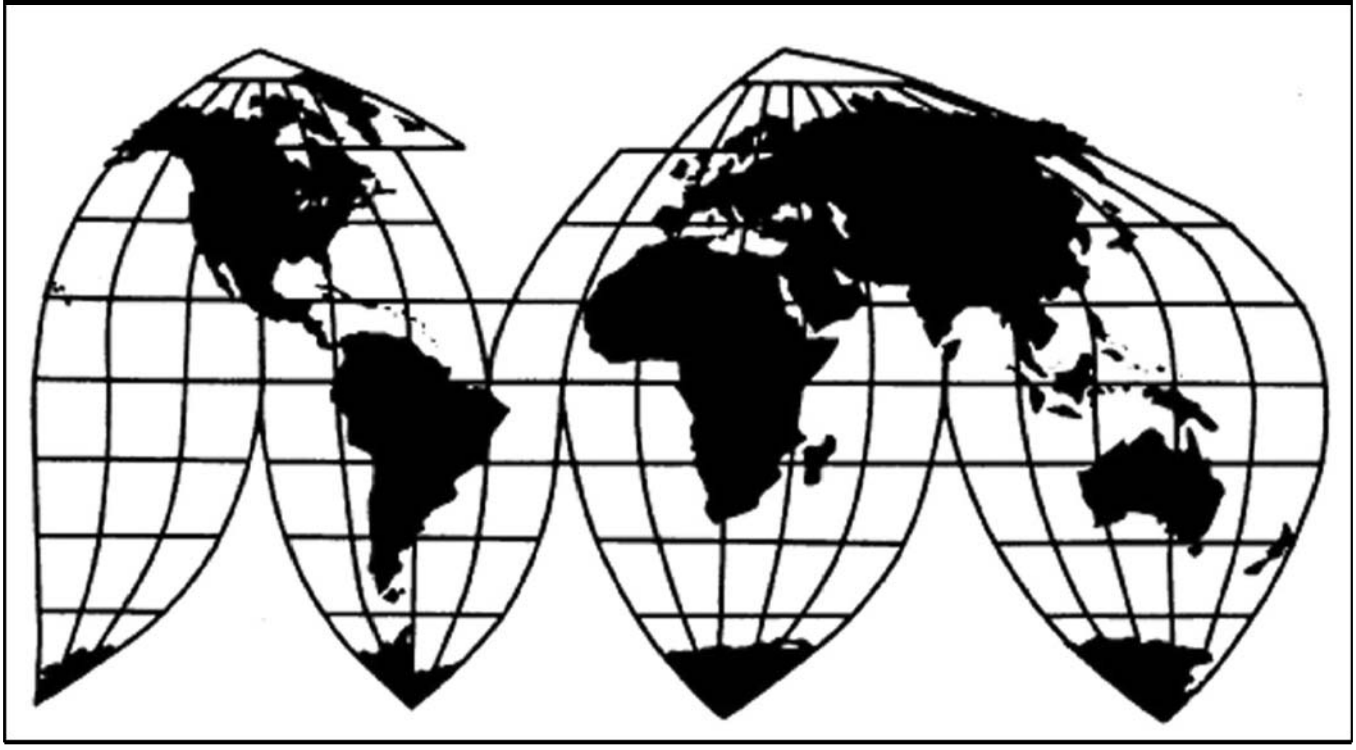
Low Melt Polyester Staple Fiber from Korea and Taiwan

Investigation Nos. 731-TA-1378-1379 (Final)

Publication 4808 **August 2018**

U.S. International Trade Commission



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U.S. International Trade Commission

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-1378-1379 (Final)

Low Melt Polyester Staple Fiber from Korea and Taiwan

DETERMINATIONS

On the basis of the record[1] developed in the subject investigations, the United States International Trade Commission ("Commission") determines, pursuant to the Tariff Act of 1930 ("the Act"), that an industry in the United States is materially injured by reason of imports of low melt polyester staple fiber (PSF) from Korea and Taiwan that have been found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value ("LTFV").[2] [3]

BACKGROUND

The Commission instituted these investigations effective June 27, 2017, following receipt of a petition filed with the Commission and Commerce by Nan Ya Plastics Corporation, America, Livingston, New Jersey. The Commission scheduled the final phase of the investigations following notification of preliminary determinations by Commerce that imports of low melt PSF from Korea and Taiwan were being sold at LTFV within the meaning of section 733(b) of the Act (19 U.S.C. 1673b(b)).

Notice of the scheduling of the final phase of the Commission's investigations and of a public hearing 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 February 26, 2018 (83 FR 8295). A revised schedule was published on May 9, 2018 (83 FR 21306). The hearing was held in Washington, DC, on June 19, 2018, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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[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] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*, 83 FR 29094 (June 22, 2018); *Low Melt Polyester Staple Fiber From Taiwan: Final Determination of Sales at Less Than Fair Value,* 83 FR 29099 (June 22, 2018).

[3] The Commission also finds that imports subject to Commerce's affirmative critical circumstances determination are not likely to undermine seriously the remedial effect of the antidumping duty order on Korea.

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of low melt polyester staple fiber ("PSF") from Korea and Taiwan found by the U.S. Department of Commerce ("Commerce") to be sold in the United States at less than fair value. We also find that critical circumstances do not exist with respect to those imports of low melt PSF from Korea subject to Commerce's final affirmative critical circumstances determination.

I. Background

Nan Ya Plastics Corporation ("Nan Ya" or "Petitioner"), a domestic producer of low melt PSF, filed petitions in these investigations on June 27, 2017. Representatives for the Petitioner appeared at the hearing accompanied by counsel and submitted prehearing and posthearing briefs as well as final comments. Representatives and counsel for Consolidated Fibers, Inc. ("Consolidated") and Stein Fibers Ltd. ("Stein") (collectively, "Respondents"), importers of subject merchandise, appeared at the hearing and jointly submitted a prehearing brief.[1]

U.S. industry data are based on the questionnaire responses from two domestic producers of low melt PSF that accounted for 100 percent of domestic production of that product in 2017.[2] U.S. import data are based on official Commerce import statistics and from questionnaire responses of 19 U.S. importers of low melt PSF from Korea or Taiwan over the 2015 through 2017 period of investigation ("POI"). In 2017, U.S. import data accounted for an estimated *** percent of subject imports from Korea and *** percent of subject imports from Taiwan, as reflected in official statistics.[3] Foreign industry data are based on the questionnaire response from one foreign producer in Korea that accounted for *** percent of U.S. imports of subject merchandise from Korea in 2017.[4] The Commission did not receive a response to its questionnaires from any subject foreign producer in Taiwan in the final phase of the investigations.[5]

II. Domestic Like Product

A. In General

In determining whether an industry in the United States is materially injured or threatened with material injury by reason of imports of subject merchandise, the Commission

[1] Respondents only contested the issue of critical circumstances.

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

[3] CR at I-5, IV-1; PR at I-4, IV-1.

[4] CR at I-5, VII-3; PR at I-4, VII-3.

[5] CR at I-5 to I-6, VII-10; PR at I-4, VII-7. In the preliminary phase, the Commission received a questionnaire response from one foreign producer in Taiwan that accounted for *** of U.S. imports of subject merchandise from Taiwan from 2014 to 2016. *Id.*

first defines the "domestic like product" and the "industry."[6] 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."[7] 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."[8]

The decision regarding the appropriate domestic like product 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.[9] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[10] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[11] Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized or sold at less than fair value,[12] the Commission determines what domestic product is like the imported articles Commerce has identified.[13]

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[6] 19 U.S.C. § 1677(4)(A).

[7] 19 U.S.C. § 1677(4)(A).

[8] 19 U.S.C. § 1677(10).

[9] *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).

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

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

[12] *See*, *e.g., USEC, Inc. v. United States*, 34 Fed. Appx. 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).

[13] *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 (Continued...)

B. Product Description

Commerce defined the scope of the imported merchandise under investigation as follows:

> synthetic staple fibers, not carded or combed, specifically bi-component polyester fibers having a polyester fiber component that melts at a lower temperature than the other polyester fiber component (low melt PSF). The scope includes bicomponent polyester staple fibers of any denier or cut length. The subject merchandise may be coated, usually with a finish or dye, or not coated.
>
> Low melt PSF is classifiable under the Harmonized Tariff Schedule of the United States (HTSUS) subheading 5503.20.0015. Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of the merchandise under the investigation is dispositive.[14]

Low melt PSF is a manmade staple fiber, not carded, combed or otherwise processed for spinning, made entirely of polyester.[15] Like other types of PSF, low melt PSF is a strong fiber that resists shrinking and stretching.[16] Unlike other types of PSF, low melt PSF has a bi-component structure consisting of two strongly bonded but separate polymers of different chemical and/or physical construction.[17] It is most commonly composed of a pure polyester core and outer sheath, but may also be produced in a side-by-side configuration.[18] The sheath, which melts at a lower temperature than the core, provides a stable structure that allows the fiber to be processed smoothly into another form and acts as an agent for thermal bonding to the core polymer.[19]

C. Arguments of the Parties

Petitioner maintains that the Commission should define a single domestic like product that is coextensive with the scope of the investigations, as it did in the preliminary

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determination defining six like products in investigations in which Commerce found five classes or kinds).

[14] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*, 83 Fed. Reg. 29094, 29096 (June 22, 2018); *Low Melt Polyester Staple Fiber From Taiwan: Final Determination of Sales at Less Than Fair Value*, 83 Fed. Reg. 29099, 29100 (June 22, 2018).

[15] CR at I-13; PR at I-10.

[16] CR at I-13 to I-14; PR at I-10.

[17] CR at I-14; PR at I-10.

[18] CR at I-14; PR at I-10.

[19] CR at I-14; PR at I-10.

determinations.[20] Respondents did not address the issue of domestic like product in the final phase investigations.

D. Analysis

In its preliminary determinations, the Commission defined a single domestic like product consisting of all low melt PSF within the scope.[21] The Commission addressed two arguments respondents made in the preliminary phase seeking the definition of separate domestic like products. It first found that black or other colored low melt PSF was not a separate domestic like product because the similarities in physical characteristics (other than color), end uses, production facilities, and channels of distribution revealed only limited distinctions between black or colored low melt PSF and other low melt PSF that did not constitute a clear dividing line.[22] It similarly found that crystalline low melt PSF was not a separate domestic like product because of similarities with other low melt PSF in basic physical characteristics, manufacturing facilities, and channels of distribution.[23]

The record in the final phase of these investigations does not contain any new information concerning the definition of the domestic like product.[24] No party has argued that the Commission should adopt a definition of the domestic like product that is different from that in the preliminary determinations. Accordingly, based on the record, and for the reasons set forth in the preliminary determinations, we define a single domestic like product consisting of all low melt PSF, coextensive with the scope of these investigations.

III. 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."[25] 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.

There are no related party or other domestic industry issues in these investigations.[26] Accordingly, we define the domestic industry to include all domestic producers of low melt PSF.

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[20] Petitioner's Prehearing Br. at 6-9.

[21] *Low Melt Polyester Staple Fiber from Korea and Taiwan*, Inv. Nos. 731-TA-1378-1379 (Preliminary), USITC Pub. 4720 at 11-17 (Aug. 2017) ("*Preliminary Determinations*").

[22] *Preliminary Determinations*, USITC Pub. 4720 at 13-14.

[23] *Preliminary Determinations*, USITC Pub. 4720 at 16-17.

[24] CR at I-13 to I-24; PR at I-10 to I-16.

[25] 19 U.S.C. § 1677(4)(A).

[26] Although Nan Ya is owned by a producer of polyester staple fiber products in Taiwan, CR at III-3; PR at III-2, it is not a related party because the firm that owns it did not export subject merchandise to the United States during the POI. Petitioner's Prehearing Br. at 9; CR at VII-10 n.10; PR at VII-7; *see*
(Continued...)

IV. Cumulation[27]

For purposes of evaluating the volume and effects for a determination of material injury by reason of subject imports, section 771(7)(G)(i) of the Tariff Act requires the Commission to cumulate subject imports from all countries as to which petitions were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

(1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;

(2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;

(3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and

(4) whether the subject imports are simultaneously present in the market.[28]

While no single factor is necessarily determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a framework for determining whether the subject imports compete with each other and with the domestic like product.[29] Only a "reasonable overlap" of competition is required.[30]

(…Continued)
generally 19 U.S.C. § 1677(4)(B). Furthermore, neither domestic producer imported subject merchandise. CR at III-12; PR at III-6.

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

Imports from each subject country exceed the statutory negligibility threshold. Subject imports from Korea and Taiwan accounted for *** percent and 30.6 percent of total imports of low melt PSF by quantity, respectively, during the 12-month period preceding the filing of the petitions (June 2016 through May 2017). CR/PR at Table IV-3. We find that imports from each subject source are not negligible.

[28] *See Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-280 (Final), USITC Pub. 1845 (May 1986), *aff'd*, *Fundicao Tupy, S.A. v. United States*, 678 F. Supp. 898 (Ct. Int'l Trade), *aff'd*, 859 F.2d 915 (Fed. Cir. 1988).

[29] *See*, *e.g.*, *Wieland Werke, AG v. United State*s, 718 F. Supp. 50 (Ct. Int'l Trade 1989).

Petitioner argues that subject imports should be cumulated because low melt PSF from all subject sources is fungible, sold through the same channels of distribution, and simultaneously present throughout the U.S. market.[31] Respondents did not address the issue of cumulation.

The statutory threshold for cumulation is satisfied in these investigations because Petitioner filed the antidumping duty petitions with respect to both subject countries on the same day, June 27, 2017.[32] We also find that there is a reasonable overlap in competition among subject imports from both subject countries and between subject imports from each source and the domestic like product, for the reasons described below.

Fungibility. The record in the final phase of these investigations indicates that low melt PSF is at least moderately fungible, regardless of source. Majorities or pluralities of purchasers reported that the domestic like product was comparable to subject imports from Korea in 15 of 16 factors, that the domestic like product was comparable to subject imports from Taiwan in all 16 factors, and that subject imports from Korea and Taiwan were comparable to each other in all 16 factors.[33] Domestic producers, on the one hand, and importers and purchasers, on the other, provided varied responses on the interchangeability among subject and domestic sources, but the vast majority of market participants reported that the product from different sources was at least sometimes interchangeable.[34]

The great majority of shipments of the domestic like product, subject imports from Korea, and subject imports from Taiwan in 2017 were neither dyed nor crystalline.[35] There were also substantial shipments of the domestic like product, subject imports from Korea, and subject imports from Taiwan in two of the four pricing products, covering a large share of U.S. producer and importer shipments, which demonstrates sales of competing products from all sources in the U.S. market.[36] Thus, the record indicates that there is sufficient fungibility between and among subject imports from Korea and Taiwan and the domestic like product to satisfy the reasonable overlap of competition standard.

(…Continued)

[30] The Statement of Administrative Action (SAA) to the Uruguay Round Agreements Act (URAA), expressly states that "the new section will not affect current Commission practice under which the statutory requirement is satisfied if there is a reasonable overlap of competition." H.R. Rep. No. 103-316, Vol. I at 848 (1994) (*citing Fundicao Tupy, S.A. v. United States*, 678 F. Supp. at 902); *see Goss Graphic Sys., Inc. v. United States*, 33 F. Supp. 2d 1082, 1087 (Ct. Int'l Trade 1998) ("cumulation does not require two products to be highly fungible"); *Wieland Werke, AG*, 718 F. Supp. at 52 ("Completely overlapping markets are not required.").

[31] Petitioner's Prehearing Br. at 10-13.

