free Trade Agreement would appear to explain Eastman's lost market share during the period of investigation. However, as discussed above, we will consider in any final phase of this investigation the extent to which causes other than subject imports, such as supply limitations and competition from other plasticizers, can explain the lost market share, price declines, and deteriorating financial performance Eastman experienced during the period of investigation.[165]

VII. 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 DOTP from Korea that are sold in the United States at less than fair value.

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[162] Three importers reported pricing data for nonsubject imports from China, together accounting for 17.8 percent of Chinese exports of DOTP to the United States in 2015. CR at D-3. These data show that nonsubject imports from China undersold the domestic like product in all 11 quarterly comparisons and undersold subject imports from Korea in ten out of the 11 quarterly comparisons. CR/PR at Table D-2.

[163] Petitioner Postconference Br. at 5.

[164] Respondent Postconference Br. at 5.

[165] Respondent argues that U.S. purchasers had experienced supply shortages and that imports of DOTP from Korea were merely filling purchasers' needs for a secondary source of supply during a time when demand was increasing. Respondent Postconference Br. at 9. Eastman maintains, however, that it had sufficient capacity to supply U.S. demand and that it had, in fact, supplied all customers with their requested volumes of DOTP during the period of investigation. Conference Tr. at 29 (Cullen). We will obtain further information in any final phase of the investigation addressing whether purchasers experienced supply shortages and will examine whether the increase in subject imports can be explained by purchasers' desire to have multiple supply sources.

Dioctyl Terephthalate (DOTP) from Korea
Investigation No. 731-TA-1330 (Preliminary)

Dissenting Views of Commissioner F. Scott Kieff

Based on the record in the preliminary phase of this investigation, 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 imports of Dioctyl Terephthalate (DOTP) from Korea that are allegedly sold in the United States at less than fair value ("LTFV"). In reaching my determination, I join and adopt sections I to VI.B. of the views of the Commission.

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.[1] 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 or that the establishment of an industry is not materially retarded by subject imports; and (2) no likelihood exists that contrary evidence will arise in a final investigation."[2]

The U.S. Court of Appeals for the Federal Circuit ("Federal Circuit") has stated that the purpose of preliminary determinations is to avoid the cost and disruption to trade caused by unnecessary investigations and that the "reasonable indication" standard requires more than a finding that there is a "possibility" of material injury.[3] It also has noted that, in a preliminary investigation, the "statute calls for a reasonable indication of injury, not a reasonable indication of need for further inquiry."[4] Moreover, the U.S. Court of International Trade ("CIT") has reaffirmed that, in applying the reasonable indication "standard for making a preliminary determination regarding material injury or threat of material injury, the Commission may weigh

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[1] 19 U.S.C. §§ 1671b(a), 1673b(a); *see also, e.g., Co-Steel Raritan, Inc. v. United States*, 357 F.3d 1 1294 (Fed. Cir. 2004); *Sensient Technologies Corp. v. United States*, 28 CIT 1513 (2004*); Committee for Fair Coke Trade v. United States*, 28 CIT 1140 (2004*); Ranchers-Cattlemen Action Legal Foundation v. United States*, 74 F. Supp.2d 1353, 1368-69 (Ct. Int'l Trade 1999*); Aristech Chem. Corp. v. United States*, 20 CIT 353, 354-55 (1996); *American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986).

[2] *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).

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

[4] *Texas Crushed Stone*, 35 F. 3d at 1543.

all evidence before it and resolve conflicts in the evidence."[5] Particularly at a time when the resources of parties appearing before the Commission and of the Commission itself are each stretched thin, the inherent cost of going to a final investigation must be born in mind.

II. No reasonable indication of material injury

In this preliminary investigation, the record already contains questionnaire data providing a representative picture of the U.S. market. Data on the U.S. industry were provided by the sole U.S. producer, Eastman. U.S. import data are based on the questionnaire responses of 13 U.S. importers that are believed to account for virtually all U.S. imports of DOTP from Korea and other sources.[6] The Commission received responses from two Korean producers of subject merchandise whose exports accounted for all U.S. imports of DOTP from Korea in 2015 and are estimated to account for *** percent of DOTP production in Korea.[7]

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."[8]

Subject import volume rose *** percent from 2013 to 2015, increasing from *** short tons in 2013 to *** short tons in 2015.[9] Subject imports also gained market share over the POI, rising from *** percent in 2013 to *** percent in 2015.[10]

In view of the foregoing, I determine the volume and increase in volume of subject imports to be significant in absolute terms and relative to consumption. However, for the reasons discussed below, I determine that the subject imports did not have significant price effects or 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

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[5] *Ranchers-Cattlemen*, 74 F. Supp. 2d at 1368.
[6] CR/PR at IV-1.
[7] CR/PR at VII-3.
[8] 19 U.S.C. § 1677(7)(C)(i).
[9] CR/PR at Table IV-2.
[10] CR/PR at Table IV-3.

(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.[11]

As addressed in section VI.B.3 of the majority views, parties to this investigation agree that DOTP is a commodity product and there is a high degree of substitutability between domestically produced DOTP and subject imports. Although parties agree that this is a commodity product, the record indicates that purchasing decisions are not based just on price differentials. Eastman reported that differences other than price are *** important ***.[12] Eight of ten importers indicated that differences other than price were at least sometimes important when comparing U.S. product with Korean product.[13] Purchasers indicated that factors other than price that were important in their purchasing decisions included quality, service, and having multiple suppliers.[14]

The Commission requested that Eastman and U.S. importers provide quarterly pricing data for two products, DOTP in 20 metric ton (MT) containers and DOTP in bulk. Eastman and 13 importers provided pricing data, accounting for *** percent of the U.S. producer's shipments and *** percent of U.S. shipments of subject imports from Korea.[15] Prices for imported DOTP from Korea undersold U.S. product in *** of *** instances (*** short tons) with margins of underselling ranging from *** to *** percent.[16] In the remaining *** instances (***), the Korean product oversold the domestic product, with margins of overselling ranging from *** to *** percent.[17] The *** occurred in the beginning of the POI. Given the ***, I determine the underselling is not significant.

The Commission also received pricing data from three importers for nonsubject imports from China for product 1 (20 MT containers). The data reported by these importers accounted for 17.8 percent of Chinese exports to the United States in 2015.[18] There were 11 quarterly pricing comparisons with domestically produced product. The Chinese product undersold the U.S. product in all 11 quarters, with underselling margins ranging from *** percent to *** percent.[19] The Chinese product undersold the Korean product in 10 quarters and oversold in 1 quarter; underselling margins ranged from *** percent to *** percent.

Six responding purchasers indicated that they had shifted purchases from domestically produced DOTP to subject imports since 2013. Three of these purchasers reported that price

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[11] 19 U.S.C. § 1677(7)(C)(ii).

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

[13] Three of these eight importers indicated that differences other price were always important, one indicated it was frequently and four indicated it was sometimes important. CR/PR at Table II-6.

[14] CR/PR at II-4 and Table V-8.

[15] CR at V-4; PR at V-3

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

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

[18] CR/PR at D-3.

[19] CR/PR at Table D-2.

was a primary reason for the shift. Price, however was not the only reason for the shift.[20] Purchasers also stressed the need to have more than one supplier. ***."[21] *** also stated "***."[22] Another purchaser that reported that price was a primary factor in their switch to subject product, ***, also indicated having multiple sources was important: "***."[23] Purchasers also viewed the changes in raw material costs as the driving force in the declining prices over the POI. *** stated "***." *** stated that "***." *** stated "***."[24] Although the record indicates that some purchases were due to differences in price between the domestically produced DOTP and subject imports, the record also shows that subject imports were *** than domestically produced product. Additionally, the pricing data on the record shows that nonsubject imports from China were underselling both domestically produced DOTP and subject imports.[25] For these reasons, I determine that subject imports did not significantly depress prices.

I also determine that subject imports did not significantly suppress prices. Although demand was increasing throughout the POI, prices for the domestically produced product saw their biggest drop during 2015, when raw material costs decreased. Raw material costs accounted for a relatively large share of DOTP production costs. During the POI, raw material costs accounted for *** percent to *** percent of the cost of goods sold ("COGS") for DOTP.[26] Raw material costs decreased from $*** per short ton in 2013 to $*** per short ton in 2015.[27] As a result, COGS declined by *** percent between 2013 and 2015, from $*** per short ton to $*** per short ton.[28] Eastman also reported that ***.[29] Subject imports oversold the domestically produced product in *** in 2015.[30] For these reasons I determine that the subject imports did not prevent any price increases that would have otherwise occurred to a significant degree.

C. Impact of the Subject Imports[31]

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

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[20] CR at V-12; PR at V-5.
[21] CR/PR at Table V-8.
[22] CR at V-16; PR at V-6.
[23] CR/PR at Table V-8.
[24] CR at V-16; PR at V-6
[25] CR/PR at Table D-2.
[26] CR/PR at Table VI-2.
[27] CR/PR at Table VI-2.
[28] CR/PR at Table C-1.
[29] Eastman's Postconference brief at Ex. 2.
[30] CR/PR at Tables V-3 and V-4.
[31] Commerce initiated the antidumping duty investigation of DOTP from Korea based on estimated antidumping duty margins ranging from 23.70 percent to 47.86 percent. 81 Fed. Reg. 49628 (July 28, 2016).

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."[32]

The performance of the domestic industry was mixed over the POI. Capacity utilization rose consistently over the POI, from *** percent in 2013 to *** percent in 2015. In the interim period, January-March 2016, it was *** percent.[33] Production rose each year, with total production in 2015 up *** percent over 2013.[34] Domestic shipments in 2015 were *** percent higher than 2013, export shipments were relatively flat between 2013 and 2015, and net sales by quantity were *** percent greater.[35]

The number of production workers slightly declined in 2015 compared to 2014, though hours worked per production worker in 2015 increased compared to 2014, but still less than in 2013. Productivity increased by *** percent, from *** short tons per hour in 2013 to *** short tons in 2015.[36]

The domestic industry's financial performance declined over the POI despite the increases in shipments (on a quantity basis) and reductions in per unit costs. Gross profits, operating income, and net income in absolute and relative to net sales fell during the POI.[37] The declines were the greatest between 2014 and 2015. During this period, raw material costs on a per unit basis declined by *** percent, though this decline was partially offset by an increase in other factory costs.[38] As a result, unit COGS declined by *** percent.[39] The unit values of Eastman's U.S. shipments fell faster than the decline in COGS, declining by *** percent.[40] This cost-price squeeze led to the deteriorating financial condition of the domestic industry.

As discussed above, I do not find that subject imports from Korea significantly depressed or suppressed prices. During 2015, subject imports oversold the domestic product in ***.

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[32] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[33] CR/PR at Table III-2.

[34] CR/PR at Table III-2.

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

[36] Wages also declined over the POI. CR/PR at Table C-1.

[37] Gross profits declined from $*** in 2013 to $*** in 2015; operating income declined from $*** in 2013 to $*** in 2015; net income declined from $*** in 2013 to $*** in 2015; gross profits to net sales ratio declined from *** percent in 2013 to *** percent in 2015; operating income to net sales ratio declined from *** percent to *** percent; and net income to net sales ratio declined from *** percent in 2013 to *** percent in 2015. CR/PR at Table VI-1.

[38] Derived from data in CR/PR Table VI-3, and CR at VI-7, PR at VI-3.

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

[40] CR/PR at C-1.

Additionally, the domestic industry's gain in market share from 2014 to 2015, ***, did not come at the expense of subject imports from Korea, but rather from nonsubject imports. In fact, the market share of subject imports from Korea minimally increased, ***, despite ***, during the same period.[41]

The domestic industry also felt this price squeeze with its export shipments. In 2015, export shipments represented *** percent of total shipments, down from *** percent in 2014. Unit values for these shipments declined *** percent between 2014 and 2015. This change in the domestic industry's export unit values cannot be attributed to subject imports.

The deterioration in the financial condition of the industry appears to stem from declining prices. Having found that subject imports did not significantly depress or suppress prices, I do not see a correlation between the subject imports and the deteriorating condition of the U.S. industry. In light of this, I determine that subject imports did not have a significant impact on the domestic industry. For the above reasons, I determine that the record as a whole contains clear and convincing evidence that the domestic industry is not materially injured by reason of subject imports.