[32] None of the statutory exceptions to cumulation apply. Imports from Korean producer Huvis Corporation ("Huvis") are no longer subject imports, *see* 83 Fed. Reg. at 29095 (June 22, 2018), and consequently are not eligible for cumulation. *See* 19 U.S.C. § 1677(7)(G)(i).

[33] CR/PR at Table II-9. A majority of purchasers reported that the domestic like product was inferior to subject imports from Korea in terms of product range. *Id*.

[34] CR/PR at Table II-10.

[35] CR/PR at Table IV-5.

[36] CR/PR at Tables V-3 to V-6; CR at V-8; PR at V-5.

Channels of Distribution. Subject imports from each subject country and the domestic like product shared the same general channels of distribution. During the POI, domestic producers sold mostly to distributors, but a substantial portion of their shipments were to end users.[37] Importers of subject merchandise from Korea and Taiwan sold almost entirely to end users.[38]

Geographic Overlap. The domestic like product and subject imports from Korea and Taiwan were sold in all regions of the contiguous United States during the POI.[39]

Simultaneous Presence in Market. Subject imports from Korea and Taiwan were present in the U.S. market in each month of the POI.[40] The domestic like product was likewise present in the U.S. market throughout the POI.[41]

Conclusion. The record indicates that there is a reasonable overlap of competition between and among subject imports and the domestic like product. Therefore, we analyze subject imports from Korea and Taiwan on a cumulated basis for our analysis of whether the domestic industry is materially injured by reason of subject imports.

V. Material Injury by Reason of Subject Imports

Based on the record in the final phase of these investigations, we find that an industry in the United States is materially injured by reason of imports of low melt PSF from Korea and Taiwan that Commerce has found to be sold in the United States at less than fair value.

A. Legal Standards

In the final phase of antidumping and countervailing duty investigations, the Commission determines whether an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.[42] 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.[43] The statute defines

[37] CR/PR at Table II-1. The proportion of domestic producers' U.S. commercial shipments that went to distributors ranged from *** to *** percent on an annual basis during the POI, while the proportion of their shipments that went to end users ranged from *** to *** percent. *Id.*

[38] CR/PR at Table II-1.

[39] CR/PR at Table II-2.

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

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

[42] 19 U.S.C. §§ 1671d(b), 1673d(b). The Trade Preferences Extension Act of 2015, Pub. L. 114-27, amended the provisions of the Tariff Act pertaining to Commission determinations of material injury and threat of material injury by reason of subject imports in certain respects. We have applied these amendments here.

[43] 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 ... and explain in full its relevance to the determination." 19 U.S.C. § 1677(7)(B).

"material injury" as "harm which is not inconsequential, immaterial, or unimportant."[44] In assessing whether 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.[45] 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."[46]

Although the statute requires the Commission to determine whether the domestic industry is "materially injured or threatened with material injury by reason of" unfairly traded imports,[47] 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.[48] 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.[49]

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

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[44] 19 U.S.C. § 1677(7)(A).

[45] 19 U.S.C. § 1677(7)(C)(iii).

[46] 19 U.S.C. § 1677(7)(C)(iii).

[47] 19 U.S.C. §§ 1671d(a), 1673d(a).

[48] *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).

[49] The Federal Circuit, in addressing the causation standard of the statute, 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 further ratified in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), where 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).

[50] SAA at 851-52 ("{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-

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the injury caused by other factors from injury caused by unfairly traded imports.[51] 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.[52] It is clear that the existence of injury caused by other factors does not compel a negative determination.[53]

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."[54] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[55]

(…Continued)
than-fair-value imports."); H.R. Rep. 96-317 at 47 (1979) ("in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;" those factors include "the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry"); *accord Mittal Steel*, 542 F.3d at 877.

[51] 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.").

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

[53] *See Nippon Steel Corp.*, 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.").

[54] *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 (Continued...)

The Federal Circuit's decisions in *Gerald Metals, Bratsk*, and *Mittal Steel* all involved cases where 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.[56] 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.[57] 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.[58]

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

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(…Continued)
decision in *Swiff-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission's causation analysis as comporting with the Court's guidance in *Mittal*.

[55] *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.").

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

[57] *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).

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

evidence standard.[59] Congress has delegated this factual finding to the Commission and the Courts have recognized the agency's institutional expertise in resolving injury issues.[60]

B. Conditions of Competition and the Business Cycle

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

1. Demand Considerations

Demand for low melt PSF depends on demand for the downstream products in which it is used. These downstream products include antibacterial wipes, air filtration, acoustical and other padding, batting, furniture, nonwoven fabrics, fabric for paint rollers, needlepunch fabric, automotive insulation, floor pads, and the trunk and wheel liners of cars.[61]

Apparent U.S. consumption by quantity increased overall during the POI, although it was slightly lower in 2017 than in 2016. Apparent U.S. consumption increased from *** pounds in 2015 to *** pounds in 2016, and then declined to *** pounds in 2017.[62] Most market participants indicated that demand for low melt PSF had increased.[63] Petitioner acknowledged improvement in U.S. demand during the POI, but perceived the increase in demand as largely driven by growth in the automotive sector and asserted that demand in that sector has been "leveling out."[64] Petitioner projects that there will be limited demand growth in the future.[65]

2. Supply Considerations

During the POI, the U.S. low melt PSF market was supplied by domestic producers, subject imports, and nonsubject imports. The record indicates that the majority of purchasers did not report supply constraints from any source.[66]

The domestic industry was the smallest source of supply to the U.S. market after subject imports and nonsubject imports. The domestic industry consists of two suppliers of low melt PSF: Nan Ya and Fiber Innovation Technology ("FIT"). Nan Ya is the primary U.S. producer of low melt PSF.[67] The domestic industry's market share declined from *** percent in 2015 to ***

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

[60] *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.").

[61] CR at II-9; PR at II-6.

[62] CR/PR at Table IV-8.

[63] CR/PR at Table II-4.

[64] Petitioner's Prehearing Br. at 14.

[65] Petitioner's Prehearing Br. at 14.

[66] Seventeen of 22 purchasers reported that no firm had refused, declined, or been unable to supply them with low melt PSF during the POI. CR at II-8; PR at II-5.

[67] Nan Ya's share of U.S. production was *** percent in 2017. CR/PR at Table III-1.

percent in 2016 and then increased to *** percent in 2017.[68] The domestic industry's production capacity remained constant and was lower than apparent U.S. consumption throughout the POI.[69]

Cumulated subject imports were the second-largest source of supply to the U.S. market after nonsubject imports in 2015 and 2016 and the largest source of supply in 2017. Cumulated subject imports' market share increased from *** percent in 2015 to *** percent in 2016 and to *** percent in 2017.[70]

Nonsubject imports were the largest source of supply to the U.S. market in 2015 and 2016 and the second-largest source of supply in 2017. Nonsubject imports' market share decreased from *** percent in 2015 to *** percent in 2016 and to *** percent in 2017.[71] The vast majority of nonsubject imports were from Huvis, a Korean exporter, which Commerce found in its final determination to have a *de minimis* dumping margin and, consequently, imports from Huvis are nonsubject for purposes of these determinations.[72]

3. Substitutability and Other Conditions

We find that there is a moderate-to-high degree of substitutability between domestically produced low melt PSF and subject imports.[73] As discussed above in Section IV, majorities or pluralities of purchasers reported that the domestic like product was comparable to subject imports from Korea and Taiwan with respect to nearly all product characteristics.[74] Furthermore, the vast majority of market participants found the subject imports to be at least sometimes interchangeable with the domestic like product.[75] Numerous responding purchasers named product range as a non-price distinction between the domestic like product and subject imports, usually citing the lack of domestic production of dyed and crystalline low melt PSF.[76] However, as indicated above, the great majority of shipments of the domestic like product and subject imports in 2017 were neither dyed nor crystalline.[77] Therefore, we find that the domestic industry competes directly with subject imports for sales in the vast majority of the U.S. market for low melt PSF.

We also find that price is an important factor in low melt PSF purchasing decisions. When asked to list the top three factors considered in purchasing decisions, responding

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[68] CR/PR at Table IV-9.

[69] The domestic industry's production capacity was *** pounds in each full year of the POI. CR/PR at Table III-4.

[70] CR/PR at Table IV-9.

[71] CR/PR at Table IV-9.

[72] *See Low Melt Polyester Staple Fiber from the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*, 83 Fed. Reg. at 29095 (June 22, 2018).

[73] *See* CR at II-14; PR at II-8.

[74] CR/PR at Table II-9.

[75] CR/PR at Table II-10.

[76] CR at II-25 to II-26; PR at II-17 to II-18.

[77] CR/PR at Table IV-5.

purchasers listed price more frequently than any other factor.[78] In addition, price was one of eight factors out of 16 that the majority of purchasers regarded as very important.[79]

The primary raw materials used to produce low melt PSF are monoethylene glycol ("MEG"), purified terephthalic acid ("PTA"), and purified isophthalic acid ("PIA").[80] The prices of MEG and PTA both fluctuated during the POI, with the price of MEG increasing overall by *** percent and the price of PTA increasing overall by *** percent during the period.[81] Most purchasers indicated that their purchase prices of low melt PSF were not based directly on published prices of any raw materials, and that they did not track prices of the raw materials used to make low melt PSF.[82]

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."[83]

The volume of cumulated subject imports increased from *** pounds in 2015 to *** pounds in 2016 and decreased *** to *** pounds in 2017, for an overall increase of *** percent from 2015 to 2017.[84] In 2016, when the quantity of cumulated subject imports increased ***, their market share rose as well. The share of apparent U.S. consumption held by cumulated subject imports increased from *** percent in 2015 to *** percent in 2016.[85] Much of this gain occurred at the expense of the domestic industry, whose market share decreased from *** percent in 2015 to *** percent in 2016.[86]

From 2016 to 2017, the cumulated subject imports, notwithstanding their decline in quantity, maintained an elevated market share. Cumulated subject imports had a *** percent share of apparent U.S. consumption in 2017, which reflected a *** percentage point market share gain during the POI.[87] Available monthly data for subject imports indicate that the volume of subject imports declined in the fourth quarter of 2017.[88] Petitioner argues that this

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[78] Price was identified as a top three factor a total of 20 times by responding purchasers, quality was identified 16 times, and availability and supply chain security were identified 15 times. Purchasers ranked quality as the most important factor more frequently than any other factor. CR/PR at Table II-6.

[79] CR/PR at Table II-7. Price was listed as a very important purchasing factor by 20 of 22 responding purchasers. Availability, product consistency, quality meets industry standards, and reliability of supply were also listed as very important purchasing factors by at least 20 responding purchasers. *Id*.

[80] CR/PR at V-1.

[81] CR at V-1; PR at V-1.

[82] CR at V-3; PR at V-2.

[83] 19 U.S.C. § 1677(7)(C)(i).

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

[85] CR/PR at Table IV-9.

[86] CR/PR at Table IV-9.

[87] CR/PR at Table IV-9.

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

is a function of the filing of the petitions.[89] Respondents have not contested this issue. We have taken the filing of the petitions and the subsequent decline in subject imports into account in examining cumulated subject import volume trends.

Accordingly, we find that the volume of cumulated subject imports and the increase in that volume are significant both in absolute terms and relative to 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 the 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.[90]

As discussed above in Section V.B.3, we find that there is a moderate-to-high degree of substitutability between subject imports and the domestic like product and that price is an important factor in purchasing decisions.

The Commission collected quarterly pricing data from U.S. producers and importers for shipments of four pricing products to unrelated customers.[91] Pricing data for all products were collected separately for sales to distributors and end users.[92] Both U.S. producers and six importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[93] Pricing data reported by these firms

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[89] Petitioner's Prehearing Br. at 37-38.

[90] 19 U.S.C. § 1677(7)(C)(ii).

[91] The four pricing products are as follows:

Product 1 – Low melt polyester staple fiber, white, non-crystalline, 4 denier in diameter, 37-76 mm in cut length, sheath melt point of 110°C;

Product 2 – Low melt polyester staple fiber, white, non-crystalline, 4 denier in diameter, 37-76 mm in cut length, sheath melt point of 180°C;

Product 3 – Low melt polyester staple fiber, white, non-crystalline, 2 denier in diameter, 37-76 mm in cut length, melt point of 110°C;

Product 4 – Low melt polyester staple fiber, dyed/solution dyed/colored, color match and controlled (+/-1.0 Delta E), non-crystalline, 4 denier in diameter, 37-76 mm in cut length, melt point of 110°C. CR at V-8; PR at V-5.

[92] Domestic producers sold mostly to distributors, but a substantial portion of their shipments were to end users. Importers of subject merchandise sold almost entirely to end users. CR/PR at Table II-1.

[93] CR at V-8; PR at V-5.

accounted for approximately *** percent of U.S. producers' shipments of low melt PSF to distributors and *** percent of U.S. producers' shipments to end users.[94] Among importers, pricing data represented *** percent of U.S. importers' shipments of subject imports from Korea to end users, *** percent of U.S. importers' shipments of subject imports from Taiwan to distributors, and *** percent of U.S. importers' shipments of subject imports from Taiwan to end users in 2017.[95]

The pricing comparison data show predominant underselling. Prices of cumulated subject imports were below those for U.S.-produced product in 44 of 69 quarterly comparisons (63.8 percent of all comparisons) from January 2015 to December 2017.[96] The quantity of subject imports in underselling comparisons was *** pounds, or *** percent of total quantity, while the quantity that oversold the domestic product totaled *** pounds, or *** percent of total quantity.[97] The average margins of underselling and overselling were 29.2 and 9.0 percent, respectively.[98]

The Commission also collected direct import cost data from U.S. importers for imports of the four pricing products used for internal consumption.[99] While the direct import data show generally higher purchase costs for the cumulated subject imports compared to prices of domestic like product sold to end users, the data reflect, in the aggregate, much lower quantities of cumulated subject imports than the pricing data described above.[100] Consequently, in our underselling analysis, we have provided less weight to the direct import data than to the pricing data reported by importers. As previously stated, those data indicate predominant underselling.

Lost sales data also indicate the prevalence of significant underselling. Six of 10 responding purchasers reported that prices for subject imports from Korea were lower than those for the U.S.-produced product and nine of 14 responding purchasers reported that prices for subject imports from Taiwan were lower than prices for U.S. product.[101] Two of 10 responding purchasers indicated that price was a primary reason for purchasing subject imports from Korea, and six of 13 responding purchasers indicated that price was a primary reason for purchasing subject imports from Taiwan, rather than the domestically produced product.[102]

Considering the available pricing data, as well as the lost sales data, we find that cumulated subject import prices were generally lower than the prices for the domestic like

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[94] CR at V-8; PR at V-5.

[95] CR at V-8; PR at V-5.

[96] CR/PR at Table V-15.

[97] CR/PR at Table V-15.

[98] CR/PR at Table V-15.

[99] *** CR at V-24 n. 10; PR at V-8 n.10.

[100] CR/PR at Tables V-10 to V-12, Figs. V-9 to V-11.

[101] CR at V-37; PR at V-11.

[102] CR at V-37; PR at V-11. Responding purchasers reported purchasing *** pounds of subject imports instead of domestically produced product. CR/PR at Table V-17. By contrast, no purchaser reported that U.S. producers had reduced prices to compete with lower-priced subject imports, although 17 of 22 purchasers responded that they did not know. CR at V-37; PR at V-11.

product. We find that there has been significant underselling by the cumulated subject imports.

We have also examined pricing trends during the POI. The quarterly pricing data indicate that prices for domestically produced low melt PSF declined from January 2015 to December 2017 for Products 1 and 2 to distributors and end users, which accounted for the largest volume of sales during the POI. Prices for Product 1 to distributors and end users declined by *** percent and *** percent, respectively, during this period.[103] Prices for Product 2 to distributors and end users declined by *** percent and *** percent, respectively, during this period.[104] Prices for domestically produced Product 3 to distributors increased from January 2015 to December 2017 by *** percent, but prices to end users during this period decreased by *** percent.[105] Domestic prices fell most intensely during 2016 when cumulated subject import volume was at its highest and the subject imports gained market share at the expense of the domestic industry.[106] While there was some price recovery in 2017, much of this occurred during the latter portion of the year when cumulated subject import volumes had declined following the filing of the petitions.[107] The prices for the subject imports also declined from the first quarter of 2015 to the fourth quarter of 2017 for all products except one.[108]

The record contains no evidence that any other factor, other than cumulated subject imports, explains why prices for domestically produced pricing products generally declined during the POI. Apparent U.S. consumption rose overall during the POI and reached its highest point in 2016 when domestic prices were at their lowest.[109] As indicated in Section V.B.3 above, most U.S. purchasers reported that their purchases of low melt PSF were not indexed to raw material costs. In any event, notwithstanding fluctuations in raw materials costs, domestic producers' average unit cost of goods sold ("COGS") increased during the POI.[110] We consequently find that cumulated subject imports depressed domestic prices to a significant degree.

We also consider whether the domestic industry was unable to obtain price increases, which otherwise would have occurred, due to the subject imports. Because, as previously discussed, both demand and unit COGS increased during the POI, the conditions of competition should have permitted the domestic industry to increase prices. Instead, prices generally declined, as did average unit sales values.[111] Because average unit COGS increased, the

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[103] CR/PR at Table V-14.

[104] CR/PR at Table V-14.

[105] CR/PR at Table V-14. No U.S. producer supplied pricing data for sales of domestically produced product 4.

[106] CR/PR at Tables IV-8, IV-9, V-3 to V-7 and Figs. V-2 to V-6.

[107] CR/PR at Tables V-3 to V-7 and Figs. V-2 to V-6.

[108] CR/PR at Table V-14. The exception was subject imports of product 2 from Korea to end users.

[109] CR/PR at Tables IV-8, V-3 to V-7 and Figs. V-2 to V-6.

[110] The domestic industry's average unit COGS declined from $*** in 2015 to $*** in 2016, and then increased to $*** in 2017, which was above the 2015 level. CR/PR at Table IV-1.

[111] The domestic industry's average unit sales values declined from $*** in 2015 to $*** in 2016, and then increased to $*** in 2017, which was still below the 2015 level. CR/PR at Table VI-1.

domestic industry's ratio of COGS to net sales deteriorated.[112] In both 2016 and 2017, total COGS exceeded total net sales value, suggesting that the domestic industry was not able to raise prices to cover costs at a time of increasing or steady demand.[113] Therefore, we find that cumulated subject imports prevented price increases for the domestic like product, which otherwise would have occurred, to a significant degree.

As discussed above, we have found that there has been significant price underselling by the cumulated subject imports and that the effect of cumulated subject imports has been to depress prices and prevent price increases for the domestic like product, which otherwise would have occurred, to a significant degree. We consequently find that the cumulated subject imports have had significant price effects.

E. Impact of the Subject Imports[114]

Section 771(7)(C)(iii) of the Tariff Act provides that in examining the impact of subject imports, the Commission "shall evaluate all relevant economic factors which have a bearing on the state of the industry."[115] 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 debts, research and development, and factors affecting domestic prices. No single

[112] The domestic industry's ratio of average COGS to net sales was *** percent in 2015, *** percent in 2016, and *** percent in 2017. CR/PR at Table VI-1.

[113] CR/PR at Tables VI-1 and IV-8.

[114] The statute instructs the Commission to consider the "magnitude of the dumping margin" in an antidumping proceeding as part of its consideration of the impact of imports. 19 U.S.C. § 1677(7)(C)(iii)(V). In its final determination of sales at less than fair value, Commerce found a *de minimis* dumping margin for producer/exporter Huvis and dumping margins of 16.27 percent for all subject imports from Korea, and 49.93 percent for subject imports from Taiwan. *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*, 83 Fed. Reg. at 29095 (June 22, 2018); *Low Melt Polyester Staple Fiber From Taiwan: Final Determination of Sales at Less Than Fair Value*, 83 Fed. Reg. at 29100 (June 22, 2018). We take into account in our analysis the fact that Commerce has made final findings that all producers in Korea and Taiwan, other than Huvis, are selling subject imports in the United States at less than fair value. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling and price effects of cumulated subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[115] 19 U.S.C. § 1677(7)(C)(iii); *see also* SAA at 851 and 885 ("In material injury determinations, the Commission considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they also may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

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."[116]

The domestic industry's trade, employment, and financial factors generally declined or remained constant from 2015 to 2016, and then showed some improvement in 2017.

The domestic industry's annual production capacity remained unchanged from 2015 to 2017.[117] Its total production of low melt PSF was nearly unchanged from 2015 to 2016, then increased by *** percent from 2016 to 2017.[118] Similarly, the domestic industry's capacity utilization rate remained unchanged from 2015 to 2016, then increased by *** percentage points from 2016 to 2017.[119] The domestic industry's U.S. shipments increased overall by *** percent by quantity during the POI with the majority of the increase occurring from 2016 to 2017.[120] The available pricing data – which includes nearly all domestic industry shipments – indicate that the domestic industry was able to increase its shipments dramatically in the second half of 2017 after the petitions were filed.[121] The domestic industry's inventories of low melt PSF decreased by *** percent from 2015 to 2016 and then increased by *** percent from 2016 to 2017.[122] The domestic industry lost market share from 2015 to 2016, before gaining market share in 2017.[123]

The domestic industry's employment of production-related workers ("PRWs") increased by *** percent overall during the POI, with the bulk of the increase occurring in 2017.[124] Total hours worked increased by *** percent overall during the POI, despite decreasing by *** percent from 2015 to 2016.[125] Total wages paid increased by *** percent overall during the POI.[126] Hourly wages increased from 2015 to 2016 by *** percent, then decreased by ***

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[116] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[117] The domestic industry's production capacity was *** pounds each year of the POI. CR/PR at Table III-4.

[118] Total production was *** pounds in 2015 and *** pounds in 2016, and then increased to *** pounds in 2017. CR/PR at Table III-4.

[119] Capacity utilization was *** percent in 2015 and 2016 and increased to *** percent in 2017. CR/PR at Table III-4.

[120] U.S. shipments increased from *** pounds in 2015 to *** pounds in 2016 and to *** pounds in 2017. CR/PR at Table III-6.

[121] U.S. shipments reflected in the pricing data were *** pounds in the first quarter of 2017, *** pounds in the second quarter of 2017, *** pounds in the third quarter of 2017, and *** pounds in the fourth quarter of 2017. CR/PR at Tables V-3 to V-8. The available pricing data account for *** U.S. producers' shipments to distributors and *** percent of their shipments to end users. CR at V-8; PR at V-5.

[122] The domestic industry's inventories were *** pounds in 2015, *** pounds in 2016, and *** pounds in 2017. CR/PR at Table III-8.

[123] The domestic industry's market share decreased from *** percent in 2015 to *** percent in 2016 and increased to *** percent in 2017. CR/PR at Table IV-9.

[124] PRWs were *** in 2015, *** in 2016, and *** in 2017. CR/PR at Table III-9.

[125] Total hours worked were *** hours in 2015, *** hours in 2016, and *** hours in 2017. CR/PR at Table III-9.

[126] Wages paid were $*** in 2015, $*** in 2016, and $*** in 2017. CR/PR at Table III-9.

percent from 2016 to 2017, for an overall increase of *** percent.[127] Productivity increased by *** percent overall during the POI.[128]

The domestic industry's total net sales revenues increased by *** percent by value during the POI. The sole year when sales revenues increased was 2017, when sales quantities also increased;[129] Petitioner indicated that it was able to increase sales in the second half of 2017 after the petitions were filed.[130] Nevertheless, from 2015 to 2017 the domestic industry's sales revenues had a lower percentage increase than the domestic industry's sales quantities because of the adverse price effects of the subject imports.[131] The industry's total COGS decreased from 2015 to 2016, but increased in 2017 to the highest level in the POI.[132] Its selling, general, and administrative ("SG&A") expenses increased over the POI.[133] Gross profits,[134] operating income,[135] net income,[136] and their ratios to net sales[137] all declined overall during the POI, but were slightly higher in 2017 than in 2016. The domestic industry experienced *** in 2016 and 2017. In those years, the domestic industry experienced *** and *** in gross profits, *** and *** in operating income, and *** and *** in net income.[138] The domestic industry's capital expenditures increased overall from 2015 to 2017.[139] *** domestic

[127] Hourly wages were $*** per hour in 2015, $*** per hour in 2016, and $*** per hour in 2017. CR/PR at Table III-9.

[128] Productivity was *** pounds per hour in 2015, *** pounds per hour in 2016, and *** pounds per hour in 2017. CR/PR at Table III-9.

[129] Total net sales revenues decreased from $*** in 2015 to $*** in 2016 and increased to $*** in 2017. CR/PR at Table VI-1.

[130] According to Petitioner, ***. Petitioner's Posthearing Br. at 8-9. Petitioner also provided specific examples of Nan Ya's increased sales in the second half of 2017 as compared to the first half from both new and existing customers. *Id.* at 9-10.

[131] Sales quantities increased by *** percent from 2015 to 2017. CR/PR at Table VI-1.

[132] The domestic industry's total COGS were $*** in 2015, $*** in 2016, and $*** in 2017. CR/PR at Table VI-1.

[133] SG&A expenses were $*** in 2015, $*** in 2016, and $*** in 2017. CR/PR at Table VI-1.

[134] Gross profits were $*** in 2015, declined to *** in 2016, and improved to *** in 2017. CR/PR at Table VI-1.

[135] Operating income was $*** in 2015, declined to *** in 2016, and improved to *** in 2017. CR/PR at Table VI-1.

[136] Net income was $*** in 2015, declined to *** in 2016, and improved to *** in 2017. CR/PR at Table VI-1.

[137] The ratio of gross profits to net sales was *** percent in 2015, *** percent in 2016, and *** percent in 2017. The ratio of operating income to net sales was *** percent in 2015, *** percent in 2016, and *** percent in 2017. The ratio of net income to net sales was *** percent in 2015, *** percent in 2016, and *** percent in 2017. CR/PR at Table VI-1.

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

[139] Capital expenditures increased from $*** in 2015 to $*** in 2016 and to $*** in 2017. CR/PR at Table VI-5. Research and development expenses were $*** in 2015 and $*** in 2016 and 2017. *Id*.

producers reported negative effects on investment, growth, and development due to the subject imports.[140]

Low-priced cumulated subject imports increased in volume and market share in 2016, taking market share from the domestic industry. As a result, the domestic industry reported lower production, shipments, and sales than would have otherwise occurred during that time; indeed, in 2016 the industry's production and shipments were essentially stagnant notwithstanding increased demand. Consequently, the domestic industry lost revenue that it otherwise would have obtained, and these lost revenues were reflected in its declining financial performance in 2016. The significant price effects of the subject imports exacerbated the revenue loss and financial performance declines in 2016. The high volume of low-priced cumulated subject imports with their attendant price effects continued in 2017. While the domestic industry was able to increase output that year, much of its increased shipments and sales took place during the latter half of 2017 after the petitions were filed. Moreover, the continued price effects of the subject imports deprived the domestic industry of income it would otherwise have received; the industry's financial performance remained poor in 2017 notwithstanding its increased output and market share. We therefore find that cumulated subject imports had a significant impact on the domestic industry.

We have considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject imports.[141] As discussed above, apparent U.S. consumption increased overall during the POI.[142] We have also considered the presence of nonsubject imports in the U.S. low melt PSF market. Although nonsubject imports had an appreciable presence in the U.S. market, their market share declined during the POI.[143] In addition, the vast majority of nonsubject imports were from the Korean producer/exporter Huvis, which Commerce found in its final determination to have a *de minimis* dumping margin.[144] The prices of nonsubject imports from Huvis were generally higher than those of the domestic like product and cumulated subject imports and consequently cannot explain the price effects we have attributed to cumulated subject imports.[145]

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[140] CR/PR at Tables VI-7 and VI-8.

[141] We also considered whether any limits on the domestic industry's available product range could explain the domestic industry's losses. However, as discussed previously, the great majority of U.S. shipments of the domestic like product and subject imports in 2017 were neither dyed nor crystalline. CR/PR at Table IV-5. Furthermore, as previously discussed, the pricing data indicate significant underselling by the subject imports in products for which they directly competed with the domestic industry. CR/PR at Tables V-3 to V-8.

[142] CR/PR at Table IV-8.

[143] Nonsubject imports market share was *** percent in 2015, *** percent in 2016, and *** percent in 2017. CR/PR at Table IV-9.

[144] *See* CR/PR at Table IV-9.

[145] Prices of nonsubject imports from Huvis were above those for U.S.-produced product in 26 of 45 quarterly comparisons (57.8 percent of all comparisons) from January 2015 to December 2017. The quantity of nonsubject imports from Huvis in overselling comparisons was *** pounds, or *** percent of total quantity, while the quantity that undersold the domestic product totaled *** pounds, or *** (Continued...)

For the reasons discussed above, we find that cumulated subject imports had a significant adverse impact on the domestic industry.

VI. Critical Circumstances

A. Legal Standards and Party Arguments

In its final antidumping duty determination concerning low melt PSF from Korea, Commerce found that critical circumstances exist with respect to subject imports from Korean producer Toray Chemical Korea Inc. ("Toray"), but do not exist for other subject producers and/or exporters in Korea.[146] At the hearing, Petitioner's counsel stated it would "withdraw" the critical circumstances allegations in the investigation of low melt PSF from Korea and Petitioner did not assert further critical circumstances arguments; moreover, based on Petitioner's representation that it would withdraw the allegations, Respondents did not provide testimony at the hearing or arguments in a posthearing brief.[147] Nevertheless, because Commerce has not withdrawn its affirmative critical circumstances finding with respect to certain subject imports from Korea, we proceed with a critical circumstances analysis.[148]

Accordingly, because we have determined that the domestic industry is materially injured by reason of subject imports from Korea, we further determine "whether the imports subject to the affirmative {Commerce critical circumstances} determination ... are likely to undermine seriously the remedial effect of the antidumping {and/or countervailing duty} order{s} to be issued."[149] The SAA indicates that the Commission is to determine "whether, by massively increasing imports prior to the effective date of relief, the importers have seriously undermined the remedial effect of the order" and specifically "whether the surge in imports prior to the suspension of liquidation, rather than the failure to provide retroactive relief, is likely to seriously undermine the remedial effect of the order."[150] The legislative history for the critical circumstances provision indicates that the provision was designed "to deter exporters whose merchandise is subject to an investigation from circumventing the intent of the law by increasing their exports to the United States during the period between initiation of an

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(…Continued)
percent of total quantity. Prices of nonsubject imports from Huvis were above those for cumulated subject imports in 49 of 91 quarterly comparisons (53.8 percent of all comparisons) and the quantity of nonsubject imports from Huvis in overselling comparisons was *** pounds as compared to the *** pounds that undersold cumulated subject imports. CR/PR at Table D-8.

[146] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*, 83 Fed. Reg. at 29095 (June 22, 2018).

[147] Petitioner's Posthearing Br. at 1; Respondents' Letter in Lieu of Post-Hearing Brief at 1; Hearing Tr. at 93-94 (Mr. Rosenthal and Mr. Menegaz).

[148] *See* 19 U.S.C. § 1673d(b)(4)(A).