III. No reasonable indication of threat of material injury

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."[42] 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.[43] In making our determination, we consider all statutory threat factors that are relevant to these investigations.[44]

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

[42] 19 U.S.C. § 1677(7)(F)(ii).

[43] 19 U.S.C. § 1677(7)(F)(ii).

[44] These factors 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,

(*continued*...)

The Korean industry is export oriented, with over *** percent of Korean producer shipments exported annually over the POI. The United States represented a small but growing share of these exports, increasing from *** percent in 2013 to *** percent in 2015.[45] The United States, however, is not seen by the Korean producers as a major outlet for its exports. Respondent ALAC, a U.S. importer, reported that it was put on allocation so the supplier could meet its commitments to supply DOTP to other markets.[46]

The Korean industry also has operated at high capacity utilization rates throughout the POI. The Korean industry's capacity utilization rates range from *** in 2015 to *** percent in 2013. The Korean producers estimated that their capacity utilization in 2016 and 2017 would be over *** percent.[47] Therefore, the Korean industry does not have much additional capacity to produce DOTP to increase shipments to the United States.

U.S. importers' inventories of subject imports increased during the POI. Inventories increased from *** short tons in 2013 to *** short tons in 2015, or increasing from *** percent of apparent U.S. consumption in 2013 to *** percent of apparent U.S. consumption in 2015.[48] U.S. importers' arranged imports for the remainder of 2016 indicate that total subject imports from Korea will see a modest increase relative to 2015. However, BASF, ***,[49] announced in 2015 that it plans to commence production of DOTP in the United States in 2017.[50] The

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(…*continued*)

(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

(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).

19 U.S.C. § 1677(7)(F)(i). To organize our analysis, we discuss the applicable statutory threat factors using the same volume/price/impact framework that applies to our material injury analysis. Statutory threat factors (I), (II), (III), (V), and (VI) are discussed in the analysis of likely subject import volume. Statutory threat factor (IV) is discussed in the analysis of likely subject import price effects. Statutory factors (VIII) and (IX) are discussed in the analysis of likely impact. Statutory factor (VII) concerning agricultural products is inapplicable to this investigation.

[45] CR/PR at Table VII-3.

[46] ALAC's post conference brief, p. 7.

[47] CR/PR at Table VII-3.

[48] CR/PR at Table IV-3 and Table VII-5.

[49] CR/PR at Table IV-1.

[50] CR at I-4; PR at I-3.

opening of this new facility in the United States should reduce the demand for subject imports from Korea. This new facility will provide purchasers with an additional domestic source of DOTP, limiting the need for imports as an additional source. In light of the foregoing, I determine that there is unlikely to be a significant increase in subject imports from Korea in the imminent future.

During the POI, subject imports from Korea generally oversold the domestic like product and did not significantly depress or suppress prices. As discussed above, the driving force in pricing trends are changes in raw material costs. Because there is no indication that the pricing practices of the subject imports from Korea are likely to change, I determine that subject imports are unlikely to cause significant price effects in the imminent future.

I determined there was no reasonable indication of material injury by reason of subject imports, noting the lack of correlation between the significant increase in the volume of subject imports and the substantial deterioration of the domestic industry's financial condition. Despite its deterioration, the domestic industry increased capital expenditures and R&D expenses in 2015 relative to 2013.[51] The domestic producer did note, however, that ***.[52]

I see too little on the record to suggest any likely change in the imminent future such that the domestic industry will become vulnerable to subject imports in a way not evident during the POI. The domestic industry increased its capacity utilization, gained market share from underselling nonsubject imports, increased its productivity, increased its spending on R&D and capital expenditures and subject imports predominantly oversold the U.S. produced DOTP. I consequently determine that subject imports are not likely to have a significant impact on the domestic industry in the imminent future. For the above reasons, I determine that the record as a whole contains clear and convincing evidence that a domestic industry is not threatened with material injury by reason of subject imports.

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 DOTP from Korea that are allegedly sold in the United States at less than fair value.

[51] CR/PR at Table VI-5.
[52] CR/PR at Table VI-8.

PART I: INTRODUCTION

BACKGROUND

This investigation results from a petition filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Eastman Chemical Company ("Eastman"), Kingsport, Tennessee, on June 30, 2016, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of dioctyl terephthalate ("DOTP") [1] from Korea. The following tabulation provides information relating to the background of this investigation.[2] [3]

Effective date	Action
June 30, 2016	Petition filed with Commerce and the Commission; institution of Commission investigation (81 FR 44329, July 7, 2016)
July 20, 2016	Commerce's notice of initiation (81 FR 49628, July 28, 2016)
July 21, 2016	Commission's conference
August 12, 2016	Commission's vote
August 15, 2016	Commission's determination
August 22, 2016	Commission's views

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

[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 app. B of this report.

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.*

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*

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

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.

Organization of the report

Part I of this report presents information on the subject merchandise, alleged 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

DOTP is a colorless, almost odorless, slightly viscous liquid that is used to make resins more flexible and easier to process as plastics. The only known U.S. producer of DOTP is Eastman,[6] while the only known producers of DOTP in Korea are Aekyung Petrochemical Co., Ltd. ("Aekyung"), Hanwha Chemical ("Hanwha"), and LG Chem, Ltd. ("LG Chem"). The leading U.S. importers of DOTP from Korea are ***. Leading importers of product from Nonsubject Countries (primarily China and Mexico) include ***. U.S. purchasers of DOTP are firms that produce polyvinyl chloride ("PVC") flooring, PVC compounds, hoses, toys, and other plastic products; leading purchasers include ***.

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

[6] BASF Corp., based in New Jersey, announced in October 2015 that it would convert a BASF facility in Pasadena, Texas, from production of phthalate plasticizers to production of DOTP. The company gave an estimated production start date of early 2017. BASF, "BASF to Produce Palatinol® DOTP in North America," October 28, 2015; BASF, "BASF CPN Pasadena, Texas Fact Sheet," n.d., https://www.basf.com/documents/us/en/Fact-Sheets/PasadenaCPN-Texas-SiteFactSheet.pdf

Apparent U.S. consumption of DOTP totaled approximately *** short tons ($***) in 2015. Currently, one firm is known to produce DOTP in the United States. The U.S. producer's U.S. shipments of DOTP totaled *** short tons ($***) in 2015, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. shipments of imports from subject sources totaled *** short tons ($***) in 2015 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. shipments of imports from nonsubject sources totaled *** short tons ($***) in 2015 and accounted for *** percent of apparent U.S. consumption by quantity and by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in this investigation is presented in appendix C. Except as noted, U.S. industry data are based on Eastman's questionnaire response, which accounted for all known U.S. production of DOTP during 2015. U.S. imports are based on the questionnaire responses of 13 firms that are believed to account for virtually all U.S. imports of DOTP.[7] Foreign industry data are based on questionnaire responses of two firms. These firms' exports to the United States accounted for virtually all U.S. imports of DOTP from Korea in 2015. According to estimates requested of the responding Korean producers, the reported production accounts for the vast majority (approximately *** percent) of overall production of DOTP in Korea.

PREVIOUS AND RELATED INVESTIGATIONS

DOTP has not been the subject of any prior countervailing or antidumping duty investigations in the United States.

NATURE AND EXTENT OF ALLEGED SALES AT LTFV

On July 28, 2016, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigation on DOTP from Korea.[8] Commerce has initiated an antidumping duty investigation based on estimated dumping margins ranging from 23.70 percent to 47.86 percent for DOTP from Korea.

[7] DOTP is classified under an HTS statistical reporting number that is a "basket category" containing out-of-scope merchandise. Therefore, official import statistics cannot be used for import data or for coverage of questionnaire responses.

[8] *Dioctyl Terephthalate From the Republic of Korea: Initiation of Less-Than-Fair-Value Investigation*, 81 FR 49628, July 28, 2016.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of this investigation as follows:[9]

> The merchandise covered by this investigation is dioctyl terephthalate ("DOTP"), regardless of form. DOTP that has been blended with other products is included within this scope when such blends include constituent parts that have not been chemically reacted with each other to produce a different product. For such blends, only the DOTP component of the mixture is covered by the scope of this investigation.
>
> DOTP that is otherwise subject to this investigation is not excluded when commingled with DOTP from sources not subject to this investigation. Commingled refers to the mixing of subject and non-subject DOTP. Only the subject component of such commingled products is covered by the scope of the investigation.
>
> DOTP has the general chemical formulation $C_6H_4(C_8H_{17}COO)_2$ and a chemical name of "bis (2-ethylhexyl) terephthalate" and has a Chemical Abstract Service ("CAS") registry number of 6422-86-2. Regardless of the label, all DOTP is covered by this investigation.
>
> Subject merchandise is currently classified under subheading 2917.39.2000 of the Harmonized Tariff Schedule of the United States ("HTSUS"). Subject merchandise may also enter under subheadings 2917.39.7000 or 3812.20.1000 of the HTSUS. While the CAS registry number and HTSUS classification are provided for convenience and customs purposes, the written description of the scope of this investigation is dispositive.

[9] *Dioctyl Terephthalate From the Republic of Korea: Initiation of Less-Than-Fair-Value Investigation*, 81 FR 49628, July 28, 2016.

Tariff treatment[10]

Based upon the scope set forth by Commerce, information available to the Commission indicates that the merchandise subject to this investigation is classifiable in subheading 2917.39.20 ("Plasticizers of aromatic polycarboxylic acids, their anhydrides, halides, peroxides, peroxyacids and their derivatives"). The 2016 general rate of duty for this subheading is 6.5 percent *ad valorem*. The import duty applicable to originating goods of Korea was phased out as provided under the U.S.-Korea Free Trade Agreement. When properly claimed by the importer, the applicable duty on goods originating in Korea is free, effective on and after March 15, 2012. Subject merchandise may also enter under subheadings 2917.39.70 ("Other aromatic polycarboxylic acids and their derivatives") or 3812.20.10 ("Compound plasticizers for rubber or plastics, containing any aromatic or modified aromatic plasticizer"). The 2016 general rate of duty for these subheadings is also 6.5 percent *ad valorem*, and goods originating in Korea are eligible to be imported free of duty, pursuant to the U.S.-Korea Free Trade Agreement.

THE PRODUCT

Description and applications

DOTP is a colorless, almost odorless, slightly viscous liquid that is used to make resins more flexible and easier to process as plastics. It is a synthetic organic chemical and part of a group of chemical products, known as plasticizers, that perform this role in the manufacturing of plastics.

There are dozens of plasticizers (and an even greater number of formulations that contain a blend of plasticizers) available for commercial use, and the decision to use a particular plasticizer is influenced by the physical-chemical interaction of the plasticizer with the resin, which in the U.S. market are primarily PVC resins;[11] the desired performance characteristics of the finished product, ranging from stiff to soft; material cost; and the ease and speed of processing.[12] Frequently, a specifically formulated plasticizer will be used to fulfill detailed, unique requirements in the production process or the final product. Table I-1 below lists the most common groups of plasticizers and select products, U.S. producers, and uses within those groups.

---

[10] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

[11] Structural factors that govern compatibility or miscibility, especially molecular size, shape, and polarity, are involved. The solvency and compatibility of a plasticizer with a resin are usually directly related. Primary plasticizers, which rate high for solvency and compatibility, will resist separation from the resin by heat, liquid extraction, or physical contact. Secondary plasticizers have low solvency and compatibility, and a gradual material separation will take place. ***.

[12] ***.

Table I-1
DOTP: Plasticizers, by type, product, U.S. producer, and use

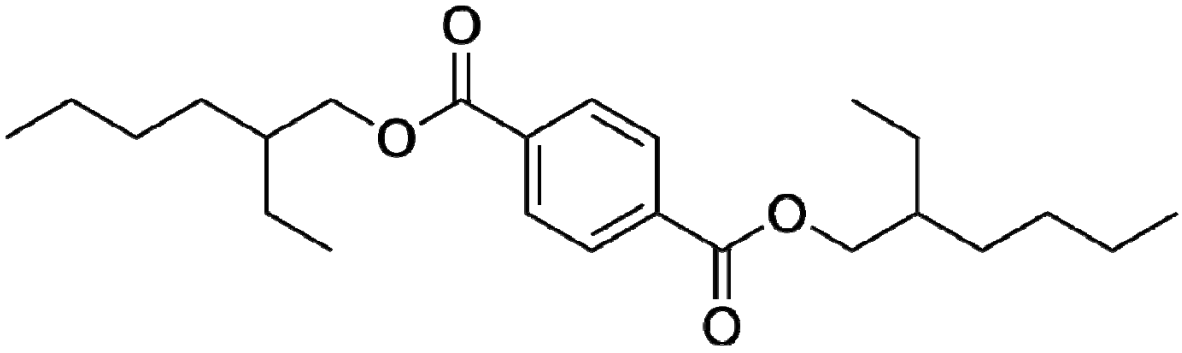
Type	Sample products[1]	U.S. producers	Uses
Nonphthalates	DOTP, DBT	Eastman	Automotive, flooring, hoses, flexible PVC
Aliphatics	DOA/DEHA, DTDA, DINA, DIDA, TEG	BASF, Eastman, ExxonMobil Chemical, Hallstar, Lanxess, Teknor Apex, Vertellus Specialties	Food film applications, outdoor exposure, high temperatures
Benzoates	Dipropylene glycol dibenzoate, diethylene glycol dibenzoate	Eastman, Emerald Performance Materials, ExxonMobil Chemical, Lanxess	Adhesives, caulks, sealants
Citrates	ATBC, TEC	Lanxess, Vertellus Specialties	Cosmetics, PVC
Epoxidized vegetable oils	ESO, ELO	Arkema, Galata Chemicals, Hallstar, Valtris Specialty Chemicals	Food packaging
Halogenated hydrocarbons	---	Chevron Phillips Chemical	Secondary
Hydrocarbons	Naphthenic	ExxonMobil Chemical	Secondary
Phosphates	Triaryl phosphates, alkyl diaryl phosphates	ICL-IP America	Flame retardation
Phthalates	DEHP/DOP, DINP, DIDP, DPHP, DTDP, BBP	BASF, ExxonMobil Chemical, Hallstar, Teknor Apex, Vertellus Specialties	General all-purpose
Polyglycols	PEG	Dow	Adhesives, ceramics, paper products
Trimellitates	TOTM, TINTM, L79TM, L810TM	Eastman, ExxonMobil Chemical, Hallstar, Lanxess, Teknor Apex, Vertellus Specialties	PVC wire insulation, automobile interiors

[1] Sample products by general chemical name, not commercial name.

Source: ***; Arkema, "Vikoflex® Epoxidized Vegetable Oils," http://www.arkema-americas.com/en/products/product-portal/range-viewer/Vikoflex-epoxidized-vegetable-oils/; BASF, "Plasticizers," http://www.plasticizers.basf.com/portal/5/en/dt.jsp?setCursor=1_221766&page=plasticizers; Chevron Phillips Chemical, "Specialty Chemicals," http://www.cpchem.com/bl/nao/en-us/Pages/SpecialtyChemicals.aspx; Dow Chemical Co., "Dow Ecolibrium™," http://www.dow.com/ecolibrium/; Eastman Chemical Co., "Products," http://www.eastman.com/Products/Pages/Product_Selector.aspx; Emerald Performance Materials, "Kalama Chemical," http://www.emeraldmaterials.com/cms/kalama/page.html?p_name=K-FLEX%20Plasticizers; ExxonMobil, "Jayflex™ Plasticizers," http://www.exxonmobilchemical.com/Chem-English/productsservices/jayflex-plasticizers.aspx; Galata Chemicals, "Products," http://galatachemicals.com/products.html#epoxy; Hallstar, "Permanent/Reactive Plasticizers," https://www.hallstar.com/areas-of-expertise/permanentreactive-plasticizers/; Lanxess, http://lanxess.us/en/home/; Teknor Apex, "Flexible PVC Compounds," https://www.teknorapex.com/flexible-pvc-compounds; Valtris Specialty Chemicals, "Our Brands and Products," http://valtris.com/brands/; Vertellus Specialties, "Morflex® Plasticizers, Sebacates, and Solvents," http://www.vertellus.com/products/plastics-polymers/morflex-plasticizers-sebacates-and-solvents.

All DOTP has the same molecular formula ($C_{24}H_{38}O_4$) and structure (figure I-1), and all DOTP can be used in applications that call for DOTP.

Figure I-1
DOTP: Molecular structure



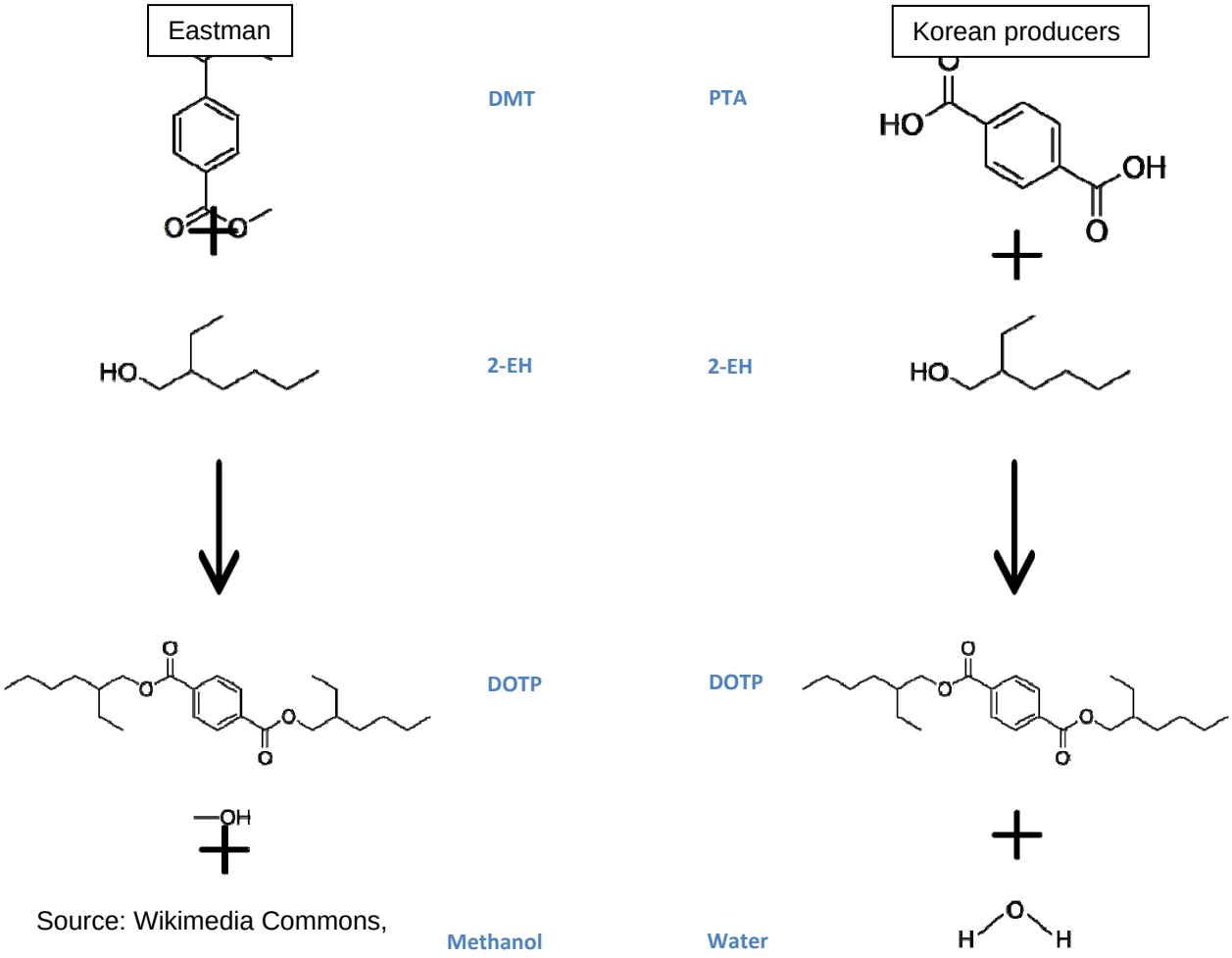
Source: Wikimedia Commons, https://commons.wikimedia.org/wiki/File:Dioctyl_terephthalate.svg, (accessed July 14, 2016).

Manufacturing processes

Eastman produces DOTP by reacting dimethyl terephthalate ("DMT") with 2-ethylhexanol ("2-EH"), with methanol as a by-product. Korean producers reportedly produce DOTP by reacting purified terephthalic acid ("PTA") with 2-EH, with water as a byproduct (figure I-2).[13]

[13] Petition, p. 9.

Figure I-2
DOTP: Mechanisms for production by Eastman and Korean producers



Source: Wikimedia Commons, https://commons.wikimedia.org/wiki/File:Dioctyl_terephthalate.svg, https://commons.wikimedia.org/wiki/File:Terephthalic_acid_200.svg, https://commons.wikimedia.org/wiki/File:2-Ethylhexanol.png, https://upload.wikimedia.org/wikipedia/commons/3/35/Methanol-2D-skeletal.png (accessed July 14, 2016); PrepChem, http://www.prepchem.com/synthesis-of-dimethyl-terephthalate/ (accessed July 14, 2016); Skeptics Stack Exchange, http://skeptics.stackexchange.com/questions/19979/do-water-molecules-change-when-you-talk-to-them (accessed July 14, 2016).

DOMESTIC LIKE PRODUCT ISSUES

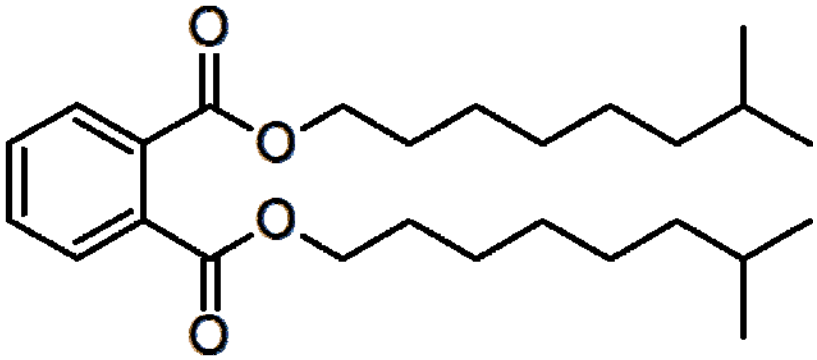
Petitioner Eastman proposes that the domestic like product should be defined as DOTP, co-extensive with Commerce's scope.[14] Respondent ALAC argues that the domestic like product should be comprised of diisononyl phthalate ("DINP") and DOTP.[15] [16]

The Commission's decision regarding the appropriate domestic product(s) that are "like" the subject imported product is based on a number of factors including: (1) physical characteristics and uses; (2) common manufacturing facilities and production employees; (3) interchangeability; (4) customer and producer perceptions; (5) channels of distribution; and (6) price. Information regarding these factors is discussed below.

Physical characteristics and uses

Petitioner Eastman reports that the physical characteristics and end uses of DINP and DOTP are "somewhat comparable." Eastman asserts that DINP and DOTP are both general purpose plasticizers, with significant use in PVC applications. However, DOTP is a different chemical than DINP with a different CAS number and different characteristics, such as molecular weight.[17] The CAS number for DINP is 28553-12-0, and its molecular formula is $C_{26}H_{42}O_4$. Its structure is presented in figure I-3.

Figure I-3
DINP: Molecular structure



Source: Wikimedia Commons, https://commons.wikimedia.org/wiki/File:Di-isononyl_phthalate.png (accessed July 14, 2016).

[14] Petition, pp. 8-10; and petitioner's postconference brief, p. 1.

[15] Respondent's postconference brief, pp. 9-16.

[16] In addition, the Commission collected data on whether subject DOTP was comparable to di-n-butyl terephthalate ("DBT"), the only non-phthalate plasticizer other than DOTP. No party argued for the inclusion of DBT in the Commission's domestic like product definition.

[17] Eastman's supplemental response, July 28, 2016.