[149] 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

[150] SAA at 877.

investigation and a preliminary determination by {Commerce}."[151] An affirmative critical circumstances determination by the Commission, in conjunction with an affirmative determination of material injury by reason of subject imports, would normally result in the retroactive imposition of duties for those imports subject to the affirmative Commerce critical circumstances determination for a period 90 days prior to the suspension of liquidation.

The statute provides that, in making this determination, the Commission shall consider, among other factors it considers relevant,

> (I) the timing and the volume of the imports,
>
> (II) a rapid increase in inventories of the imports, and
>
> (III) any other circumstances indicating that the remedial effect of the {order} will be seriously undermined.[152]

In considering the timing and volume of subject imports, the Commission's practice is to consider import quantities prior to the filing of the petition with those subsequent to the filing of the petition using monthly statistics on the record regarding those firms for which Commerce has made an affirmative critical circumstances determination.[153]

Respondents argue that the Commission should make a negative critical circumstances determination with respect to subject imports from Korea.[154]

B. Analysis

We first consider the appropriate period for comparison of pre-petition and post-petition levels of subject imports from Toray. The Commission is not required to analyze the same period that Commerce examined.[155] Unless the industry under investigation involves seasonality or the Commission decides that circumstances warrant otherwise,[156] the Commission generally compares six months of data gathered from the periods immediately

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[151] *ICC Industries, Inc. v United States,* 812 F.2d 694, 700 (Fed. Cir. 1987), *quoting* H.R. Rep. No. 96-317 at 63 (1979), *aff'g* 632 F. Supp. 36 (Ct. Int'l Trade 1986). *See* 19 U.S.C. §§ 1671b(e)(2), 1673b(e)(2).

[152] 19 U.S.C. §§ 1671d(b)(4)(A)(ii), 1673d(b)(4)(A)(ii).

[153] *See Lined Paper School Supplies from China, India, and Indonesia,* Inv. Nos. 701-TA-442-43, 731-TA-1095-97**,** USITC Pub. 3884 at 46-48 (Sept. 2006); *Carbazole Violet Pigment from China and India,* Inv. Nos. 701-TA-437 and 731-TA-1060-61 (Final), USITC Pub. 3744 at 26 (Dec. 2004); *Certain Frozen Fish Fillets from Vietnam,* Inv. No. 731-TA-1012 (Final), USITC Pub. 3617 at 20-22 (Aug. 2003).

[154] Respondents' Prehearing Br. at 1.

[155] *Certain Polyester Staple Fiber from China*, Inv. No. 731-TA-1104 (Final), USITC Pub. 3922 at 35 (June 2007); *Steel Concrete Reinforcing Bars from Turkey*, Inv. No. 731-TA-745 (Final), USITC Pub. 3034 at 34 (Apr. 1997).

[156] *See 1,1,1,2--Tetrafluoroethane (R-134a) from China*, Inv. No. 731-TA-1313 (Final), USITC Pub. 4679 at 25 (April 2017) (engaging in seasonal analysis because of demand patterns for product).

preceding and following the petition's filing.[157] Consistent with our usual practice, we have determined to compare the volume of subject imports from Toray for the six-month periods prior to and after the filing of the petition.[158]

The import volume from Korea subject to Commerce's antidumping duty critical circumstances finding was *** pounds for the six-month period prior to the filing of the petition and *** pounds for the six-month period after the filing of the petition, an increase of *** pounds or *** percent.[159] Although the volume of subject imports by Toray increased during the post-petition period, we do not find the increased volume, particularly in the context of the *** pound apparent U.S. consumption in 2017, was sufficiently large to undermine seriously the remedial effect of the order.[160] The available inventory data for all subject Korean importers indicate that inventories of low melt PSF from Korea increased over the POI from *** pounds in 2015 to *** pounds in 2016 to *** pounds in 2017.[161]

Taken as a whole, the data on the record do not show a sudden and significant increase in imports or inventories subject to Commerce's affirmative critical circumstances determination subsequent to the filing of the petition that would seriously undermine the remedial effect of the antidumping duty order to be issued on low melt PSF from Korea. Consequently, and consistent with Petitioner's waiver of its critical circumstances allegations at the hearing, we make a negative critical circumstances determination with regard to subject imports in the antidumping duty investigation of low melt PSF from Korea.

VII. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of subject imports of low melt PSF from Korea and Taiwan that are sold in the United States at less than fair value. We also find that critical circumstances do not

[157] The Commission has relied on a shorter comparison period when, unlike in this case, Commerce's preliminary determination applicable to the country at issue fell within the six-month post-petition period the Commission typically considers. *See Biodiesel from Argentina and Indonesia*, Inv. Nos. 731-TA-1347-1348 (Final), USITC Pub. 4775 at 6-7 (April 2018); *Softwood Lumber Products from Canada,* Inv. Nos. 701-TA-566 and 731-TA-1342 (Final), USITC Pub. 4749 at 44-45 (Dec. 2017); *Certain Hot-Rolled Steel Flat Products from Australia, Brazil, Japan, Korea, the Netherlands, Turkey, and the United Kingdom,* Inv. Nos. 701-TA-545-547, 731-TA-1291-1297 (Final), USITC Pub. 4638 at 49-50 (Sept. 2016); *Certain Corrosion-Resistant Steel Products from China, India, Italy, Korea, and Taiwan,* Inv. Nos. 701-TA-534-537 and 731-TA-1274-1278 (Final), USITC Pub. 4620 at 35-36 (July 2016); *Polyethylene Terephthalate (PET) Resin from Canada, China, India, and Oman,* Inv. Nos. 701-TA-531-532 and 731-TA-1270-1273 (Final), USITC Pub. 4604 at 31-32 (Apr. 2016); *Carbon and Certain Steel Wire Rod from China*, Inv. Nos. 701-TA-512, 731-TA-1248 (Final), USITC Pub. 4509 at 25-26 (Jan. 2015).

[158] The six-month periods considered are January 2017 through June 2017 and July 2017 through December 2017. CR/PR at Table IV-4.

[159] CR/PR at Table IV-4.

[160] CR/PR at Table IV-8.

[161] CR/PR at Table VII-10.

exist with respect to those imports of low melt PSF from Korea subject to Commerce's final affirmative critical circumstances determination.

PART I: INTRODUCTION

BACKGROUND

These investigations result from petitions filed with the U.S. Department of Commerce ("Commerce") and the U.S. International Trade Commission ("USITC" or "Commission") by Nan Ya Plastics Corporation, America, Livingston, New Jersey, on June 27, 2017, 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 low melt polyester staple fiber ("low melt PSF")[1] from Korea and Taiwan. The following tabulation provides information relating to the background of these investigations.[2] [3]

Effective date	Action
June 27, 2017	Petitions filed with Commerce and the Commission; institution of the Commission's investigations
July 17, 2017	Commerce's notice of initiation
August 17, 2017	Commission's preliminary determinations
February 2, 2018	Commerce's preliminary determinations (83 FR 4906); scheduling of final phase of Commission investigations (83 FR 8295, February 26, 2018)
May 2, 2018	Revised schedule for final investigations (83 FR 21306, May 9, 2018)
June 18, 2018	Commerce's final AD determinations (83 FR 29094; 83 FR 29099, June 22, 2018)
June 19, 2018	Commission's hearing
July 19, 2018	Commission's vote
August 6, 2018	Commission's views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

> *shall consider (I) the volume of imports of the subject merchandise, (II) the effect of imports of that merchandise on prices in the United States for*

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

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

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

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 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

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

United States merely because that industry is profitable or because the performance of that industry has recently improved.

Organization of report

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

Low melt PSF generally is used as a bonding fiber in nonwoven applications including automotive lining, soundproofing, insulation, and batting. There are two known U.S. producers of low melt PSF: Nan Ya Plastics Corporation, America ("Nan Ya") and Fiber Innovation Technology ("FIT Fibers"). Also, a third U.S. facility to manufacture and sell low melt PSF in the near future through a $48 million joint venture between Korea-based Huvis Corporation and Thailand-based Indorama Ventures was announced in January 2018.[6] The leading U.S. producer of low melt PSF is ***, while leading producers of low melt PSF outside the United States include Huvis Corporation ("Huvis"), Toray Chemical Korea, Inc. ("Toray Chemical"), and Taekwang Industrial Co., Ltd. ("Taekwang") of Korea, and Far Eastern New Century Corporation ("FENC") of Taiwan.[7] Huvis was assessed a *de minimus* duty margin by Commerce in its final antidumping duty determinations regarding Korea.[8] The leading U.S. importers of low melt PSF from Korea are ***. The leading importers of low melt PSF from Taiwan are ***. Leading importers of low melt PSF from nonsubject countries (primarily China) include ***. U.S. purchasers of low melt PSF include distributors and firms that produce batting for furniture,

[6] Posthearing brief (Nan Ya), p. 13; hearing transcript, p. 85 (Freeman); Bob Montgomery. "Foreign Firm to Invest $48 Million, Create 50 Jobs in Spartanburg County," May 17, 2018. http://www.goupstate.com/news/20180517/foreign-firm-to-invest-48m-create-50-jobs-in-spartanburg-county; and "Indorama Ventures and Huvis to Form Joint Venture to Produce High Value-Added Products in USA," January 16, 2018. http://www.indoramaventures.com/en/updates/other-release/180/indorama-ventures-and-huvis-to-form-joint-venture-to-produce-high-value-added-products-in-usa.

[7] Petition, p. 29.

[8] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part,* 83 FR 29094, June 22, 2018.

filtration, lining for automotive headliners, truck liners, and soundproofing. Leading U.S. purchasers include ***.

Apparent U.S. consumption of low melt PSF totaled approximately *** pounds ($***) in 2017. U.S. producers' U.S. shipments of low melt PSF totaled *** pounds ($***) in 2017, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled *** pounds ($***) in 2017 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** pounds ($***) in 2017 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value.

SUMMARY DATA AND DATA SOURCES

A summary of data collected in these investigations is presented in appendix C, table C-1. Except as noted, U.S. industry data are based on questionnaire responses of *** firms that accounted for 100 percent of known U.S. production of low melt PSF during 2017. U.S. imports are based on official import statistics and from questionnaire responses from nineteen companies representing an estimated *** percent of subject imports from Korea and *** percent of U.S. imports from Taiwan in 2017 under HTS statistical reporting number 5503.20.0015. The Commission received a response to its foreign producer questionnaire from one subject producer in Korea whose exports account for *** percent of subject U.S. imports of low melt PSF from Korea in 2017. The Commission did not receive a response from any subject producer in Taiwan. During the preliminary phase of these investigations, the Commission received a questionnaire response from one firm in Taiwan that accounted for *** of subject U.S. imports of low melt PSF from Taiwan during 2014 to 2016. Firm-specific data presented in this report are based on that previous submission.

PREVIOUS AND RELATED INVESTIGATIONS

Certain polyester staple fiber from Korea and Taiwan has been the subject of prior antidumping and countervailing duty investigations in the United States. A petition on certain polyester staple fiber ("certain PSF") was filed on April 2, 1999, by E.I. DuPont de Nemours ("DuPont"); Intercontinental Polymers, Inc. ("Intercontinental"); Arteva Specialties S.a.r.l., d/b/a KoSa ("KoSa"); Nan Ya; and Wellman, Inc. ("Wellman"). Nan Ya subsequently withdrew as a petitioner in the investigation involving Korea and was never an original petitioner in the investigation involving Taiwan. DuPont also later withdrew as a petitioner in the investigation involving Taiwan. In 2000, the Commission determined that an industry in the United States was materially injured by reason of imports from Korea and Taiwan of certain subject PSF, other than low melt PSF. The Commission found that low melt PSF was a separate domestic like product, and it made a negative injury determination with respect to that product.[9] After

[9] *Certain Polyester Staple Fiber From Korea and Taiwan*, 65 FR 33576, May 24, 2000.

receiving the Commission's final affirmative determinations, Commerce issued antidumping duty orders on imports of certain PSF from Korea and Taiwan,[10] with margins of *de minimis* to 7.91 percent *ad valorem* for certain PSF from Korea and 5.77 to 9.51 percent *ad valorem* for certain PSF from Taiwan.[11]

On March 20, 2006, the Commission completed its full first five-year reviews of certain PSF from Korea and Taiwan. The Commission determined that revocation of the antidumping duty orders would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[12] On April 3, 2006, Commerce published its notice of continuation of the antidumping duty orders.[13]

On September 13, 2011, the Commission completed its expedited second five-year reviews on certain PSF from Korea and Taiwan.[14] The Commission determined that revocation of the antidumping duty orders on certain PSF from Korea and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.[15] On September 30, 2011, Commerce published its notice of continuation of the antidumping duty orders.[16]

On August 1, 2016, the Commission instituted its third five-year reviews of the antidumping duty orders on imports of certain PSF from Korea and Taiwan.[17] On December 20, 2016, Commerce determined that revocation of the antidumping duty orders would likely lead to continuation or recurrence of dumping at a weighted-average margin of 7.48 percent *ad valorem* for Korea and 9.90 percent for Taiwan.[18] On February 6, 2017, the Commission published its determinations in its expedited third five-year reviews that revocation of the antidumping duty orders on imports of certain PSF from Korea and Taiwan would likely lead to continuation or recurrence of material injury to the domestic industry within a reasonably

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[10] *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Notice of Antidumping Duty Order*, 65 FR 33807, May 25, 2000.

[11] *Certain Polyester Staple Fiber from Korea and Taiwan, Inv. Nos. 731-TA-825 and 826 (Third Review)*, USITC Publication 4668, January 2017, p. I-9.

[12] *Certain Polyester Staple Fiber from Korea and Taiwan; Determinations*, 71 FR 14721, March 23, 2006.

[13] *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Continuation of Antidumping Duty Orders*, 71 FR 16558, April 3, 2006.

[14] *Certain Polyester Staple Fiber from Korea and Taiwan, Inv. Nos. 731-TA-825 and 826 (Second Review)*, USITC Publication 4257, September 2011, p. I-1.

[15] *Certain Polyester Staple Fiber from Korea and Taiwan*; Determination, 76 FR 58040, September 19, 2011.

[16] *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Continuation of Antidumping Duty Orders*, 76 FR 60802, September 30, 2011.

[17] *Certain Polyester Staple Fiber from Korea and Taiwan*, 81 FR 50544, August 1, 2016.

[18] *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 81 FR 92783, December 20, 2016.

foreseeable time.[19] Commerce published its notice of continuation of the antidumping duty orders on imports of certain PSF from Korea and Taiwan on February 10, 2017.[20]

On May 18, 2018, in order to avoid any potential overlap in coverage with the antidumping orders in *Certain Polyester Staple Fiber From Korea and Taiwan*, Commerce determined that those orders would be amended, in part, with respect to low melt PSF. Commerce replaced the following language formerly within the scope of the orders: "{i}n addition, low-melt PSF is excluded from these orders. Low-melt PSF is defined as a bi-component fiber with an outer sheath that melts at a significantly lower temperature than its inner core," with the following language: "{i}n addition, low-melt PSF is excluded from these orders. Low-melt PSF is defined as a bi-component polyester fiber having a polyester fiber component that melts at a lower temperature than the other polyester fiber component."[21]

On June 23, 2006, a petition was filed with the Commission and Commerce by DAK Americas, Nan Ya, and Wellman, alleging that LTFV imports of polyester staple fiber ("PSF") from China were materially injuring or threatening to materially injure the domestic industry. Low melt PSF was excluded from the scope of the investigation. On April 1, 2007, Commerce determined that certain PSF from China was being or was likely to be sold in the United States at LTFV. On May 24, 2007, the Commission determined that the U.S. industry was materially injured by reason of LTFV imports of certain PSF from China.[22] On June 1, 2007, Commerce issued the antidumping duty order on certain PSF from China.[23]

On May 1, 2012, the Commission instituted[24] and Commerce initiated[25] the first five-year review on the antidumping duty on certain PSF from China. Following an expedited five-year review, on September 28, 2012, the Commission determined that revocation of the antidumping duty order on PSF from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time,[26] and Commerce published the first continuation of the antidumping duty order on certain PSF from China on October 12, 2012.[27]

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[19] *Certain Polyester Staple Fiber from Korea and Taiwan*, 82 FR 9392, February 6, 2017.