In addition, DINP, a phthalate plasticizer, is restricted in use for children's toys and is being phased out in flooring products by major retailers, such as Lowe's, Home Depot, Menard's, and Lumber Liquidators.[18]

Respondent argues that although they are somewhat different chemically, DOTP and DINP are both colorless liquids used as general-purpose plasticizers. Respondent also points out that the petition specifically identifies DOTP as one of the products most similar to DINP and notes that DOTP has been replacing DINP in the market.[19]

Manufacturing facilities and production employees

Eastman asserts that the manufacturing processes of DOTP and DINP are "not at all the same." While Eastman itself does not manufacture DINP, it requires "entirely different inputs" than DOTP. DINP requires isononyl alcohol and phthalic anhydride as primary inputs. DOTP requires 2-EH and DMT or PTA. Eastman also reports that it would require significant capital expenditure to produce DINP on equipment designated for DOTP production, or vice versa.[20]

Respondent acknowledges that because DOTP and DINP are chemically different, the production processes are also somewhat different. However, respondent contends that the overall process of making plasticizers is very similar and the end product is used in many of the same applications.[21]

Interchangeability

Petitioner claims that DOTP and DINP are "not at all interchangeable." It argues that DINP is not an acceptable substitute for DOTP as DINP is subject to restrictions by several regulatory agencies due to its toxicological profile.[22] DOTP has a clean profile, does not appear on any restricted lists, and has received positive risk assessments from the EPA and other government agencies around the world. Petitioner claims that there are no substitutes for DOTP in terms of toxicology.[23]

Respondent argues that DOTP and DINP are highly interchangeable for the vast majority of products comprising of plasticizers. DOTP and DINP are both used as an additive in flexible PVC products, primarily in vinyl flooring and other applications, and compete for the same customers. It also argues that the regulatory environment imposes only minor limitations in interchangeability. For example, California Proposition 65[24] only requires that products

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[18] Conference transcript, p. 33 (Yobst); and Eastman's supplemental response, July 28, 2016.

[19] Respondent's postconference brief, p. 11; and Petition, p. 9.

[20] Eastman's supplemental response, July 28, 2016.

[21] Respondent's postconference brief, p. 15.

[22] Eastman's supplemental response, July 28, 2016.

[23] Conference transcript, pp. 33-34 (Yobst).

[24] California Proposition 65 is a voter-approved initiative that requires businesses to notify Californians about significant amounts of chemicals known to cause cancer or birth defects that are

(*continued*...)

containing DINP be labeled as such. In addition, ALAC points to the State of California's June 2016 "Safe Use Determination for DINP in Vinyl Flooring Products," which deemed vinyl flooring products containing 18.9 percent or less of DINP, by weight, as safe. In addition, the use of DINP is banned in the use of children's toys only, a single product category, and has no impact on the interchangeability of DINP and DOTP for any other application, including flooring, which is one of the primary applications for such chemicals.[25]

Customer and producer perceptions

Eastman reports that DINP and DOTP are "not at all comparable" in terms of customer and producer perceptions. DINP is a phthalate plasticizer, while DOTP is sold and specifically marketed as a non-phthalate plasticizer.[26] Eastman asserts that DOTP is viewed more favorably by consumers due to its clean toxicological profile. DOTP has replaced phthalate plasticizers in various applications such as textile printing, flooring, and children's toys. As mentioned previously, major retailers in the flexible flooring industry such as Home Depot, Lowe's, Menard's, and Lumber Liquidators have made public statements to phase out vinyl flooring products containing phthalate plasticizers. For example, in 2015, Home Depot instructed several suppliers to phase out their use of phthalate plasticizers in vinyl flooring sold in its stores by 2016.[27]

In its postconference brief, Respondent argues that it is unclear whether consumers perceive DOTP and DINP as distinctly different based on their environmental profiles and if they do perceive them differently, to what degree. Respondent emphasizes that producers perceive DOTP and DINP as highly interchangeable and that end users, especially producers of vinyl flooring, routinely use DOTP and DINP interchangeably.[28] However, Mr. Fisher from ALAC reported that the addition of DINP to California Proposition 65 may have accelerated the interest of moving away from phthalate plasticizers in certain applications, "But these chemicals exist because of their unique properties, and they are not exclusively or wholly interchangeable. Some products simply can't use other plasticizers."[29]

Channels of distribution

Petitioner reports that the channels of distribution through which DOTP and DINP are sold are "mostly comparable," and both are sold directly to end users and distributors.[30]

(…*continued*)
contained in certain consumer products, in homes or workplaces, or released into the environment. See http://oehha.ca.gov/proposition-65/general-info/proposition-65-plain-language, accessed July 28, 2016.

[25] Respondent's postconference brief, pp. 12-14.
[26] Eastman's supplemental response, July 28, 2016.
[27] Conference transcript, p. 33 (Yobst).
[28] Respondent's postconference brief, pp. 15-16.
[29] Conference transcript, p. 95 (Fisher).
[30] Eastman's supplemental response, July 28, 2016.

Respondent also believes that DOTP and DINP are sold through the same channels of distribution and are directly sold to the end user and to a lesser extent through distributors. Both products are sold by the metric ton and are transported by tank trucks, railcars, and flexitainers.[31]

Price

Petitioner reports that DOTP and DINP prices are "somewhat comparable." Eastman asserts that DINP and DOTP do not compete against each other, as DOTP is selected when a non-phthalate plasticizer is required. Both DOTP and DINP market prices fluctuate on a regular basis. Historically, DOTP sold at a premium to DINP because it is a non-phthalate plasticizer.

Respondent also reports that DOTP and DINP are commodity products and subject to similar market dynamics.[32]

[31] Respondent's postconference brief, p. 15.
[32] Respondent's postconference brief, p. 16.

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

U.S. MARKET CHARACTERISTICS

DOTP is a plasticizer that is viewed in the industry as a commodity product. The product goes into PVC flooring, PVC compounds, hoses, toys, and other plastic products. DOTP has experienced increased demand in the last several years as regulatory provisions and consumer perceptions have driven its use as a replacement for phthalate plasticizers.

DOTP is generally sold from inventory rather than being produced-to-order.[1] The subject product is sold to both end users and distributors.[2] Although some Korean DOTP is imported into the United States in ship cargo holds in quantities of up to 1,000 MT, U.S.-produced and imported DOTP is usually shipped in the U.S. market in quantities of 20 metric tons and is transported via tank truck, isotainer, or flexitainer.[3] DOTP is also shipped via rail cars in quantities of 80 MT. Smaller volumes are shipped from distributors.[4]

Apparent U.S. consumption of DOTP increased during 2013-15. Overall, apparent U.S. consumption in 2015 was *** percent higher by quantity and *** percent higher by value than in 2013. During January-March 2016, apparent U.S. consumption was *** percent higher by quantity and *** percent lower by value than during the same period of 2015.

CHANNELS OF DISTRIBUTION

Eastman sold mainly to *** (*** percent in 2015), and importers of DOTP from Korea sold mainly to *** (*** percent in 2015) (table II-1).

Table II-1
DOTP: U.S. producer's and importers' U.S. commercial shipments, by sources and channels of distribution, 2013-15, January-March 2015 and January-March 2016

* * * * * * *

GEOGRAPHIC DISTRIBUTION

Eastman reported selling DOTP to *** (table II-2).[5] Importers reported selling to all regions except the Mountain region ***. All responding importers reported selling to the Southeast region and between six and eight of the 11 responding importers[6] reported selling to each of the other regions. For the U.S. producer, *** percent of sales were within 100 miles of

[1] Conference Transcript, 72-73, 99.
[2] Petition, 8.
[3] Conference Transcript, 30-31.
[4] Conference Transcript, 68-69.
[5] ***.
[6] Two importers, ***, did not provide responses regarding their geographic markets.

its production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold *** percent within 100 miles of their U.S. points of shipment, *** percent between 101 and 1,000 miles, and *** percent over 1,000 miles.

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

Region	U.S. producer	Importers
Northeast	***	8
Midwest	***	8
Southeast	***	11
Central Southwest	***	6
Mountain	***	0
Pacific Coast	***	7
Other[1]	***	0
All regions (except Other)	***	0
Reporting firms	***	11

[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

Domestic production

Based on available information, the U.S. producer of DOTP has the ability to respond to changes in demand with moderate changes in the quantity of shipments of U.S.-produced DOTP to the U.S. market. The main contributing factors to this degree of responsiveness of supply are significant shipments to alternate markets from which it could divert shipments and some inventories.

Industry capacity

Domestic capacity utilization increased from 2013 to 2015.[7] Between 2013 and 2015, Eastman's production capacity grew by *** percent, while its total production grew by *** percent, increasing capacity utilization from *** percent in 2013 to *** percent in 2015. During January-March 2016, Eastman's capacity, production, and capacity utilization were higher by *** percent, *** percent, and *** percent, respectively, compared to the same period during

[7] According to Respondents, "BASF, a competitor of Petitioner, announced plans in October 2015 to begin production of DOTP in North America in 2017 at its Pasadena, Texas facility." Respondent's postconference brief, p. 4.

2015. This relatively high level of capacity utilization suggests that Eastman may have a limited ability to increase production of DOTP in response to an increase in prices.

Alternative markets

The U.S. producer's exports as a percentage of total shipments decreased from *** percent in 2013 to *** percent in 2015, as its total export shipments declined by *** percent during this time. This indicates that Eastman likely has the substantial ability to shift shipments between the U.S. market and other markets in response to price changes. Eastman identified its primary export markets as ***.

Inventory levels

The U.S. producer's inventories increased by *** percent from 2013 to 2015 and were *** percent higher in January-March 2016 than during the same period in 2015. Eastman's inventories as a percentage of total shipments declined from *** percent in 2013 to *** percent in 2015, and was *** percentage points lower in January-March 2016, compared to January-March 2015.[8] These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Eastman stated that it *** switch production from DOTP to other products, ***.[9] Eastman reported that ***. Eastman also reported that "***."

Supply constraints

Eastman reported that it has not experienced any constraints in its ability to supply the market since January 1, 2013.[10]

Subject imports from Korea[11]

Based on available information, producers of DOTP from Korea have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of DOTP to the U.S. market. The main contributing factors to this degree of responsiveness of supply are Korean producers' increasing and projected increases in capacity and production levels and large shipments to alternate markets.

---

[8] Eastman reported that *** percent of its product is sold from inventory.

[9] Eastman reported ***.

[10] Conference Transcript, 29.

[11] For data on the number of responding foreign firms and their share of U.S. imports from Korea, please refer to Part I, "Summary Data and Data Sources."

Industry capacity

Korean production capacity increased by *** percent and Korean producers' overall production increased by *** percent from 2013 to 2015. This contributed to a decrease in capacity utilization from *** percent in 2013 to *** percent in 2015. During January-March 2016 compared to the same period in 2015, capacity, production, and capacity utilization were *** percent, *** percent, and *** percent higher, respectively. Compared to 2015, capacity, production, and capacity utilization are all projected to increase by an additional *** percent, *** percent, and *** percent, respectively, by the end of 2016. The responding Korean producers, Aekyung and LG Chem, estimated that their combined production accounts for the *** majority (*** percent) of Korean production. The relatively high level of capacity utilization reported by these firms suggests that Korean producers may have a limited ability to increase production of DOTP in response to an increase in prices.

Alternative markets

Korean producers' exports as a percentage of total shipments increased from *** percent in 2013 to *** percent in 2015. Korean producers' total exports also increased by *** percent during this time – from *** short tons in 2013 to *** short tons in 2015. The United States became a more important market for Korean DOTP exports from 2013 to 2015 as shipments to the United States grew by *** short tons. Shipments to Korean producers' other export markets (primarily ***) increased by a larger volume (*** short tons) but decreased as a share of total Korean exports from *** percent in 2013 to *** percent in 2015. These significant shipments to third country markets indicate that Korean producers likely may have a large ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

Korean producers' inventories increased from *** short tons in 2013 to *** short tons in 2014 before decreasing to *** short tons in 2015. Korean producers' inventories as a share of total shipments decreased from *** percent in 2013 to *** percent in 2015. *** reported holding inventory in the United States. These inventory levels suggest that Korean producers may have a limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

*** responding Korean producers stated that *** switch production from DOTP to other products. *** reported that ***."[12]

[12] ***. http://www.lgchem.com/global/pvc/plasticizers/product-detail-PDBCB000 accessed August 3, 2016.