[20] *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Continuation of Antidumping Orders*, 82 FR 10330, February 10, 2017.

[21] *Polyester Staple Fiber from the Republic of Korea and Taiwan: Final Results of Changed Circumstances Reviews, and Revocation Antidumping Duty Orders in Part,* 83 FR 23253, May 18, 2018.

[22] *Certain Polyester Staple Fiber from China: Determination*, 72 FR 30394, May 31, 2007.

[23] *Notice of Antidumping Duty Order: Certain Polyester Staple Fiber from the People's Republic of China*, 72 FR 30545, June 1, 2007.

[24] *Certain Polyester Staple Fiber from China; Institution of a Five-Year Review*, 77 FR 25744, May 1, 2012.

[25] *Initiation of Five-Year ("Sunset") Review*, 77 FR 25683, May 1, 2012.

[26] *Certain Polyester Staple Fiber from China: Determination*, 77 FR 60720, October 4, 2012.

[27] *Certain Polyester Staple Fiber from the People's Republic of China: Continuation of Antidumping Duty Order*, 77 FR 62217, October 12, 2012.

On September 1, 2017, the Commission instituted and Commerce initiated the second five-year review on the antidumping duty order on certain PSF from China.[28] Following an expedited review, on March 21, 2018, the Commission determined that revocation of the antidumping duty order on certain PSF from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time,[29] and Commerce published the second continuation of the antidumping duty order on certain PSF from China on April 4, 2018.[30]

On May 31, 2017, petitions were filed with the Commission and Commerce by DAK Americas, Nan Ya Plastics Corporation, and Auriga Polymers Inc., alleging that an industry in the United States was materially injured and threatened with material injury by reason of less-than-fair-value ("LTFV") imports of fine denier polyester staple fiber ("fine denier PSF") from China, India, Korea, and Taiwan, and subsidized by the Governments of China and India.[31] On January 16, 2018, Commerce issued final affirmative countervailing duty determinations with respect to fine denier PSF from China and India.[32] On March 7, 2018, the Commission issued final affirmative determinations that an industry in the United States is materially injured by reason of imports of fine denier PSF from China and India, that were found by Commerce to be subsidized by the governments of China and India.[33] On May 23, 2018, Commerce issued final affirmative antidumping duty determinations with respect to China, India, Korea, and Taiwan.[34]

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[28] *Certain Polyester Staple Fiber from China: Institution of a Five-Year Review*, 82 FR 41654, September 1, 2017. *Certain Polyester Staple Fiber from China: Initiation of Five-Year ("Sunset") Review*, 82 FR 42073 September 6, 2017.

[29] *Certain Polyester Staple Fiber from China,* 83 FR 12406, March 21, 2018.

[30] *Certain Polyester Staple Fiber from the People's Republic of China: Continuation of Antidumping Duty Order,* 83 FR 14415, April 4, 2018.

[31] The petition also alleged that LTFV imports from Vietnam were injuring and threatening to injure an industry in the United States. On June 29, 2017, the petitioning firms withdrew the antidumping duty petition with respect to Vietnam. Subsequently, Commerce terminated its LTFV investigation concerning Vietnam (*Fine Denier Polyester Staple Fiber From the Socialist Republic of Vietnam: Termination of Less-Than-Fair-Value Investigation*, 82 FR 33480, July 20, 2017), and the Commission terminated its investigation concerning Vietnam shortly thereafter (*Fine Denier Polyester Staple Fiber From Vietnam; Termination of Investigation*, 82 FR 33926, July 21, 2017).

[32] *Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber From the People's Republic of China: Final Affirmative Determination,* 83 FR 3120, January 23, 2018; and *Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber From India: Final Affirmative Determination,* 83 FR 3122, January 23, 2018.

[33] *Fine Denier Polyester Staple Fiber from China and India; Determinations,* 83 FR 10875, March 13, 2018.

[34] *Fine Denier Polyester Staple Fiber from the People's Republic of China: Final Affirmative Determination of Sales at Less Than Fair Value,* 83 FR 24740, May 30, 2018; *Fine Denier Polyester Staple Fiber from the India: Final Affirmative Determination of Sales at Less Than Fair Value,* 83 FR 24737, May 30, 2018; *Fine Denier Polyester Staple Fiber from the Republic of Korea: Final Affirmative Determination of Sales at Less Than Fair Value,* 83 FR 24743, May 30, 2018; and *Fine Denier Polyester Staple Fiber from Taiwan: Final Affirmative Determination of Sales at Less Than Fair Value,* 83 FR 24745, May 30, 2018.

On June 28, 2018, the Commission determined that a U.S. industry is materially injured by reason of imports of fine denier PSF from China, India, Korea, and Taiwan that Commerce had determined are sold for less than fair value.[35]

NATURE AND EXTENT OF SALES AT LTFV

On June 22, 2018, Commerce published a notice in the *Federal Register* of its final determination of sales at LTFV with respect to imports from Korea [36] and Taiwan.[37] Tables I-1 and I-2 present Commerce's dumping margins with respect to imports of low melt PSF from Korea and Taiwan.

Table I-1
Low melt PSF: Commerce's final weighted-average LTFV margins with respect to imports from Korea

Exporter/producer	Estimated weighted-average margin (percent)
Huvis Corporation	0.00
Toray Chemical Korea Inc.	16.27
All others	16.27

Source: 83 FR 29094, June 22, 2018.

Table I-2
Low melt PSF: Commerce's final weighted-average LTFV margins with respect to imports from Taiwan

Exporter/producer	Estimated weighted-average margin (percent)
Far Eastern New Century Corporation	49.93
All others	49.93

Source: 83 FR 29099, June 22, 2018.

[35] USITC News Release 18-079 (June 28, 2018), *Dumped Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan Injures U.S. Industry, Says USITC,* https://www.usitc.gov/press_room/news_release/2018/er0628ll973.htm.

[36] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part,* 83 FR 29094.

[37] *Low Melt Polyester Staple Fiber From Taiwan: Final Determination of Sales at Less Than Fair Value*, 83 FR 29099.

THE SUBJECT MERCHANDISE

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[38]

> *The merchandise subject to this investigation is synthetic staple fibers, not carded or combed, specifically bi-component polyester fibers having a polyester fiber component that melts at a lower temperature than the other polyester fiber component (low melt PSF). The scope includes bi-component polyester staple fibers of any denier or cut length. The subject merchandise may be coated, usually with a finish or dye, or not coated.*
>
> *Low melt PSF is classifiable under the Harmonized Tariff Schedule of the United States (HTSUS) subheading 5503.20.0015. Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of the merchandise under the investigation is dispositive.*

Tariff treatment

Based upon the scope set forth by the Department of Commerce, information available to the Commission indicates that the merchandise subject to these investigations is classified in subheading 5503.20.00, a tariff line for staple fibers of polyesters, not carded, combed, or otherwise processed for spinning, of the 2018 Harmonized Tariff Schedule of the United States ("HTSUS"). The subject product is imported under statistical reporting number 5503.20.0015. The general rate of duty for HTSUS subheading 5503.20.00 is 4.3 percent *ad valorem*. The import duty applicable to eligible goods originating in Korea under the United States-Korea Free Trade Agreement was eliminated on the effective date of that agreement for shipments with proper importer claim; other products of Korea receive the general rate.[39] Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

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[38] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part,* 83 FR 29094, June 22, 2018.

[39] The United States-Korea Free Trade Agreement entered into force on March 15, 2012.

THE PRODUCT

Description and applications

Low melt PSF is a synthetic (manmade) staple fiber,[40] not carded, combed or otherwise processed for spinning, made entirely of polyester. It looks like cotton or wool fiber after production when it is cut into links by a cutter wheel and baled. Like other types of PSF, low melt PSF is a high tenacity or strong fiber that resists shrinking and stretching.[41] Unlike other types of PSF, low melt PSF has a bi-component structure consisting of two strongly bonded, but separate polymers of different chemical and/or physical construction.[42] It is most commonly composed of a pure polyester core and a pure polyester outer sheath, but may also be produced in a side-by-side configuration. ***.[43] The sheath, which melts at a lower temperature (approximate melt points of 90° C to 220° C) than the core (approximate melt point of 250° C), provides a stable structure that allows the fiber to be processed smoothly into another form,[44] and acts as an agent for thermal-bonding to the core polymer. Thermal bonding eliminates the need for chemical adhesives and therefore is more environmentally friendly than resin bonding—a process previously used to bind the outer sheath with the core.[45] By melting at a lower temperature,[46] the polyester outer sheath becomes sticky and bonds the fibers together which imparts specific properties to the fibers.[47] These include strength, structural integrity, resilience, and durability for nonwoven products such as fiberfill or batting used in bedding – e.g., for comforters, quilting, and padding.[48] According to the petitioner, "different end uses require different melt points."[49] Low melt PSF can be used in nonwoven products for a broad spectrum of downstream industries—automotive (door trim panels, dash pads, wheel housing, trunk and floor carpet, hood insulation, and as an acoustical

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[40] Staple fiber is cut into specific, predetermined lengths from filaments. *Dictionary of Fiber & Textile Technology, "Staple,"* p. 150.

[41] *Dictionary of Fiber & Textile Technology, "Polyester Fiber,"* p. 116.

[42] Hearing transcript, p. 14 (Sparkman); and Koslowski, *Dictionary of Man-Made Fibers: Terms-Figures-Statistics,* p. 2, 34-35.

[43] ***.

[44] Fiberpartner.com. "Basics about low melt fiber you need to know," April 4, 2016. https://www.slideshare.net/fiberpartner1/basics-about-low-melt-fiber-you-need-to-know, accessed July 12, 2017.

[45] Low melt polyester staple fibers offer reduced energy costs, recyclability, and a healthier work environment for manufacturers' employees. Exelto Fibers. "Product Data Sheet: Polyolefin (Low) Melt Fibers." http://www.exelto.com, accessed July 26, 2017; conference transcript, p. 73 (Bernet); and representative of the American Fiber Manufacturers Association, email message to USITC staff, July 26, 2017.

[46] ***.

[47] Conference transcript, p. 14 (Menegaz) and hearing transcript, p. 14 (Sparkman).

[48] "Low Melt Polyester Fiber." http://www.globalsources.com/gsol/I/Polyester-fiber/p/sm/1133589310.htm (accessed July 26, 2017) and Drum Creative. "The Low-Down on Low-Melt," September 29, 2011.

[49] Conference transcript, p. 19 (Sparkman).

barrier), industrial purposes (soundproofing and insulation for construction), water and air filtration (such as air-filtering face masks), and hygienic products (wipes, diapers, sanitary and medical goods such as disposable surgical drapes, etc.).[50]

The variable physical characteristics of low melt PSF include "denier length, finished luster, and crimp," percentage of the low melt PSF compared to the main fiber, whiteness or color (for black or other colors, a dye or pigment is added to the polymer during the fiber extrusion process or an optical brightener may be added instead of a dye or pigment),[51] and crystalline form (the molecules remain in a repeated and structured arrangement rather than an amorphous form throughout the entire production process, and a chemical additive is inserted before extrusion).[52]

Black and crystalline low melt PSF are sold at higher prices than white low melt PSF because of the additional raw materials that are needed during the production process.[53] Both are used for the same downstream industries as regular low melt PSF, but are targeted for niche markets within those industries. For example, black low melt PSF has been replacing "more toxic and heavier molded plastics in automotive applications such as trunk liners and engine insulation liners…," and is used in applications in the automotive industry where the fiber might be visible, or for the exterior of the vehicle for which quality, esthetics, and engineering specifications are considered important.[54]

According to the petitioner, crystalline low melt PSF is ***.[55] It is ***.[56] The respondents state that the chemical structure of crystalline low melt PSF differs from that of standard low melt PSF because "the polymer molecules are in a structured and repeated arrangement." Furthermore, "crystalline low melt does not soften until it meets the exact melting point…and can withstand a significantly larger variety of temperatures without changing form," whereas standard low melt PSF softens as the temperature gets closer to its

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[50] Low Melt Polyester Fiber." http://www.globalsources.com/gsol/I/Polyester-fiber/p/sm/1133589310.htm, accessed July 26, 2017 and Fiberpartner.com. "Basics about low melt fiber you need to know," April 4, 2016. http://ww.slideshare.net/.../basics-about-low-melt-fiber-you-need-to-know, accessed 7/12/2017; Conference transcript, p. 74 (Bernet); petitioner Nan Ya, postconference brief, p. 5; and hearing transcript, p. 14 (Sparkman).

[51] Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

[52] Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017; Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 7; and conference transcript, pp. 80-81 (Kunik).

[53] Respondent Far Eastern New Century Corporation, postconference brief, p. 1; and conference transcript, pp. 47 and 105. Respondent Milliken stated that it has historically paid *** more for black low melt PSF. Respondent Milliken postconference brief, p. 5.

[54] Conference transcript, p. 15 (Menegaz), p. 50 (Sparkman); and respondents Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 122-123.

[55] ***.

[56] ***.

melt temperature.[57] The petitioner notes that the additive in the crystalline form of low melt PSF provides a bit more rigidity which enables it to resist heat more effectively than standard low melt PSF.[58] For this reason, crystalline low melt PSF typically is used in the underbody of the automobile, wheel liners, and components near the engine compartment which have various temperature zones.[59]

The petitioner states that low melt PSF produced in the United States is chemically similar to the low melt PSF produced in Korea and Taiwan, used in the same applications, and made from the same raw materials—monoethylene glycol (MEG) and purified terephthalate acid (PTA).[60] However, the respondents state that each producer's fiber "has slightly different characteristics, such as shrinkage and/or bond strength"[61] and that the low melt PSF produced in the United States does not offer the "various specialty products in different configurations that Korean sources provide."[62]

In the preliminary phase of these investigations, respondents claimed that there is limited substitutability between the white low melt produced domestically by the petitioners and the black low melt imported into the U.S. market. Respondents claim that black low melt PSF is responsible for the increase in demand worldwide, not just the United States, for low melt PSF.[63]

All low melt staple fiber is sold cut-to-length in bales to distributors or directly to end users—U.S. manufacturers of bedding, mattresses, filters, automotive components, insulation media, and other general industrial components.[64]

Manufacturing processes

Like other forms of polyester staple fiber, the production of bi-component low melt PSF is capital intensive and expensive requiring producers to maintain high operating rates to maximize efficiencies[65] and occurs in two distinct stages—1) the formation of the polymers and 2) the formation of fiber including extruding, stretching, cutting, and baling. However, the production of low melt PSF is distinctive because of the fiber's unique bi-component structure, consisting of two polymers that have different melting points. The most common structures of low melt bi-component staple fiber are: 1) core/sheath types (concentric circles) and 2) side-by-

[57] Respondents Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 7.

[58] Conference transcript, p. 70 (Sparkman).

[59] Respondents Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 7.

[60] Conference transcript, p. 23 (Sparkman); and petitioner Nan Ya, postconference brief, p. 4.

[61] Conference transcript, p. 75 (Bernet).

[62] Conference transcript, p. 28 (Kunik).

[63] Conference transcript, p. 15 (Menegaz).

[64] Conference transcript, p. 82 (Elias).

[65] Hearing transcript, p. 14-15 (Sparkman); and conference transcript, p. 28 (Freeman). ***.

side types.[66] Most low melt PSF is produced in the core/sheath type configuration,[67] in which the outer sheath, made of virgin materials, melts at a lower temperature (approximate melt point of 90° C to 220° C) than the core (approximate melt point of 250° C), which can be produced with either virgin or recycled materials.[68] The thermal bonding of the outer sheath with the inner core that occurs when the low-melt PSF is heated, replaces a resin bonding process employed in the past.[69]

In stage one of the manufacturing process, the polymer is produced by the reaction of the raw materials—monoethylene glycol (MEG) and purified terephthalate acid (PTA) or its derivatives.[70] [71] Unlike other forms of PSF, production of low melt PSF requires two reactors, one producing the lower melt temperature product and the second which produces the higher melt temperature product.[72] The MEG and PTA are chemically combined in one reactor that will eventually form the polyester core of low melt. Polyester that will form the outer sheath is formulated in a second reactor, where MEG and PTA are mixed. Often a third input, purified isophthalic acid (PIA) is added to achieve a lower melting point and to modify the properties of the polyester.[73] "The melt point of the outer sheath can be controlled by the amount of PIA added to the second reactor vessel."[74] The polymerization occurs at a high temperature using a vacuum by one of two methods: 1) the MEG and PTA "react to form a polymer chain, releasing methanol; or 2) the MEG and PTA react directly to form the polymer with water as the by-product."[75] Figure I-1 presents Nan Ya's production schematic for low melt PSF as well as nonsubject products.

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[66] Koslowski, *Dictionary of Man-Made Fibers: Terms-Figures-Statistics,* p. 2, 34-35; and representative of the American Fiber Manufacturers Association, telephone call with USITC staff, July 31, 2017.

[67] Conference transcript, p. 46 (Ringel)

[68] Conference transcript, p. 19 and p. 44 (Sparkman).

[69] Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 26, 2017; and conference transcript, p. 73. According to one respondent, "resin bonding manufacturing capabilities no longer really exist in meaningful ways," conference transcript, p. 73 (Bernet). Based on its questionnaire response, it appears that ***

[70] *Dictionary of Fiber & Textile Technology, "Polyester Fiber,"* p. 116.

[71] Based on data provided in the U.S. producers' questionnaires, the raw materials account for ***.

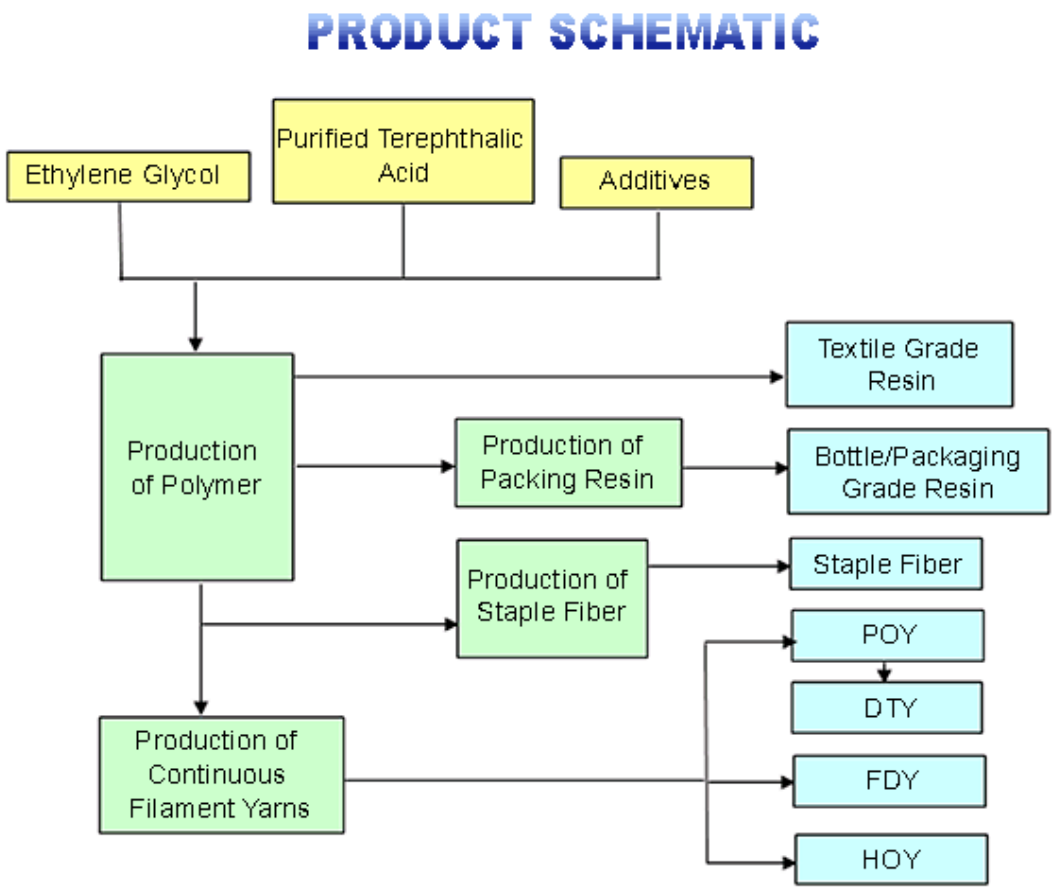
[72] Conference transcript, p. 66 (Sparkman); and representative of the American Fiber Manufacturers Association, staff telephone interview, July 31, 2017.

[73] Conference transcript, p. 20 (Sparkman).

[74] Ibid.

[75] *Dictionary of Fiber & Textile Technology, "Polyester Fiber*," 116.

Figure I-1
Low melt PSF: Nan Ya's production process



Source: Nan Ya webpage, http://www.npcam.com/nj-sc/AAAAA-3.htm, retrieved April 24, 2018.

The second stage of the production process for low melt PSF, common to all PSF, is extrusion and fiber formation that includes stretching, cutting, and baling. After polymerization, the solid, molten plastic, which has a consistency similar to cold honey, must be heated and liquefied before it can be extruded. The liquid fiber-forming polymers are then extruded through tiny holes of a spinneret, a device similar in principle to a showerhead, to form continuous filaments of semi-solid polymer. The denier of the fiber is controlled by the size of the holes on the spinneret as is the configuration (core/sheath or side by side, for example) of the bi-component low melt PSF.[76] ***.[77] Petitioner maintains that all low melt PSF (including black low melt PSF and crystalline low melt PSF) is manufactured using the same basic

[76] Representative of the American Fiber Manufacturers Association, telephone call with USITC staff, July 31, 2017.
[77] ***.

production process on the same equipment and with the same employees.[78] An industry source reports that the differences between the manufacturing processes for standard low melt PSF and those for black low melt PSF and crystalline low melt PSF are minor.[79] The principal additional step required to produce black and crystalline low melt PSF is that the dye used to produce black low melt PSF, or the chemical additive used to produce the crystalline low melt PSF, are added to the polymer before the fiber extrusion.[80] Because of the additional materials required to produce black and crystalline low melt PSF, U.S.
producers of low melt PSF either use dedicated production lines for these different forms or produce them in alternate small batches.[81] Standard low melt PSF cannot be produced simultaneously with black or crystalline low melt PSF on the same shared equipment.[82]

***.[83] The spun tow[84] ***.[85] The spun tow is sent over a creel and a series of "draw wheels" in order to orient the fiber molecules and strengthen the tow. Next, the tow is sent through a crimping machine, which gives the fiber tow a two-dimensional, saw-tooth shape. The tow is then sent through an oven to heat-set the crimp. A second finish (usually silicone or some type of oil-based finish) may be added during this stage of the process, either before the tow is crimped and heat-set or directly after, depending on the manufacturer's preference. Finally, the fiber tow is cut to length by a cutter wheel that determines the length of the links, baled, and shipped to the end users or customers.[86] For low melt PSF, the bales are compressed less than other staple fibers to avoid damaging the fibers.[87] Therefore, the bales weigh less—about 120 pounds versus as much as 400 pounds for non-low melt PSF.[88]

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[78] Petitioner Nan Ya, postconference brief, p. 6; and representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

[79] Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

[80] Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

[81] Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 26, 2017; and conference transcript, pp. 89-90.

[82] Conference transcript, p. 94 (Fee).

[83] ***.

[84] "Tow is a large strand of continuous manufactured fiber filaments without definite twist, collected in loose, rope-like form, usually held together by crimp. Tow is the form that most manufactured fiber reaches before being cut into staple." *Dictionary of Fiber & Textile Technology, "Tow," p.* 165.

[85] ***.

[86] *Certain Polyester Staple Fiber from Korea and Taiwan, Invs. Nos. 731-TA-825 and 826 (Final)*, USITC Publication 3300, May 2000, pp. I-3-I-9; *Certain Polyester Staple Fiber from Korea and Taiwan, Invs. Nos. 731-TA-825 and 826 (Review)*, USITC Publication 3843, March 2006, pp. 16, I-12-I-19; and representative of the American Fibers Manufacturers Association, email message to USITC staff, July 27, 2017.

[87] Representative of the American Fibers Manufacturers Association, email message to USITC staff, July 27, 2017.

[88] Representative of the American Fibers Manufacturers Association, email message to USITC staff, July 27, 2017.

DOMESTIC LIKE PRODUCT ISSUES

In the preliminary phase of these investigations, the petitioner asked the Commission to define one domestic like product coextensive with the scope of the investigations.[89] Respondents Bernet (on behalf of Fibertex Corporation, Consolidated Fibers, Inc., Bernet International Trading, LLC and Stein Fibers, Ltd.,) and Milliken argued that black/dyed low melt PSF and crystalline low melt PSF should each be defined as distinct domestic like products.[90] In its preliminary phase determinations, the Commission defined the domestic like product as a single like product coextensive with Commerce's scope definition.[91] The Commission concluded that the limited distinctions for black/dyed low melt PSF did not constitute a clear dividing line. The Commission found that although the interchangeability of black/dyed low melt PSF with other low melt PSF is limited, such limited interchangeability is also true for other low melt PSF products that serve a range of applications based upon the product's specific characteristics. Although customers perceive the black/dyed low melt PSF and the uncolored low melt PSF to have different applications based largely on aesthetic considerations, the basic characteristics of the colored and uncolored products, namely bonding in nonwoven products, are the same.[92]

With respect to crystalline low melt PSF, similarly, the Commission found that although customers perceive the crystalline low melt PSF and other low melt PSF to have different applications, the basic characteristics of the products are the same, namely bonding in nonwoven products.[93] Crystalline low melt PSF was priced higher than other low melt PSF. However, the limited distinctions between crystalline low melt PSF and other low melt PSF did not constitute a clear dividing line.

In the final phase of these investigations, the petitioner continued to argue that the Commission should define domestic like product as co-extensive with the scope of this case.[94] No respondent addressed the issue of domestic like product in the final phase of these investigations, as no respondent filed prehearing or posthearing briefs with respect to this issue.

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[89] Petition, pp. 13-15.

[90] Respondent Milliken argued for a somewhat broader separate like product than Bernet Respondents. While Bernet Respondents sought a separate like product encompassing only black low melt PSF, the separate like product Milliken seeks includes both black and other colored low melt PSF. *See* Bernet Respondents' Postconference Brief, pp. 5-7. *See also* Milliken Respondent's Postconference Brief, pp. 2-5.

[91] *Low Melt Polyester Staple Fiber From Korea and Taiwan, Inv. Nos. 731-TA-1378-1379 (Preliminary)*, USITC Publication 4720, August 2017, p. 17.

[92] *Ibid.,* p. 13.

[93] *Ibid.,* p. 16.

[94] Petitioner, Nan Ya, prehearing brief, p. 4.

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

U.S. MARKET CHARACTERISTICS

Low melt PSF is used in a range of consumer and industrial nonwoven products including antibacterial wipes and diapers, insulation, soundproofing, batting, and furniture. Low melt PSF is also commonly used in the automotive industry for padding and insulation in the trunks of cars, engine hoods, car floors, and headliners.[1]

The U.S. market is supplied primarily by U.S. production from Nan Ya, nonsubject imports from Korean producer Huvis, subject imports from Korean producers Taekwang and Toray, and subject imports from Taiwan. Apparent U.S. consumption of low melt PSF increased overall during 2015 to 2017, with a large increase from 2015 to 2016 and a small decrease from 2016 to 2017.

*** and twelve importers indicated that there had not been any changes in the product range, mix, or marketing of low melt PSF since January 1, 2015. However, four importers described changes. Importers *** stated that there had been increased demand for crystalline, black, and/or other specialty low melt PSF, with *** adding that black low melt PSF is not made in the United States.

U.S. PURCHASERS

The Commission received 22 usable questionnaire responses from firms that had purchased low melt PSF since 2015.[2] Eighteen responding purchasers are end users and four are distributors.[3] U.S. purchasers were located in multiple states of the continental United States, including Texas, California, Michigan, Tennessee, and the Carolinas. Large purchasers of low melt PSF include ***. Six purchasers (***) also submitted importer questionnaires. Purchasers described selling low melt PSF, or products made with low melt PSF, to automotive, bedding, filtration, furniture, and fabric users.

Ten purchasers, including firms that did not describe themselves as distributors, described whether they compete for sales with the manufacturers or importers from which they purchase low melt PSF. Six purchasers stated that they did not, while four stated that they did. Among those four, one described competing with Nan Ya while another described competing with importers.

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[1] Petition, p. 7.

[2] Of the 22 responding purchasers, 17 purchased the domestic low melt PSF, 8 purchased imports of the subject merchandise from Korea, 12 purchased imports of subject merchandise from Taiwan, 16 purchased imports of nonsubject merchandise from Korea, and 5 purchased imports of low melt PSF from other sources.

[3] Four purchasers indicated that they were “other,” but in further description, indicated that they were end users that produced intermediate products for other final end uses.

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CHANNELS OF DISTRIBUTION

U.S. producers sold mostly to distributors, but had some sales to end users, while importers sold almost entirely to end users (table II-1). ***.

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

* * * * * * *

GEOGRAPHIC DISTRIBUTION

*** reported selling low melt PSF to all regions in the contiguous United States, although *** reported selling only to three regions (table II-2). Importers reported selling subject imports to most regions, although more reported sales in the southeast than in other regions. For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold 52.1 percent within 100 miles of their U.S. point of shipment, 40.5 percent between 101 and 1,000 miles, and 7.4 percent over 1,000 miles.

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

Region	U.S. producers	Importers of subject Korean product	Importers of Taiwan product	Importers of subject Korean and/or Taiwan product
Northeast	***	5	2	6
Midwest	***	5	2	5
Southeast	***	9	2	9
Central Southwest	***	6	2	7
Mountain	***	3	3	5
Pacific Coast	***	3	3	5
Other[1]	***	***	***	***
All regions (except Other)	***	3	2	4
Reporting firms	***	9	3	10

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

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

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SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Table II-3 provides a summary of the supply factors regarding low melt PSF from U.S. producers and from subject countries. No Taiwan or nonsubject Korean producers provided any information in this phase of the investigations.

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

* * * * * * *

Domestic production

Based on available information, U.S. producers of low melt PSF have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced low melt PSF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are substantial unused capacity, along with some limited ability to shift some shipments from alternative markets and sell some product from inventories.

*** stated that it could not shift between producing low melt PSF and other products, while *** indicated that it *** does so. *** indicated that it could also produce ***.[4]

*** indicated that they had not refused, declined, nor been unable to supply low melt PSF since January 1, 2015. Fourteen purchasers stated that the availability of U.S.-produced low melt PSF had not changed since that date. However, eight did. Three of these (***) cited increased supply or capacity from Nan Ya, and *** cited a general increase in production to meet growing global demand. On the other hand, *** stated that supply has tightened with increasing demand and/or the antidumping investigations. *** also described Nan Ya as unable to supply black low melt PSF, and *** stated that Nan Ya would not supply colored or crystalline low melt PSF. *** stated that higher-priced product from Taiwan had increased demand for U.S. product.