Nonsubject imports

The largest sources of nonsubject imports during 2013-15 were China and Mexico. Nonsubject imports represented *** percent of total reported imports in 2015, representing a decrease of *** percentage points since 2013.

U.S. demand

Based on available information, the overall demand for DOTP is likely to experience small-to-moderate changes in response to changes in price. The main contributing factors are the somewhat limited substitutability in certain applications and DOTP's limited share of the cost of most end-use products. Demand elasticity appears to be somewhat limited by regulatory limits on substitute products.

End uses

U.S. demand for DOTP depends on the demand for U.S.-produced downstream products. Reported end uses include PVC and other types of flooring, other PVC products (such as PVC compounding and flexible PVC), hose, wire and cable, toys, ink, coatings, adhesives, sealants and elastomers.

Cost share

DOTP accounts for a varying share of the cost of the end-use products in which it is used. Reported average cost shares for some end uses were as follows:

- Flooring: *** percent
- PVC compounding: *** percent
- PVC flooring: *** percent
- Hose: *** percent
- Toys: *** percent
- Other PVC products: *** percent

Business cycles

*** three of 12 importers indicated that the market is subject to business cycles. Specifically, *** reported that DOTP was subject to building and construction industry cycles, *** reported that demand for flooring and compounding products are usually seasonal, and *** reported that demand tends to be higher starting in early spring and then tends to decrease in the final months of each year. *** also reported that DOTP experiences "seasonal peaks," but did not elaborate.

*** two of 12 importers reported that the DOTP market is subject to distinct conditions of competition. *** three importers also reported that there has been a change in the DOTP market since 2013. Specifically, *** reported that an increase in the substitution of phthalate plasticizers with non-phthalates, including DOTP, has resulted in an increase in global DOTP

production, particularly by Korean producers, and *** reported that global production of DOTP has increased beyond demand. *** also reported that DOTP "is facing more competition from bio-plasticizers and renewed interest in DINP," *** reported that prices have fallen significantly as production has increased, and *** reported that the Korean producers recognized an opportunity in the U.S. DOTP market when demand for DINP collapsed. *** added that "the Koreans enjoy the lowest PX/PTA prices in the world due to the overcapacity of those products in Korea."

Demand trends

Most firms reported an increase in demand for DOTP both inside and outside the United States since January 1, 2013 (table II-3). Among the firms reporting an increase in U.S. demand, *** indicated that the demand for DOTP has increased substantially since 2010 due to the industry trend of replacing phthalate plasticizers (such as DINP and DEHP) with non-phthalate plasticizers (such as DOTP). According to ***, "these ortho-phthalates are currently banned from use in toys for children under three years of age by the U.S. CPSC (Consumer Product Safety Commission)… Additionally, both DINP and DEHP are California Proposition 65 listed chemicals[13]… {whereas} DOTP has been favorably reviewed by several U.S. and other nations' authorities as an alternative to ortho-phthalates in toys, medical devices, and other common goods." All eight importers that reported an increase in U.S. demand for DOTP noted the shift away from phthalate plasticizers as the primary reason. *** added that DOTP is cheaper than other subsitutes. The importer that reported a decrease in demand for DOTP stated that "{the} local price is very competitive."

Table II-3
DOTP: Firms' responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producer	***	***	***	***
Importers	8	0	1	3
Demand outside the United States				
U.S. producer	***	***	***	***
Importers	6	2	1	2

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

[13] California Proposition 65 is a voter-approved initiative that requires businesses to notify Californians about significant amounts of chemicals known to cause cancer or birth defects that are contained in certain consumer products, in homes or workplaces, or released into the environment. See http://oehha.ca.gov/proposition-65/general-info/proposition-65-plain-language, accessed July 28, 2016.

Substitute products

Reported substitutes for DOTP include DINP (in PVC applications, flooring, wire and cable, plasticizers, inks, coatings, and consumer goods), DPHP (in flooring, vinyl film, flexible PVC, rubber, and plasticizers), DOP (in flexible PVC, rubber, and plasticizers), bio-plasticizer (in flooring), dibutyl phthalate, and dioctyl phthalate (in inks, coatings, and plastics), and linear phthalates (in plasticizers).

SUBSTITUTABILITY ISSUES

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

Lead times

DOTP is primarily sold from inventory. U.S. producer Eastman reported that *** percent of its commercial shipments were ***. The typical lead time was *** days and *** percent were produced-to-order. Importers reported that *** percent of their shipments were sold from inventory, *** percent were produced-to-order, and *** percent were sold from the foreign producers' inventories, with lead times ranging from 5-20 days, 40-60 days, and 7-159 days, respectively.

Factors affecting purchasing decisions

Purchasers responding to lost sales and lost revenue allegations[14] were asked to identify the main purchasing factors their firm considered in their purchasing decisions for DOTP. Cumulatively, the most often cited top three factors firms consider in their purchasing decisions for DOTP were price (7 firms), quality (6 firms), and service (4 firms) (table II-4). Quality was the most frequently cited first-most important factor (cited by 4 firms), and price was the most frequently reported second-most important and third-most factor (cited by 4 firms and 3 firms, respectively).

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

Table II-4
DOTP: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor[1]

Factor	First	Second	Third	Total
Quality	4	2		6
Price / Cost		4	3	7
Service	1	1	2	4
Performance	1			1
Security of supply	1			1
Delivery	1			1
Convenience	1			1
Technical qualification	1			1
Availability	1			1
Dependability			1	1
Lead time			1	1
Other[2]			2	2

[1] The sum of responses down (or across) may not add up to the total number of responding firms, as some firms reported more than one factor in the first ranking.
[2] Other factors listed included "competition" and "type of packaging (bulk truck vs. flexibag vs. isocontainer)."

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

Purchaser *** added that ***. It reported that it was "***."

Comparison of U.S.-produced and imported DOTP

In order to determine whether U.S.-produced DOTP can generally be used in the same applications as imports from Korea, the U.S. producer and importers were asked whether the products can "always," "frequently," "sometimes," or "never" be used interchangeably. As shown in table II-5, U.S. producer Eastman reported that DOTP from the United States, Korea, and China can "always" be used interchangeably, while DOTP from all other sources can "frequently" be used interchangeably with DOTP from these countries. A majority of importers reported that all DOTP can be used interchangeably, regardless of source.

Table II-5

DOTP: Interchangeability between DOTP produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. Korea	***	***	***	***	7	3	0	0
U.S. vs. nonsubject countries:								
U.S. vs. China	***	***	***	***	6	2	0	0
U.S. vs. other nonsubject	***	***	***	***	6	2	0	0
Korea vs. nonsubject countries:								
Korea vs. China	***	***	***	***	5	2	0	0
Korea vs. other nonsubject	***	***	***	***	5	2	0	0
Nonsubject country comparisons:								
China vs. other nonsubject	***	***	***	***	5	2	0	0

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

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

In addition, the U.S. producer and importers were asked to assess how often differences other than price were significant in sales of DOTP from the United States, subject, or nonsubject countries. As seen in table II-6, U.S. producer Eastman reported that differences other than price are "***" important ***. Importers' responses were varied: a plurality of importers reported that differences other than price were "sometimes" important, while three of ten importers reported that differences other than price were "always" important when comparing U.S. product to Korean product and three of nine importers reported that differences other than price were "always" important when comparing U.S. product to any other source. Two importers responded that differences other than price are "never" important for each of the country comparisons.

Table II-6

DOTP: Significance of differences other than price between DOTP produced in the United States and in other countries, by country pair

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. Korea	***	***	***	***	3	1	4	2
U.S. vs. nonsubject countries:								
U.S. vs. China	***	***	***	***	3	0	4	2
U.S. vs. other nonsubject	***	***	***	***	3	0	4	2
Korea vs. nonsubject countries:								
Korea vs. China	***	***	***	***	2	0	4	2
Korea vs. other nonsubject	***	***	***	***	1	0	4	2
Nonsubject country comparisons:								
China vs. other nonsubject	***	***	***	***	1	0	4	2

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

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

PART III: U.S. PRODUCER'S 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 dumping margins was 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/or *Part VI* and (except as noted) is based on the questionnaire response of Eastman that accounted for all known U.S. production of DOTP during 2015.[1]

U.S. PRODUCER

The Commission issued a U.S. producer questionnaire to one firm based on information contained in the petition. Petitioner Eastman provided useable data on its productive operations. Staff believes that Eastman represents all known U.S. production of DOTP.

Table III-1 lists the U.S. producer of DOTP, its production locations, position on the petition, and share of total production.

Table III-1
DOTP: U.S. producer, its position on the petition, production locations, and share of reported production, 2015

Firm	Position on petition	Production location(s)	Share of production (percent)
Eastman Chemical Company	Support	Kingsport, TN Texas City, TX	100.0
Total			100.0

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

Eastman is not owned, in whole or in part, by any other firm, and is not related to any U.S. importers or foreign producers of subject merchandise. In addition, as discussed in greater detail below, Eastman did not directly import the subject merchandise nor purchase the subject merchandise from U.S. importers.

---

[1] BASF, based in New Jersey, announced in October 2015 that it would convert a BASF facility in Pasadena, Texas, from production of phthalate plasticizers to production of DOTP. The company gave an estimated production start date of early 2017. BASF, "BASF to Produce Palatinol® DOTP in North America," October 28, 2015; BASF, "BASF CPN Pasadena, Texas Fact Sheet," n.d., https://www.basf.com/documents/us/en/Fact-Sheets/PasadenaCPN-Texas-SiteFactSheet.pdf. Fluor Corp., based in Texas, announced in February 2016 that it had been awarded an engineering and construction management contract by BASF for the Pasadena facility conversion project. Fluor, "Fluor Awarded EPCM Work for BASF Chemicals Project," February 18, 2016.
***. ***.

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-2 and figure III-1 present Eastman's production, capacity, and capacity utilization. Capacity and production increased between 2013 and 2015, by *** percent and *** percent, respectively. In addition, capacity and production were higher in January-March 2016 when compared with January-March 2015. In 2011, Eastman acquired Sterling Chemical, Inc.'s plasticizer manufacturing assets in Texas City, Texas and converted the equipment to produce DOTP, which began in April 2012.[2] Since 2013, Eastman reported modest capacity expansions in their Kingsport, Tennessee and Texas City, Texas facilities, most of which involved eliminating bottlenecks in the production process. In September 2014, Eastman announced the completion of its DOTP capacity expansion in its Texas City, Texas facility, which increased Eastman's total DOTP capacity by approximately 15 percent, and announced plans for further DOTP capacity expansion by mid-2016.[3] However, Eastman has put on hold its plans for further expansion due to the deteriorating profitability it attributes to low-priced Korean imports.[4]

Table III-2
DOTP: U.S. producer's production, capacity, and capacity utilization, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Figure III-1
DOTP: U.S. producer's production, capacity, and capacity utilization, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Eastman's production is calculated ***. Petitioner reports that efficient DOTP production requires continuous operations, 24 hours per day, seven days per week. Although Eastman can adjust this process to account for weak demand, it causes inefficiencies that raise production costs.[5]

The Commission asked Eastman to report constraints on its capacity to produce DOTP. Eastman stated that ***. Eastman reported that switching its production of DOTP to other chemicals would take extensive modification, capital investment, and time. In general, converting a dedicated chemical plant to manufacture another product would take millions of dollars to implement.[6]

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[2] Conference transcript, pp. 16-17 (Parker).
[3] "Eastman Plasticizer Expansion Complete," News Release, accessed August 3, 2016, http://www.eastman.com/Company/News_Center/2014/Pages/Eastman-Plasticizer-Expansion-Complete.aspx.
[4] Conference transcript, pp. 18-19 (Parker), and 29 (Cullen).
[5] Petition, p. 15.
[6] Conference transcript, pp. 50-51 (Cullen).