Subject imports from Korea[5]

Based on available information, subject producers of low melt PSF from Korea have the ability to respond to changes in demand with large changes in the quantity of shipments of low melt to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the known large volume of Korean exports to the world (see Part VII), suggesting that Korean exporters are able to export substantial volumes to the United States. It is not

[4] ***.
[5] ***.

known what share of Korean exports to the world are from subject Korean producers as opposed to the nonsubject Korean producer Huvis.[6]

***.

Petitioner noted that Mexico and Turkey have placed antidumping duties on Korean low melt PSF, and India, Israel, and Pakistan have imposed other tariffs of 11-30 percent.[7]

Subject imports from Taiwan[8]

Based on available information, producers of low melt PSF from Taiwan have the ability to respond to changes in demand with moderate changes in the quantity of shipments of low melt PSF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the known large volume of Taiwan exports to the world (see Part VII), suggesting that Taiwan exporters are able to export substantial volumes to the United States.[9]

Petitioner noted that Indonesia and Turkey have issued antidumping duties on Taiwan low melt PSF, and that India, Israel, Mexico, and Pakistan have other tariffs of 11-35 percent in place.[10]

Nonsubject imports

Nonsubject imports accounted for *** percent of total U.S. imports in 2017, with the vast majority of those coming from nonsubject Korean producer Huvis, and the rest from other countries (not Korea or Taiwan). The largest sources of other countries' nonsubject imports during 2015-17 were China and Japan.

Supply constraints

Eleven responding importers indicated that they had not refused, declined, or been unable to supply low melt PSF since January 1, 2015. Purchasers were also asked if any firm had refused, declined, or been unable to supply them with low melt PSF since January 1, 2015. Seventeen answered that no firm had, but five responded that there had been such issues. *** stated that Nan Ya does not offer crystalline or color low melt PSF, and, *** stated that Nan Ya

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[6] Additionally, petitioner submitted publicly available articles on Korean producers. It characterized these articles as showing that Korean producers have large capacities to produce low melt PSF. See petitioner's prehearing brief, pp. 43-44 and exhibit 9.

[7] Petitioner's posthearing brief, p. 48 and exhibit 11.

[8] ***.

[9] In the preliminary phase of these investigations, the responding Taiwan producer indicated that it had high but declining capacity utilization, and substantial export shipments to third-country markets. In this phase, petitioner submitted public articles on Taiwan producer FENC. Petitioner characterized these articles as showing that FENC has a large capacity to produce low melt PSF. See petitioner's prehearing brief, pp. 45-46 and exhibit 9.

[10] Petitioner's posthearing brief, p. 48 and exhibit 11.

did not have the capacity to meet U.S. demand. *** described increasing no-quotes from some suppliers, and *** stated that supply is available at higher prices.

Twelve purchasers stated that the availability of imports from Korea and/or Taiwan had not changed since January 1, 2015, but ten stated that there had been changes. Two indicated that Korean supply or capacity had increased, while one stated that it had tightened. Others cited the effects of the antidumping investigations or general increases in supply. Thirteen purchasers stated that the availability of imports from all other countries had not changed, but five stated that it had, mostly citing increased supply from China.

Purchasers were also asked if certain grades/types/sizes of low melt PSF are only available from certain country sources. Twelve answered no, but ten reported that at least some low melt PSF products were not available, usually from U.S. suppliers (although two purchasers did not specify). Purchasers responding that products were not available cited black or color (eight purchasers), crystalline (five purchasers), particular deniers (three purchasers), and particular melt points (one purchaser).

New suppliers

Fourteen purchasers indicated that they were not aware of any new suppliers in the U.S. low melt PSF market since January 1, 2015. Eight listed new suppliers, including Taekwang (listed by four purchasers), Chinese suppliers (listed by three purchasers), and Toray Korea.

U.S. demand

Based on available information, the overall demand for low melt PSF is likely to experience low-to-moderate changes in response to changes in price. The main contributing factors are the limited range of substitute products and moderate cost share in most end uses.

End uses and cost share

U.S. demand for low melt PSF depends on the demand for U.S.-produced downstream products. Reported end uses include antibacterial wipes, air filtration, acoustical padding, batting, furniture, nonwoven fabrics, fabric for paint rollers, needlepunch fabric, padding, automotive insulation, floor pads, and the trunk and wheel liners of cars.[11]

*** explained that batting (in furniture and cushions) is the largest end use for low melt PSF. It continued that there are also automotive end uses, such as wheel well liners and acoustical padding (which use 180 degree low melt PSF) and cabin acoustical padding and trunk liners (which use 110 degree low melt PSF). It added that other end uses include mattresses, medical applications, air filtration (which uses 110 degree low melt PSF), personal care products, and dusting and cleaning products.[12]

[11] Questionnaires and ***.
[12] ***.

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Low melt PSF accounts for a moderate share of the cost of the end-use products in which it is used. Reported cost shares for some end uses were as follows:

- 15 to 25 percent in general non-woven fabrics
- 5 to 20 percent in wipes and household product
- 3 percent in floor pads
- 10 to 35 percent in bedding applications
- 15 to 20 percent in furniture and cushions
- 16 to 50 percent in general automotive end uses
- 10 to 30 percent in filtration media

Business cycles

***, 14 of 17 importers, and 17 of 22 purchasers indicated that the low melt PSF market was not subject to distinctive business cycles or conditions of competition. However, ***, three importers, and five purchasers indicated that the low melt PSF market was subject to distinctive business cycles or conditions of competition. Specifically, *** stated that low melt PSF demand was heavily driven by production of new automobiles. Importer *** stated that its demand peaks correspond to the bedding industry's demand peaks, which tend to correspond to major holiday sales (e.g., Memorial Day, July 4th, and Labor Day). Importer *** stated that demand increases in late fall through spring in anticipation of outdoor furniture sales that start in the spring. Purchaser *** described the automotive industry as moving toward lighter-weight materials and away from plastics.[13]

U.S. producer ***, two importers, and five purchasers indicated that there had not been any changes to low melt PSF business cycles or conditions of competition since January 1, 2015. However, importer *** stated that it had observed an increase in demand due to the increase in demand for bedding via online sales of "bed in a box." Four purchasers (***) stated that there had been changes, including new supply from Asia and the antidumping investigations.

Demand trends

Most firms reported an increase in U.S. demand for low melt PSF since January 1, 2015 (table II-4), primarily driven by expanding end-use demand. In the preliminary phase of these investigations, Nan Ya stated that demand had grown since 2014 due to growth in demand from the automotive sector; however, it projected demand would be "limited" in the future.[14] In this phase, Nan Ya stated that automotive demand was mature and flattening.[15] Also in this phase, *** and three importers stated that U.S. demand had increased due to increased

[13] Other purchasers indicating distinctive conditions of competition described supply and/or demand generally as a distinctive condition of competition.

[14] Petitioner's prehearing brief, p. 14.

[15] Hearing transcript, pp. 47-48 (Sparkman).

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demand from the automotive sector, including from more types of automotive end uses. Importer *** attributed the increase in demand to increased demand for nonwoven fibers as well as low melt PSF being less expensive than polyethylene and polypropylene. Importer *** stated that there had been increased use of processes for carded fiber, increasing demand for low melt PSF. Importer *** stated that demand went down for two years after 2015 but has since risen back to 2015 levels. Importer *** stated that demand for low melt PSF had increased due to general economic growth and an increase in consumer confidence. *** stated that demand for *** had increased since the ***.[16]

Table II-4
Low melt PSF: 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. producers	***	***	***	***
Importers	10	2	0	3
Purchasers	14	3	0	5
Demand outside the United States				
U.S. producers	***	***	***	***
Importers	8	2	0	2
Purchasers	10	4	0	3
Demand for end use product(s)				
Purchasers	9	2	3	3

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

Among purchasers, four indicated that increased automotive sector demand had driven increased U.S. demand for low melt PSF. Another four cited general economic growth as driving increased U.S. demand for low melt PSF, and one (***) indicated that increased demand from the filtration market had caused increased U.S. demand for low melt PSF.

In discussing foreign demand, importer *** attributed the increase in foreign demand to low melt PSF replacing resin bonds. Three purchasers attributed the increase in foreign demand to increased demand from China (with one adding India as well), and another attributed growth in foreign demand to increased demand from specific sectors (e.g., automotive, filtration) or to general economic growth.

Also as shown in table II-4, most responding purchasers indicated that demand for the end-use products incorporating low melt PSF had changed since January 1, 2015. A majority of these purchasers described demand for their end-use products incorporating low melt PSF as increasing. Additionally, thirteen of 17 responding purchasers indicated that changes in demand for their final products had changed their demand for low melt PSF, whether those changes were increases or decreases in demand. *** stated that a change in product mix had led it to purchase more specialized black or black and white low melt PSF, as opposed to "more commoditized" white low melt PSF.

[16] See ***, April 11, 2018.

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Substitute products

Substitutes for low melt PSF are very limited. ***, 12 importers, and 18 purchasers reported that there were no substitutes. *** described polypropylene as a substitute in automotive insulation, home furnishings, and textiles. Those purchasers listing substitutes named polypropylene in automotive components and furnishings, and also named chemical spray binder in bedding and furniture pads. However, all three responding purchasers indicated that changes in the price of the substitute had not affected the price of low melt PSF. *** elaborated that the production equipment needed to use substitute products is much more expensive than the equipment used with low melt PSF, and that it does not have the capability to switch in most of its facilities.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported low melt PSF depends upon such factors as relative prices, quality (e.g., grade standards, defect rates, etc.), and conditions of sale (e.g., price discounts/rebates, lead times between order and delivery dates, reliability of supply, product services, etc.). Purchasers generally described U.S. product and subject imports as comparable in most factors, but also indicated that U.S. products and subject imports were not always interchangeable, especially on the availability of black and crystalline low melt PSF. Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced low melt PSF and low melt PSF imported from subject sources.

Lead times

Low melt PSF is primarily sold from inventory. U.S. producers sold between *** percent of their 2017 commercial sales from inventory, with lead times of *** days. The balance of their 2017 commercial sales were sold produced-to-order, with lead times of *** days. Seven U.S. importers indicated that at least 70 percent of their commercial shipments of Korean and/or Taiwan low melt PSF came from U.S. inventories, with lead times of 2 to 7 days. The balance of U.S. importers' commercial shipments were produced-to-order or from the foreign manufacturers' inventory, with lead times averaging 30 to 100 days.[17]

Knowledge of country sources

Eighteen purchasers indicated they had marketing/pricing knowledge of domestic product, 12 of subject Korean product, 16 of Taiwan product, 17 of nonsubject Korean product, and 10 of product of nonsubject countries (mostly China but also Japan and Germany).

[17] One importer indicated that the majority of its commercial shipments were from foreign manufacturers' inventories, and one indicated that the majority of its commercial shipments were produced-to-order.

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As shown in table II-5, most purchasers and their customers never make purchasing decisions based on the producer or country of origin, although purchasers are somewhat more likely to make such decisions on the basis of producer or country of origin than their customers are. Among purchasers that reported that they at least sometimes make decisions based the manufacturer, most cited the quality of a manufacturer's product, with *** citing Korean product as high quality. Other reasons to purchase from a particular producer included availability, existing certification of a particular producer, and cost/price. Among purchasers making decisions at least sometimes based on country, *** stated that it avoided product from China and India; *** stated that product from the United States, Korea, and Taiwan was mostly interchangeable; and *** stated that it purchases "strategically" from the United States. Among purchasers describing customers that at least sometimes make decisions based on country, *** stated that some of its customers prefer product from Korea, and *** stated that some of its customers want domestic product so that they can market their own finished products as "made in U.S.A."

Table II-5
Low melt PSF: Purchasing decisions based on producer and country of origin

Purchaser/customer decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	2	3	5	12
Purchaser's customers make decision based on producer	---	1	3	16
Purchaser makes decision based on country	1	---	5	16
Purchaser's customers make decision based on country	---	---	3	17

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

Factors affecting purchasing decisions

The most often cited top three factors firms consider in their purchasing decisions for low melt PSF were price or cost (20 firms), quality (16 firms), and availability and/or supply (15 firms) as shown in table II-6. Supply factors were described both in terms of availability and supply chain risk, as well as having a longstanding relationship with the supplier. Cost factors were described both in terms of price and in terms of total costs, including payment terms and the ability to buy in large volume to take advantage of raw material cost declines.

Purchasers defined quality as including factors such as melting temperature, crimp, color, finish, sheath-core ratio, ease of processing, clumping, hardness, and consistency.

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Table II-6
Low melt PSF: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor

Factor	First	Second	Third	Total
Price / Cost	7	7	6	20
Quality	11	4	1	16
Availability / Supply	2	5	8	15
All other factors[1]	2	3	4	9

[1] Other factors include brand, spin finish, color, service, payment terms, and product range.

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

Nine purchasers reported that they usually purchase the lowest-priced low melt PSF that is offered, and nine reported that they sometimes do. Additionally, three reported that they always do, and one reported that it never does.

Purchasers were asked if they or their customers ever specifically ordered low melt PSF from one country in particular over other possible sources of supply. Thirteen answered that they did not, but eight indicated that they did. Four of these eight purchasers indicated that they purchased Korean product because of its quality, consistency, reliability, and/or versatility, or because the purchaser stated that black and crystalline low melt PSF are only available from Korea. One firm reported purchasing German product for its combination of price and performance. Other purchasers cited products specifically tailored to customer requirements or availability of some products from only some sources as reasons why they might order low melt PSF from one country in particular.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 16 factors in their purchasing decisions (table II-7). The factors rated as very important by more than half of responding purchasers were availability, delivery terms, delivery time, price, product consistency, quality meets industry standards, and reliability.

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Table II-7
Low melt PSF: Importance of purchase factors, as reported by U.S. purchasers, by factor

Factor	Very important	Somewhat important	Not important
Availability	21	1	0
Delivery terms	16	6	0
Delivery time	18	4	0
Discounts offered	10	9	3
Extension of credit	9	9	4
Minimum quantity requirements	2	12	7
Packaging	4	10	7
Pigmentation	9	8	4
Price	20	2	0
Product consistency	21	1	0
Product range	4	15	2
Quality meets industry standards	20	2	0
Quality exceeds industry standards	10	11	1
Reliability of supply	20	1	0
Technical support/service	6	13	2
U.S. transportation costs	12	9	1

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

Dyed/colored low melt PSF

Low melt PSF is available as white as well as dyed or colored. Nan Ya stated that black and white low melt PSF are interchangeable in most end uses, although some end users may prefer black low melt PSF when there is an application (such as automotive engines, trunks, or wheel wells) in which low melt PSF is visible and may become soiled.[18] Nan Ya estimated that black low melt PSF accounts for *** of the low melt PSF consumed by the automotive industry.[19] Nan Ya also stated that it would like to make black low melt PSF, but that currently prices are too low to justify the greater cost of doing so.[20]

Purchasers were asked how often dyed/colored low melt PSF is interchangeable with white low melt PSF. Nineteen answered that it never was, and two answered that it sometimes was. *** stated that some of its customers require products made with black low melt PSF, which it described as not available from domestic sources. Four other purchasers expressed a preference for white low melt PSF, and several described different uses requiring different color low melt PSF.

[18] Hearing transcript, pp. 41-43 (Sparkman). See also ***.
[19] Petitioner's posthearing brief, answers to Commissioner questions, p. 7.
[20] Hearing transcript, pp. 41-43 (Sparkman).