U.S. PRODUCER'S U.S. SHIPMENTS AND EXPORTS

Table III-3 presents Eastman's U.S. shipments, export shipments, and total shipments. The quantity and value of Eastman's U.S. shipments increased from 2013 to 2015 by *** percent and *** percent, respectively, and were higher in January-March 2016 than in January-March 2015. However, the unit values of U.S. shipments decreased by *** percent. Eastman reported exporting to ***. The quantity of exports increased slightly between 2013 and 2015, peaking in 2014 by *** percent before decreasing in 2015 to levels similar to 2013. However, the value of exports decreased by *** percent between 2013 and 2015.

Table III-3
DOTP: U.S. producer's U.S. shipments, export shipments, and total shipments, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

U.S. PRODUCER'S INVENTORIES

Table III-4 presents Eastman's end-of-period inventories and the ratio of these inventories to Eastman's production, U.S. shipments, and total shipments. Eastman's inventories increased by *** percent from 2013 to 2015. Inventories relative to U.S. shipments decreased by *** percentage points from 2013 to 2015, while inventories to total shipments decreased by *** percentage points.

Table III-4
DOTP: U.S. producer's inventories, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

U.S. PRODUCER'S IMPORTS AND PURCHASES

Eastman did not import or purchase DOTP during the period for which data were collected.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-5 shows Eastman's employment-related data.

Table III-5
DOTP: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 21 firms believed to be importers of subject DOTP, as well as to all U.S. producers of DOTP.[1] Usable questionnaire responses were received from 13 companies, while 8 companies responded that they do not import DOTP. Responding companies represented virtually all U.S imports of DOTP from Korea and all other sources. Table IV-1 lists all responding U.S. importers of DOTP from Korea and other sources, their locations, and their shares of U.S. imports, in 2015.

Table IV-1
DOTP: U.S. importers, their locations, and share of total imports by source, 2015

Firm	Headquarters	Share of imports by source (percent)		
		Korea	All other sources	Total imports
ALAC International, Inc.	New York, NY	***	***	***
BASF Corporation[1]	Florham Park, NJ	***	***	***
Chembank International, Inc.[2]	Closter, NJ	***	***	***
Greenchem Industries, LLC	West Palm Beach, FL	***	***	***
ICC Chemical	New York, NY	***	***	***
Innua USA Inc.[3]	Wilmington, DE	***	***	***
LG Chem America, Inc.[4]	Atlanta, GA	***	***	***
MC International, LLC DBA Miami Chemical	Miami, FL	***	***	***
Mexichem Specialty Compounds Inc.[5]	Leominster, MA	***	***	***
Oxea Corporation[6]	Dallas, TX	***	***	***
Soyventis North America LLC	Jersey City, NJ	***	***	***
Tricon International Ltd. (DBA Tricon Energy Ltd.)[7]	Houston, TX	***	***	***
Univar USA Inc.[8]	Downers Grove, IL	***	***	***
Total		***	***	***

[1] BASF Corporation is ***.
[2] Chembank International, Inc. is ***.
[3] Innua USA Inc. is ***.
[4] LG Chem America, Inc is ***.
[5] Mexichem is ***.
[6] Oxea Corporation is ***.
[7] Tricon International Ltd. is ***.
[8] Univar USA Inc. is ***.

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

[1] The Commission issued questionnaires to those firms identified in the petition, along with firms that, based on a review of data provided by ***, may have accounted for more than one percent of total imports under HTS subheading 2917.39.20 in 2015.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of DOTP from Korea and all other sources.

Table IV-2
DOTP: U.S. imports, by source, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Imports of DOTP from Korea increased overall by *** percent from 2013 to 2015, and were *** percent higher during January to March 2016 than during January to March 2015. As a share of total imports, subject imports increased from *** percent in 2013 to *** percent in 2015. Subject imports accounted for *** percent of total imports during January to March 2016 compared to *** percent of total imports during January to March 2015. The average unit value of subject imports decreased by *** percent from 2013 to 2015, and were *** percent lower during January to March 2016 than during January to March 2015. Responding U.S. importers indicated that the top nonsubject sources of imports were China and Mexico. Other nonsubject sources of imports include ***.

Figure IV-1
DOTP: U.S. import volumes and prices, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

U.S. imports from nonsubject countries decreased *** percent, by quantity, from 2013 to 2015, and were *** percent lower during January to March 2016 than during January to March 2015.

The ratio of subject import volume to U.S. production increased overall from *** percent in 2013 to *** percent in 2015. The ratio was *** percent during January to March 2015 compared to *** percent during January to March 2016.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[2] Negligible imports are generally defined in the Tariff Act of 1930, 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

[2] 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)).

petition or the initiation of the investigation. Imports from Korea accounted for *** percent of total imports of DOTP by quantity from April 2015 to March 2016.

APPARENT U.S. CONSUMPTION AND MARKET SHARES

Table IV-3 presents data on apparent U.S. consumption and U.S. market shares for DOTP. Apparent U.S. consumption based on quantity increased *** percent from 2013 to 2015, and was *** percent higher during January to March 2016 than during January to March 2015. Apparent U.S. consumption based on value increased by *** percent from 2013 to 2015, but was *** percent lower during January to March 2016 than during January to March 2015.

These data show that U.S. producer Eastman's market share based on quantity decreased by *** percentage points from 2013 to 2015, and was *** percentage points higher during January to March 2016 than during January to March 2015. Eastman's market share, based on value, decreased by *** percentage points from 2013 to 2015, but was *** percentage points higher during January to March 2016 than during January to March 2015. The market share of DOTP products from Korea, by quantity, increased by *** percentage points from 2013 to 2015, but was *** percentage points lower during January to March 2016 than during January to March 2015.

Table IV-3
DOTP: U.S. shipments of domestic product, U.S. shipments of imports, apparent U.S. consumption, and market shares, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Figure IV-2
DOTP: Apparent consumption, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The primary raw materials used to manufacture DOTP are 2-ethylhexanol (2-EH), dimethyl terephthalate (DMT), and purified terephthalic acid (PTA). The petitioner stated during the conference that it uses 2-EH and DMT while most other DOTP producers use 2-EH and PTA.[1] The petitioner claimed that it was one of the last producers of DMT.[2] Most other DOTP producers use PTA because it is more readily available in the market.

All of these raw materials experienced falling prices in 2015.[3] The petitioner did not provide PTA pricing data for the period but stated during the staff conference that it is a petrochemical derivative like DMT and that its price also tracks changes in oil prices. According to ***, the price of 2-EH rose by *** percent from 2013 to 2014 before falling by *** percent from 2014 to 2015. Overall, the price of 2-EH fell by *** percent from 2013 to 2015.

DMT experienced price declines in each year of the period of investigation: down by *** percent from 2013 to 2014 and down by *** percent from 2014 to 2015. Overall, the price of DMT fell by *** percent from 2013 to 2015.

The petitioner's raw materials costs as a share of its cost of goods sold (COGS) fluctuated during 2013-15: *** percent in 2013, *** percent in 2014, and *** percent in 2015. Additionally, their share of COGS in the interim period, January through March, was lower, *** percent, in 2016 than the *** percent recorded in the first quarter of 2015.

U.S. inland transportation costs

The U.S. producer and nine of 11 responding importers reported that they typically arrange transportation to their customers.[4] The U.S. producer reported that its U.S. inland transportation costs accounted for approximately *** percent while importers reported costs of 2 to 10 percent.

---

[1] The petitioner stated that most major producers of DOTP use one of two methods. The method that Eastman uses requires DMT. Other producers use the method that uses PTA.

[2] Conference Transcript, 23.

[3] Conference Transcript, 29-30.

[4] Two importers reported that they did not arrange transportation to their customers and two importers did not answer the question.

PRICING PRACTICES

Pricing methods

*** the U.S. importers reported using transaction-by-transaction negotiations and contracts. ***. As presented in table V-1, the majority of U.S. importers sell using transaction-by-transaction negotiations.

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

Method	U.S. producer	Importers
Transaction-by-transaction	***	12
Contract	***	2
Set price list	***	0
Other	***	0

[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.

*** the U.S. importers reported selling *** of their product in the spot market. *** the U.S. importers sell *** their product under contracts ***. Table V-2 presents the distribution by type of sale of the U.S. producer's and importers' reported 2015 U.S. commercial shipments of DOTP.

Table V-2
DOTP: U.S. producer's and importers' shares of U.S. commercial shipments by type of sale, 2015

* * * * * * *

Sales terms and discounts

*** the U.S. importers typically quote prices on a delivered basis. Eastman offers *** discounts. *** U.S. importers offer ***. One importer *** reported offering ***. Eastman and U.S. importers reported standard sales terms of net 30 days. Two importers reported that their terms are either net 30 days or net 60 days depending on the customer. One importer reported that its terms are net *** days.

PRICE DATA

The Commission requested Eastman and the U.S. importers to provide quarterly data for the total quantity and f.o.b. value of the following DOTP products shipped to unrelated U.S. customers during January 2013-March 2016.

Product 1.--Dioctyl terephthalate in 20 MT containers.

Product 2.--Dioctyl terephthalate in bulk.

Eastman and 13 importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[5] [6] Pricing data reported by these firms accounted for *** percent of U.S. producer shipments of DOTP and *** percent of U.S. shipments of subject imports from Korea in 2015.

Price data for products 1 and 2 are presented in tables V-3 and V-4 and figures V-1 and V-2. Prices for nonsubject country China are presented in Appendix D.

Table V-3

DOTP: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

* * * * * * *

Table V-4

DOTP: Weighted-average f.o.b. prices and quantities of domestic and imported product 2[1] and margins of underselling/(overselling), by quarter, January 2013-March 2016

* * * * * * *

Figure V-1

DOTP: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2013-March 2016

* * * * * * *

[5] 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.

[6] ***.

Figure V-2
DOTP: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2013-March 2016

* * * * * * *

Price trends

Prices decreased during January 2013-March 2016. Table V-5 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from *** to *** percent during January 2013-March 2016 while subject import price decreases ranged from *** to *** percent.

Table V-5
DOTP: Summary of weighted-average f.o.b. prices for products 1 and 2 from the United States and Korea

* * * * * * *

Price comparisons

As shown in table V-6, prices for DOTP imported from Korea were below those for U.S.-produced product in *** of *** instances (*** short tons); margins of underselling ranged from *** to *** percent. In the remaining *** instances, prices for DOTP from Korea were between *** and *** percent above prices for the domestic product.

Table V-6
DOTP: Instances of underselling/overselling and the range and average of margins, by product, January 2013-March 2016

* * * * * * *

LOST SALES AND LOST REVENUE

The Commission requested the U.S. producer of DOTP to report purchasers with which it experienced instances of lost sales or revenue due to competition from imports of DOTP from Korea during January 2013-March 2016. U.S. producer Eastman reported that it ***. Eastman identified 11 firms where it lost sales or revenue (***). Eastman was also asked to provide information regarding the timing, method of sale, and product type related to the lost sales and lost revenue allegations. Eastman listed ***. The methods of sale listed by Eastman were ***.

Staff contacted 11 purchasers and received responses from seven of them. Responding purchasers reported purchasing a total of *** short tons of DOTP during 2013-15, including *** short tons in 2013, *** short tons in 2014, and *** short tons in 2015 (table V-7). During 2015, purchasers purchased *** percent from U.S. producers, *** percent from Korea, and ***

percent from nonsubject countries.[7] Of the responding purchasers, two reported decreasing purchases from domestic producers, four reported increasing purchases, and one reported no change.[8] Regarding explanations for increasing purchases of domestic product, *** reported that it "***." Regarding explanations for decreasing purchases of domestic product, *** reported that it "***," and *** reported that it "***."

Table V-7
DOTP: Purchasers' responses to purchasing patterns

* * * * * * *

Of the seven responding purchasers, six reported that since 2013 they had shifted purchases from U.S.-produced to imported Korean DOTP. Five purchasers reported that they had increased their purchases from Korea since 2013. Three of these purchasers reported that price was a primary reason for the shift; one reported shifting ***, and another reported shifting *** (table V-8). Other identified reasons for shifting from the U.S. producer were ***, and "***."

Of the seven responding purchasers, four reported that the U.S. producer had reduced prices in order to compete with lower-priced imports from subject countries, two reported that they had not, and one reported that it did not know (table V-9). Among the purchasers reporting that the U.S. producer had reduced prices, one reported price reductions of *** percent, one reported price reductions of *** percent, and one reported price reductions of *** percent. In describing the price reductions, *** reported that "***."

Table V-8
DOTP: Purchasers' responses to shifting supply sources

* * * * * * *

Table V-9
DOTP: Purchasers' responses to U.S. producer price reductions

* * * * * * *

[7] Of the seven responding purchasers, *** reported purchasing DOTP from "unknown source" countries ***. The *** that reported purchasing from another country besides the United States and Korea, ***, reported purchasing from "Europe."

[8] No purchasers reported fluctuating purchases, and no purchasers reported that they did not purchase any domestic product.

In responding to the lost sales and lost revenue survey, some purchasers provided additional information on purchases and market dynamics.

*** stated the following: "***."
*** stated the following: "***."
*** stated the following: "***."
*** stated the following: "***."
*** stated the following: "***."

PART VI: FINANCIAL EXPERIENCE OF THE U.S. PRODUCER

BACKGROUND

Eastman, the sole known U.S. producer of DOTP, provided useable financial data on its operations producing and selling DOTP and DBT.[1] Eastman is a global specialty chemical company that produces a wide range of advanced materials, chemicals, and fibers.[2] The firm has produced DOTP since 1974 at its plant at Kingsport, Tennessee and since April 2012 at its plant at Texas City, Texas.[3] As highlighted in the firm's public reports, Eastman anticipates growth in flexible plastic products used in sensitive applications. In these applications because of regulatory and consumer concerns Eastman's DOTP is perceived to be a primary non-phthalate alternative to phthalate plasticizers traditionally used in flooring, toys, child care articles, medical packaging and devices, and food contact items.[4]

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[1] Eastman has a fiscal year that ends on December 31. The data reported in the trade and financial sections of its questionnaire response reconciled.

[2] Overall, Eastman reported sales revenue of $9.6 billion and earnings from continuing operations of $848 million in 2015. The unit producing plasticizers, including DOTP, was included in Eastman's Adhesives & Plasticizers ("A&P") reporting segment through the end of fiscal year 2015. "Adhesives Resins" are mostly composed of hydrocarbon resins and rosin resins. "Plasticizers" are primarily non-phthalate such as DOTP (Eastman 168®) and phthalate plasticizers and a range of niche non-phthalate plasticizers. Eastman's 2015 Form 10-K, p. 11 (as filed). The A&P segment reported sales of $1.2 billion and operating earnings of $239 million in 2015, accounting for approximately 12.6 percent of Eastman's total sales by segment and 14.6 percent of Eastman's total operating earnings by segment. Eastman's 2015 Form 10-K, p. 125-126 (as filed). Plasticizers accounted for approximately 46 percent of segment sales in 2015 (down slightly from 47 percent in 2014 and 48 percent in 2013). Eastman's 2015 Form 10-K, p. 11 (as filed).

According to testimony at the staff conference, DOTP accounts for the largest share of sales of Eastman's non-phthalate plasticizers. Conference transcript, p. 80 (Cullen). In its postconference brief, Eastman reported that its global sales revenue from all non-phthalate plasticizers, including DOTP, was $*** in 2015. Postconference brief of Eastman, exh. 2, responses to staff questions, p. 2. Based on this, DOTP accounted for approximately *** percent of non-phthalate plasticizer sales in 2015.

In January 2016, Eastman changed its organizational and management structure and the unit producing plasticizers was placed under the reporting segment Chemical Intermediates ("CI"). This was done to better align products and inputs with similar chemistry. Eastman's 2015 Form 10-K, p. 8 (as filed).

[3] Conference transcript, p. 16 (Parker). Eastman purchased the Texas City plant from Sterling Chemical in 2011 in order to increase production of non-phthalate plasticizers, primarily DOTP. Eastman modified the layout and plant equipment and started producing DOTP at the Texas City plant in April 2012. Conference transcript, p. 49 (Cullen).

[4] Eastman's 2015 Form 10-K, p. 12 (as filed). In this regard Eastman stated that it has expanded its Eastman 168® non-phthalate plasticizers manufacturing capacity at its Texas City, Texas site to meet expected plasticizer demand growth and has options to further expand this capacity.

(*continued*...)

OPERATIONS ON DOTP

Eastman provided data on its ***. Table VI-1 presents Eastman's reported data on operations in relation to DOTP over the period examined.

Table VI-1
DOTP: Results of operations of Eastman, fiscal years 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Table VI-1 presents the value of raw material costs before any offset for byproduct revenues of byproduct methanol. Table VI-2 provides a calculation of raw material costs, net of byproduct revenues. These data differ *** from those presented in table VI-1.

Table VI-2
DOTP: Eastman's raw material costs net of byproduct revenues, fiscal years 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Table VI-3 shows the change in average unit values for DOTP data presented in table VI-1 between yearly and interim periods. The unit values here differ somewhat in that raw material costs are net of byproduct revenues as calculated in table VI-2. Most of the numbers shown are negative, indicating a downward trend, namely, that the number in the suceeding period was lower than in the preceeding period.

Table VI-3
DOTP: Change in unit values of Eastman's profit and loss data, fiscal years 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Net sales

Based on the data in table VI-1, total net sales by quantity increased steadily from 2013 to 2015 and were greater in January-March 2016 ("interim 2016") than in January-March 2015 ("interim 2015"). Total net sales by value fell irregularly from 2013 to 2015 and were lower in interim 2016 than in the period one year earlier.[5] The average unit value of total net sales

(…*continued*)

With regard to the regulatory environment and consumer concerns, see Dr. Steve Cullen, "Global Plasticizer Update," SPI Flexible vinyl Products Conference, July 2012 and Scott Boito, "Plasticizers Regulatory Update," February 2014. EDIS file under research on July 20, 2016.

[5] In 2015, ***. Postconference brief of Eastman, exh. 2, responses to staff questions, p. 1.

(dollars per short ton) fell between the full yearly periods (***) and was *** lower in interim 2016 than in interim 2015. These changes were indicated in table VI-3.

Costs and expenses

Based on the data in table VI-1, total COGS rose irregularly from 2013 to 2015 and was *** lower in interim 2016 than in interim 2015. The ratio of COGS to total net sales rose steadily from 2013 to 2015 and was higher in interim 2016 than in interim 2015. This is an indication that sales values declined to a greater extent than did the value of total COGS (table VI-3). The average unit value of COGS fell irregularly from 2013 to 2015 and was lower in interim 2016 than in interim 2015. This is an indication that costs were spread over greater sales quantities.

Raw material costs before byproduct offset increased from 2013 to 2014 before falling in 2015, and were lower in interim 2016 than in interim 2015. Expressed on a per-unit basis, raw material costs generally declined (as sales quantities increased) between the full yearly periods as well as between interim periods; however, these costs increased as a share of sales value. Raw material costs (and selling prices) fluctuated with the prices of petrochemical products according to testimony at the staff conference.[6] Eastman personnel testified that the firm produces DOTP by combining dimethyl terephthalate (DMT) with 2-ethylhexanol (2-EH) in a transesterification process, and that Eastman produces both input raw materials.[7] Methanol is generated as a byproduct during the production process for DOTP and is reclaimed and reused to produce DMT.

The *** in the category of other factory costs ***.[8]

---

[6] Conference transcript, p. 29 (Cullen).

[7] Conference transcript, p. 23 (Cullen). Methanol is combined with purified teriphthalic acid (PTA) (both of which are made at the Kingsport, Tennessee plant) to produce DMT . Propylene is combined with certain other chemicals to produce 2-EH at Longview, Texas and is imported from Eastman's Singapore plant. Conference transcript, p. 23 (Cullen) and Petition, Exh. Gen-12, flowchart of production process. As explained at the staff conference, the inputs for DMT, PTA, and 2-EH are petrochemical derivatives. DMT and PTA are produced from paraxylene, itself produced from crude petroleum refining. 2-EH's main input is propylene, which is produced as a byproduct of oil refining or by cracking naphta or shale gas or derived from natural gas or syngas. Conference transcript , pp. 66-67 (Cullen).

[8] Email to Commission staff from ***. See EDIS filing, Eastman revision 1 on 7-19. Also, Postconference brief of Eastman, exh. 2, responses to staff questions, pp. 2-3.

Eastman hedges the costs of certain raw material and energy sources as well as sales of certain commodity products, including propane, ethane, natural gas, paraxylene, ethylene, and benzene. Eastman enters into options and forward contracts and designates these contracts as cash flow hedges. The mark-to-market gains or losses on qualifying hedges are included in cost of sales (for commodity purchases) and sales (for commodity sales) in the period during which the hedged transaction affects earnings. In 2015, Eastman's charge to its total cost of sales of all products from hedging was $217 million. Eastman's 2015 Form 10-K, pp. 98-100 (as filed).

Profitability

Based on the data in table VI-1, gross profits of Eastman *** from 2013 to 2015 and was *** in interim 2016 than in interim 2015, which may be attributed to ***. Operating income and net income before taxes followed a similar pattern, reflecting SG&A expenses (which were ***, and interest expense, respectively. Net income and cash flows were ***.

Variance analysis

A variance analysis for the operations of Eastman of DOTP is presented in table VI-4.[9] The information for this variance analysis is derived from table VI-1. A variance analysis is a method to assess the changes in profitability from period to period by measuring the impact of changes in the relationships between price, cost, and volume. A calculation is made of the impact of each factor by varying only that factor while holding all other factors constant. The components of net sales variances are either favorable (positive), resulting in an increase in net sales and profitability or unfavorable (negative) resulting in the opposite. The analysis in table VI-3 indicates that Eastman's operating income and net income ***.

Table VI-4
DOTP: Variance analysis on the operations of Eastman, fiscal years 2013-15, January-March 2015, and January-March 2016

* * * * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Capital expenditures are included in a firm's statement of cash flows within the section, "cash flows from investing activities." In accounting terms, capital expenditures increase the value of specific plant and equipment and total assets, while charges for depreciation and amortization (in the case of intangible assets), impairments, and divestitures (or retirement or abandonment of property) decrease the value of assets. Capital expenditures are made and R&D expenses are incurred to achieve improvements in equipment or reduce operating costs

[9] The Commission's variance analysis is calculated in three parts: Sales variance, cost of sales variance (COGS variance), and SG&A expense variance. Each part consists of a price variance (in the case of the sales variance) or a cost or expense variance (in the case of the COGS and SG&A expense variance), and a volume variance. The sales or cost/expense variance is calculated as the change in unit price or per-unit cost/expense times the new volume, while the volume variance is calculated as the change in volume times the old unit price or per-unit cost/expense. Summarized at the bottom of the table, the price variance is from sales; the cost/expense variance is the sum of those items from COGS and SG&A variances, respectively, and the volume variance is the sum of the volume components of the net sales, COGS, and SG&A expense variances. The overall volume component of the variance analysis is generally small.

and the quality of products produced. Total capital expenditures ***; R&D expenses followed a similar pattern. Eastman explained that its capital expenditures were ***, while R&D expenses were described as ***.[10] Table VI-5 presents Eastman's reported capital expenditures and research and development ("R&D") expenses.

Table VI-5
DOTP: Eastman's capital expenditures and R&D expenses, fiscal years 2013-15, January-March 2015, and January-March 2016

* * * * * * *

ASSETS AND RETURN ON INVESTMENT

Table VI-6 presents data on Eastman's total net assets, the ratios of operating income or (loss) and net income or (loss) to total net assets, and asset turnover. Eastman revised its asset values *** to include other current and non-current assets besides plant and equipment used to produce DOTP.[11] ***. The data for operating income and net income are from those items in table VI-1, and the ratios of those indicators to total net assets followed the table VI-1 data. The asset turnover ratio is the ratio of total net sales to total net assets and is termed a measure of efficiency because it provides an indication of how efficiently $1 of assets generates $1 of sales. In table VI-6, $1 of assets generated approximately $*** of sales in 2015.

Table VI-6
DOTP: Eastman's total assets, ratios of income to assets, and asset turnover ratio, fiscal years 2013-15

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of DOTP to describe any actual or potential negative effects of imports of DOTP from Korea on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-7 tabulates Eastman's response on actual negative effects on investment, growth, and development while table VI-8 presents its narrative responses to these items.

Table VI-7
DOTP: Negative effects of imports from subject sources on investment, growth, and development since January 1, 2013

* * * * * * *

[10] Producer questionnaire response of Eastman, section III-13.

[11] Producer questionnaire response of Eastman, section III-12 was amended by Eastman's postconference brief, exh. 2, responses to staff questions.

Table VI-8
DOTP: Narrative responses by Eastman regarding actual and anticipated negative effects of imports from subject sources on investment, growth, and development since January 1, 2013

* * * * * * *

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 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, if applicable; 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 KOREA

The Commission issued foreign producers' or exporters' questionnaires to three firms believed to produce and/or export DOTP from Korea.[3] Useable responses to the Commission's questionnaire were received from two firms: Aekyung and LG Chem.[4] These firms' exports to the United States accounted for *** U.S. imports of DOTP from Korea in 2015. According to estimates requested of the responding Korean producers, the production of DOTP in Korea reported in this Part of the report accounts for approximately *** percent of overall production of DOTP in Korea. Table VII-1 presents summary data on producers in Korea by firm in 2015.

Table VII-1
DOTP: Summary data for producers in Korea, 2015

* * * * * * *

Producers were asked to report any changes in operations since January 2013. Aekyung reported ***, while LG Chem reported ***. Korean producers' reported changes in operations are presented in table VII-2.

Table VII-2
DOTP: Korean producers' reported changes in operations, since January 1, 2013

* * * * * * *

*** reported production of other products on the same machinery as DOTP. ***. Korean producers were asked to report contraints on their capacity to produce DOTP. Firms reported that reactor size and the reaction process limit their production capacity.

Table VII-3 presents information on DOTP operations of the responding Korean producers.

Table VII-3
DOTP: Data for producers in Korea, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

Table VII-4 presents data on Korea's top export markets for a basket category of goods that includes DOTP.

---

[3] These firms were identified through a review of information submitted in the petition and contained in *** records.

[4] Staff made several attempts to contact Hanwha, but did not receive a questionnaire response. See email correspondence with ***, July 18, 2016.

Table VII-4

DOTP: Korean exports by destination market, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (short tons)		
Korea's exports to the United States	14,336	22,775	30,440
Korea's exports to other major destination markets.--			
China	123,452	74,364	93,353
Turkey	12,220	10,981	22,379
Vietnam	17,446	16,621	17,740
India	8,207	265	12,383
Italy	6,767	7,853	9,969
Spain	5,201	6,638	8,444
Hong Kong	6,856	5,340	4,895
Peru	1,260	2,706	3,973
All other destination markets	100,619	28,035	26,496
Total Korea exports	296,364	175,579	230,071
	Value (1,000 dollars)		
Korea's exports to the United States	21,763	32,381	30,847
Korea's exports to other major destination markets.--			
China	177,813	105,547	94,334
Turkey	18,784	15,378	22,841
Vietnam	26,345	23,902	17,527
India	11,366	443	11,658
Italy	10,390	11,051	9,482
Spain	8,148	9,389	8,156
Hong Kong	10,047	7,406	4,717
Peru	2,277	4,378	5,309
All other destination markets	147,106	42,453	30,610
Total Korea exports	434,038	252,329	235,481

Table continued on next page.

Table VII-4--Continued

DOTP: Korean exports by destination market, 2013-15

	Unit value (dollars per short ton)		
Korea's exports to the United States	1,518	1,422	1,013
Korea's exports to other major destination markets.--			
China	1,440	1,419	1,011
Turkey	1,537	1,400	1,021
Vietnam	1,510	1,438	988
India	1,385	1,671	941
Italy	1,535	1,407	951
Spain	1,567	1,414	966
Hong Kong	1,465	1,387	964
Peru	1,807	1,618	1,336
All other destination markets	1,462	1,514	1,155
Total Korea exports	1,465	1,437	1,024
	Share of quantity (percent)		
Korea's exports to the United States	4.8	13.0	13.2
Korea's exports to other major destination markets.--			
China	41.7	42.4	40.6
Turkey	4.1	6.3	9.7
Vietnam	5.9	9.5	7.7
India	2.8	0.2	5.4
Italy	2.3	4.5	4.3
Spain	1.8	3.8	3.7
Hong Kong	2.3	3.0	2.1
Peru	0.4	1.5	1.7
All other destination markets	34.0	16.0	11.5
Total Korea exports	100.0	100.0	100.0

Source: Official Korean trade statistics under HTS 2917.39, as reported by Korea Customs in the GTIS/GTA database, accessed July 12, 2016.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-5 presents data on U.S. importers' reported inventories of DOTP.

Table VII-5
DOTP: U.S. importers' inventories, 2013-15, January-March 2015, and January-March 2016

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of DOTP from Korea after March 31, 2016.

Table VII-6
DOTP: Arranged imports, April 2016 through March 2017

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS

There are no known trade remedy actions on DOTP in third-country markets.

INFORMATION ON NONSUBJECT COUNTRIES

The global market

During the period being examined, the top suppliers of nonsubject U.S. imports of DOTP were China and Mexico. U.S. firms also reported DOTP imports from Germany, Hong Kong and Taiwan. There are reportedly two companies in Mexico, one company in France, one company with one plant each in the Netherlands and Germany, one company in Poland, six companies in Turkey, and 24 companies in China, together accounting for all worldwide production of DOTP as of March 2015.[5] There are no individual breakouts for DOTP production from each company's annual plasticizer capacity.

Table VII-7 presents countries' global exports of a basket category of goods, including DOTP, during 2013-15.

[5] ***.

Table VII-7

DOTP: Global exports by exporter, 2013-15

Item	Calendar year		
	2013	2014	2015
	Quantity (short tons)		
United States	176,860	123,909	135,712
Korea	296,364	175,579	230,071
All other major exporting countries.--			
Taiwan	59,406	165,681	186,508
China	63,168	84,913	86,489
Belgium	69,773	64,862	66,217
Japan	144,379	84,468	62,497
Netherlands	45,162	50,373	49,747
India	29,168	32,667	38,680
Italy	25,333	32,587	32,228
Poland	471,115	8,534	19,912
Turkey	10,921	17,168	13,135
Canada	7,988	12,662	11,164
All other exporting countries.	101,530	54,201	43,466
Total global exports	1,501,167	907,602	975,827
	Share of quantity (percent)		
United States	11.8	13.7	13.9
Korea	19.7	19.3	23.6
All other major exporting countries.--			
Taiwan	4.0	18.3	19.1
China	4.2	9.4	8.9
Belgium	4.6	7.1	6.8
Japan	9.6	9.3	6.4
Netherlands	3.0	5.6	5.1
India	1.9	3.6	4.0
Italy	1.7	3.6	3.3
Poland	31.4	0.9	2.0
Turkey	0.7	1.9	1.3
Canada	0.5	1.4	1.1
All other exporting countries.	6.8	6.0	4.5
Total global exports	100.0	100.0	100.0

Source: Official exports statistics under HTS subheading 291739 as reported by various national statistical authorities in the GTIS/GTA database, accessed July 12, 2016.

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
81 FR 44329, July 7, 2016	*Dioctyl Terephthalate (DOTP) From Korea; Institution of Antidumping Duty Investigation and Scheduling of Preliminary Phase Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2016-07-07/pdf/2016-16062.pdf
81 FR 49628, July 28, 2016	*Dioctyl Terephthalate From the Republic of Korea: Initiation of Less-Than-Fair-Value Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2016-07-28/pdf/2016-17806.pdf

APPENDIX B

CALENDAR OF THE PUBLIC STAFF CONFERENCE

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

Those listed below appeared as witnesses at the United States International Trade Commission's preliminary conference:

Subject: Dioctyl Terephthalate (DOTP) from Korea

Inv. No.: 731-TA-1330 (Preliminary)

Date and Time: July 21, 2016 - 9:30 a.m.

Sessions were held in connection with this preliminary phase investigation in ALJ Courtroom A (room 100), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioners (**Christine M. Streatfeild**, Baker& McKenzie LLP)
Respondent (**Mara M. Burr**, Jochum Shore & Trossevin, PC)

In Support to the Imposition of Antidumping Duty Order:

Baker & McKenzie LLP
Washington, DC
on behalf of

Eastman Chemical Company

Cari Parker, Vice President, Chemical Intermediates and Fibers Manufacturing, Eastman Chemical Company

Dr. Stephen R. Cullen, Business Unit Director, Oxo and Plasticizers, Chemical Intermediates Business Organization, Eastman Chemical Company

Brian A. Yobst, Strategic Procurement Manager, Eastman

Michael K. Carrier, Esq., Senior Counsel, Global Trade and Compliance, Eastman Chemical Company

Thomas Rogers, Economist, Capital Trade, Inc.

Kevin M. O'Brien)
) – OF COUNSEL
Christine M. Streatfeild)

In Opposition to the Imposition of
Antidumping Duty Order:

Jochum Shore & Trossevin, PC
Washington, DC
on behalf of

ALAC International Inc.

Ted Fisher, Director of Sales and Marketing,
ALAC International Inc.

Mara M. Burr) – OF COUNSEL

REBUTTAL/CLOSING REMARKS:

Petitioners (**Kevin M. O'Brien**, Baker & McKenzie LLP)
Respondent (**Mara M. Burr**, Jochum Shore & Trossevin, PC)

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APPENDIX C

SUMMARY DATA

Table C-1
DOTP: Summary data concerning the U.S. market, 2013-15, January to March 2015, and January to March 2016
(Quantity=short tons; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per short ton; Period changes=percent--exceptions noted)

	Reported data					Period changes			
	Calendar year			January to March		Calendar year			Jan-Mar
	2013	2014	2015	2015	2016	2013-15	2013-14	2014-15	2015-16
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Korea	***	***	***	***	***	***	***	***	***
All others sources	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Korea	***	***	***	***	***	***	***	***	***
All others sources	***	***	***	***	***	***	***	***	***
Total imports	***	***	***	***	***	***	***	***	***
U.S. importers' U.S. shipments of imports from:									
Korea:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Total imports:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
U.S. producers':									
Average capacity quantity	***	***	***	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***	***	***	***
Production workers	***	***	***	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***	***	***	***
Hourly wages (dollars)	***	***	***	***	***	***	***	***	***
Productivity (short tons per hour)	***	***	***	***	***	***	***	***	***
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)	***	***	***	***	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires.
Notes:
fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

APPENDIX D

NONSUBJECT COUNTRY PRICE DATA

Three importers reported price data for nonsubject imports from China for product 1.[1] Price data reported by these firms accounted for 17.8 percent of Chinese exports of DOTP to the United States during 2015.[2] These price items and accompanying data are comparable to those presented in table V-3. Price and quantity data for China are shown in table D-1 and in figure D-1 (with domestic and subject sources).

In comparing nonsubject country pricing data with U.S. producer pricing data, prices for DOTP imported from China were lower than prices for U.S.-produced product in all eleven instances. In comparing nonsubject country pricing data with subject country pricing data, prices for product imported from China were lower than prices for product imported from Korea in ten instances and higher in one instance. A summary of price differentials is presented in table D-2.

Table D-1
DOTP: Weighted-average f.o.b. prices and quantities of imported product 1[1], by quarter, January 2013-March 2016

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Figure D-1

DOTP: Weighted-average f.o.b. prices and quantities of domestic and imported product 1[1], by quarter, January 2013-March 2016

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Table D-2

DOTP: Summary of price differentials, by source comparison, January 2013-March 2016

Comparison	Total number of comparisons	Nonsubject lower than the comparison source		Nonsubject higher than the comparison source	
		Number of quarters	Quantity (*short tons*)	Number of quarters	Quantity (*short tons*)
Nonsubject vs United States:					
China vs. United States	11	11	***	0	***
Nonsubject vs subject country:					
China vs. Korea	11	10	***	1	***

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

[1] No importers reported nonsubject price data for product 2.
[2] Official Chinese export statistics as reported by China in the IHS/GTA database under HTS 2917.39, accessed July 18, 2016.