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Supplier certification

Fifteen responding purchasers require their suppliers to become certified or qualified to sell low melt PSF to their firm. Seven indicated that they did not require certification. Of those requiring certification, some reported extensive qualification periods and procedures, while others reported faster and less strenuous review. Seven purchasers reported that the time to qualify a new supplier ranged from 60 to 185 days, while four reported that it ranged from 14 to 30 days. Purchasers reported using test runs, samples, and sometimes lab tests to qualify suppliers, and indicated that important factors in qualification included quality, service, on-time delivery, and price. Twenty purchasers reported that no domestic or foreign supplier had failed in its attempt to qualify low melt PSF, or had lost its approved status since January 1, 2015. Two did, citing product from Taiwan and from Korean producer Toray.

Changes in purchasing patterns

Purchasers were asked about changes in their purchasing patterns from different sources since January 1, 2015 (table II-8). Overall, purchasers were slightly more likely to report decreased than increased purchases of U.S. low melt PSF, but more likely to report increased purchases of imports of low melt PSF from all sources than decreased purchases of such imports. Reasons reported for decreases in purchases of U.S. product included lower quality of U.S. product, difficulty of dealing with U.S. supplier, lack of sales contact from U.S. producers, and price. Reasons reported for fluctuating purchases of U.S. product included cost/price, changes in product mix, inability of U.S. producer to supply certain products, and changes in demand. Reasons reported for changes in sourcing of imports included price, changes in demand, need for black low melt PSF, and risk mitigation for the U.S. petrochemical supply chain.

Purchasers were asked if they had changed suppliers since January 1, 2015. Eleven indicated that they had not, and 11 indicated that they had. Purchasers reported adding a wide variety of suppliers, including Nan Ya, Huvis, Toray Korea, Taekwang, and Stein Fibers, and reported dropping Bernet and Stein Fibers, among others. *** indicated that it had regularly switched, either directly or through distributors, among ***.

Table II-8
Low melt PSF: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	3	7	5	2	3
Korea subject	5	2	6	2	2
Taiwan	5	1	4	5	3
Korea nonsubject	2	5	7	2	3
All other countries	7	3	1	1	2
Sources unknown	11	---	1	---	1

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

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Importance of purchasing domestic product

Almost all purchasers reported that all or almost all of their purchases of low melt PSF did not require purchasing U.S.-produced product. Three purchasers reported that some of their purchases were domestic product in order to satisfy customer requirements.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing low melt PSF produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country comparison on the same 16 factors (table II-9) for which they were asked to rate the importance.

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Table II-9
Low melt PSF: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. Korea			U.S. vs. Taiwan			Korea vs. Taiwan		
	S	C	I	S	C	I	S	C	I
Availability	1	7	4	1	10	3	2	8	0
Delivery terms	1	10	1	1	12	1	1	8	1
Delivery time	5	5	2	6	7	1	1	8	1
Discounts offered	0	10	2	0	11	2	0	10	0
Extension of credit	2	10	0	1	11	1	0	8	2
Minimum quantity requirements	0	11	1	0	13	1	0	10	0
Packaging	0	12	0	0	14	0	0	10	0
Pigmentation	0	7	5	0	9	4	1	9	0
Price[1]	0	9	3	1	10	3	1	9	0
Product consistency	0	9	3	0	12	2	1	9	0
Product range	0	4	8	0	8	5	4	6	0
Quality meets industry standards	0	11	1	0	13	1	2	8	0
Quality exceeds industry standards	0	11	1	0	12	1	2	8	0
Reliability of supply	0	9	3	0	12	2	3	6	1
Technical support/service	1	9	2	1	10	2	1	9	0
U.S. transportation costs[1]	1	10	1	1	11	2	1	9	0

Factor	U.S. vs. Korea nonsubject			Korea subject vs. Korea nonsubject			Taiwan vs. Korea nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	1	11	4	1	11	0	0	11	1
Delivery terms	1	14	1	0	12	0	0	12	0
Delivery time	6	8	2	0	12	0	0	12	0
Discounts offered	0	13	3	0	12	0	0	12	0
Extension of credit	2	13	1	0	11	1	0	12	0
Minimum quantity requirements	0	13	3	0	12	0	0	11	0
Packaging	0	16	0	0	12	0	0	12	0
Pigmentation	0	9	6	1	11	0	0	10	2
Price[1]	1	10	5	1	11	0	1	9	2
Product consistency	0	12	4	0	12	0	0	12	0
Product range	0	8	8	1	11	0	0	12	0
Quality meets industry standards	0	15	1	0	12	0	0	12	0
Quality exceeds industry standards	0	15	1	0	12	0	0	12	0
Reliability of supply	0	13	3	0	11	1	0	11	1
Technical support/service	1	12	3	0	11	1	0	11	1
U.S. transportation costs[1]	1	12	3	0	12	0	0	12	0

Table continued on the next page.

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Table II-9--Continued
Low melt PSF: Purchasers' comparisons between U.S.-produced and imported product

Factor	U.S. vs. all other nonsubject			Korea vs. all other nonsubject			Taiwan vs. all other nonsubject		
	S	C	I	S	C	I	S	C	I
Availability	1	8	3	1	9	1	0	7	2
Delivery terms	1	10	1	0	11	0	0	8	1
Delivery time	2	8	2	0	11	0	0	7	2
Discounts offered	0	11	1	0	11	0	0	9	0
Extension of credit	1	10	0	0	11	0	0	9	0
Minimum quantity requirements	0	10	2	0	11	0	0	9	0
Packaging	0	11	0	0	11	0	0	9	0
Pigmentation	0	9	2	0	10	0	0	9	0
Price[1]	0	10	2	1	9	1	0	7	1
Product consistency	1	10	1	1	10	0	0	8	0
Product range	0	8	3	0	10	1	0	8	1
Quality meets industry standards	1	10	1	1	10	0	0	9	0
Quality exceeds industry standards	1	9	1	1	10	0	0	9	0
Reliability of supply	1	9	2	1	10	0	0	8	1
Technical support/service	1	7	3	0	11	0	0	9	0
U.S. transportation costs[1]	2	10	0	0	11	0	0	9	0

[1] A rating of superior means that price/U.S. transportation cost is generally lower. For example, if a firm reported "U.S. superior," it meant that the U.S. product was generally priced lower than the imported product.

Note.--S=first listed country's product is superior; C=both countries' products are comparable; I=first list country's product is inferior.

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

Most responding purchasers reported that U.S., subject, and nonsubject low melt PSF were comparable in all factors. However, for product range, a majority of responding purchasers ranked U.S. product as inferior to subject Korean product. Responding purchasers were also evenly split when comparing U.S. product to nonsubject Korean product on product range, and when comparing U.S. product to subject Korean product on delivery time.

Comparison of U.S.-produced and imported low melt PSF

In order to determine whether U.S.-produced low melt PSF can generally be used in the same applications as imports from Korea and Taiwan, U.S. producers, importers, and purchasers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-10, U.S. producers were more likely than U.S. importers and purchasers to describe product from different sources as always interchangeable. Whereas a plurality of importers generally indicated that U.S. product and product from other sources were frequently or sometimes interchangeable, purchaser responses varied somewhat more across responses (except for never interchangeable).

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Table II-10
Low melt PSF: Interchangeability between low melt PSF 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				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries: U.S. vs. subject Korea	***	***	***	***	3	3	5	1	3	3	6	1
U.S. vs. Taiwan	***	***	***	***	2	3	5	2	6	3	6	---
Subject countries comparisons: Subject Korea vs. Taiwan	***	***	***	***	2	4	3	1	5	3	4	---
Nonsubject comparisons: U.S. vs. nonsubject Korea	***	***	***	***	2	4	5	1	5	5	7	2
U.S. vs. other country nonsubject	***	***	***	***	2	2	4	1	2	6	4	---
Subject Korea vs. nonsubject Korea	***	***	***	***	3	4	3	1	6	3	3	1
Subject Korea vs other country nonsubject	***	***	***	***	2	2	3	2	4	3	4	---
Taiwan vs. nonsubject Korea	***	***	***	***	2	4	4	1	7	3	4	1
Taiwan vs. other country nonsubject	***	***	***	***	3	2	3	---	4	4	4	---
Nonsubject Korea vs. other country nonsubject	***	***	***	***	2	2	5	---	4	4	4	---

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

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

In additional comments, two importers (***) stated that specific product requirements necessitated the use of low melt PSF from particular sources. Five importers (***) stated that black low melt PSF is not available from U.S. producers. *** stated that Korean product is higher quality than Nan Ya's product, and several importers (including ***) described product from different sources as having different qualities and performance.

Among purchasers, *** stated that while low melt bicomponent fiber is chemically the same product from different suppliers, product from different suppliers cannot be used together due to variability in processing the fiber through its equipment. It also stated that the quantity of spin finish (added to the low melt PSF to control static electricity) must be optimized for its equipment. *** stated that black and/or semi-crystalline low-melt PSF is not available (or not available in large volumes) from U.S. producers. *** added that U.S. product is "often" inferior in quality. *** indicated that melting points for products from different countries can vary, and *** stated that different producers' processes can result in different qualities, availabilities, and shrinkage when heat is applied. *** stated that the quality of Chinese product had not been as consistent as the quality of U.S., Korean, and Taiwan product.

As can be seen from table II-11, half or a majority of responding purchasers reported that low melt PSF from all sources usually met minimum quality specifications, with the balance generally describing low melt PSF from all sources as always meeting minimum quality specifications.

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Table II-11
Low melt PSF: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	7	11	0	2
Korea subject	4	8	0	0
Taiwan	8	8	0	0
Korea nonsubject	9	9	0	0
Other	3	7	2	0

[1] Purchasers were asked how often domestically produced or imported low melt PSF meets minimum quality specifications for their own or their customers' uses.

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

In addition, producers, importers, and purchasers were asked to assess how often differences other than price were significant in sales of low melt PSF from the United States, subject, or nonsubject countries. As seen in table II-12, U.S. producers described such factors as never significant, while U.S. importers and purchasers were more likely to describe such factors as always or frequently significant.

Table II-12
Low melt PSF: Significance of differences other than price between low melt PSF 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				Number of purchasers reporting			
	A	F	S	N	A	F	S	N	A	F	S	N
U.S. vs. subject countries: U.S. vs. subject Korea	***	***	***	***	3	4	3	1	3	7	3	---
U.S. vs. Taiwan	***	***	***	***	3	3	3	1	3	5	5	2
Subject countries comparisons: Subject Korea vs. Taiwan	***	***	***	***	3	3	2	2	2	5	3	2
Nonsubject comparisons: U.S. vs. nonsubject Korea	***	***	***	***	2	4	5	---	5	8	3	2
U.S. vs. other country nonsubject	***	***	***	***	3	2	2	1	2	4	5	1
Subject Korea vs. nonsubject Korea	***	***	***	***	1	5	3	2	2	5	2	4
Subject Korea vs other country nonsubject	***	***	***	***	2	4	2	1	2	2	5	2
Taiwan vs. nonsubject Korea	***	***	***	***	1	5	3	2	3	6	3	3
Taiwan vs. other country nonsubject	***	***	***	***	2	3	2	1	2	3	4	3
Nonsubject Korea vs. other country nonsubject	***	***	***	***	1	4	3	1	2	4	4	2

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

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

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In additional comments, four importers (***) stated that crystalline and/or black low melt PSF is not available from U.S. producers. *** stated that low melt PSF from different sources is differentiated by quality and processability in the customer's equipment. *** stated that because of Nan Ya's limited capacity and ability to switch its production to more profitable bicomponent conjugated fibers, U.S. purchasers needed alternative sources of supply. *** stated that U.S. product was not of the same quality or available in the same quantity as that from Asian sources.

Among purchasers, *** reiterated that U.S. producers do not offer black or crystalline low melt PSF, or do not do so in sufficient volume.[21] *** described lead time, availability, and commercial terms as significant non-price factors, and *** indicated that product range and availability were significant. On the other hand, *** stated that differences are never significant, making products from different sources interchangeable.

Additionally, *** stated that Nan Ya ***

ELASTICITY ESTIMATES

This section discusses elasticity estimates; parties were encouraged to comment on these estimates in their prehearing or posthearing briefs; none did so.

U.S. supply elasticity

The domestic supply elasticity[22] for low melt PSF measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of low melt PSF. The elasticity of domestic supply depends on several factors including the level of excess capacity, the ease with which producers can alter capacity, producers' ability to shift to production of other products, the existence of inventories, and the availability of alternate markets for U.S.-produced low melt PSF. Analysis of these factors above indicates that the U.S. industry has the ability to increase or decrease shipments of white low melt PSF to the U.S. market; an estimate in the range of 5 to 8 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for low melt PSF measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of low melt PSF. This estimate depends on factors discussed above such as the existence, availability, and commercial viability of substitute products, as well as the component share of the low melt PSF in the production of any downstream products. Based on the available information, the aggregate demand for low melt PSF is likely to be somewhat inelastic; a range of -0.5 to -1.0 is suggested.

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[21] In other comments, *** stated that it had inquired about the availability of domestic black low melt PSF and not been able to obtain it.

[22] A supply function is not defined in the case of a non-competitive market.

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Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[23] Product differentiation, in turn, depends upon such factors as quality (e.g., chemistry, appearance, etc.) and conditions of sale (e.g., availability, sales terms/ discounts/ promotions, etc.). Based on available information, the elasticity of substitution between U.S.-produced low melt PSF and imported low melt PSF is likely to be in the range of 3 to 5, depending on the importance of color and/or crystalline requirements.

[23] The substitution elasticity measures the responsiveness of the relative U.S. consumption levels of the subject imports and the domestic like products to changes in their relative prices. This reflects how easily purchasers switch from the U.S. product to the subject products (or vice versa) when prices change.

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the 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 responses of two firms that accounted for all known U.S. production of low melt PSF during 2017.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to two firms based on information contained in the petition, Nan Ya and FIT Fibers. Both firms provided usable data on their production operations. Staff believes that these responses represent the entirety of U.S. production of low melt PSF.

Table III-1 lists U.S. producers of low melt PSF, their production locations, positions on the petition, and shares of total production. Nan Ya is the primary U.S. producer of low melt PSF. Accordingly, industry trends in this section are largely driven by that firm's data.

Table III-1
Low melt PSF: U.S. producers of low melt PSF, their positions on the petition, production locations, and shares of reported production, 2017

Firm	Position on petition	Production location(s)	Share of production (percent)
FIT Fibers	***	Johnson City, TN	***
Nan Ya	Petitioner	Lake City, SC	***
Total			***

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms of low melt PSF. As indicated, *** is related to and wholly owned by a foreign producer of the subject merchandise. *** U.S. producer reported either importing the subject merchandise or purchasing the subject merchandise from U.S. importers.

Table III-2
Low melt PSF: U.S. producers' ownership, related and/or affiliated firms

* * * * * * *

FIT Fibers

FIT Fibers, a wholly owned subsidiary of The Cha Technologies Group, headquartered in Johnson City, Tennessee, is a producer of low melt PSF, black low melt PSF, and crystalline low

melt PSF. FIT Fibers operates a research and development facility on-site and maintains a large number of patents that it utilizes to jointly develop products with customers.[1] The Johnson City facility was constructed and became operational in 1997.

The Cha Technologies Group, headquartered in Nyon, Switzerland, is a division of The Cha Group, a multinational corporation with a diversified business portfolio that includes property, technology, textiles, financial services, and healthcare.[2] The Cha Technologies Group is composed of 7 companies and operates businesses in fibers, yarns, nonwovens and filter manufacturing.[3]

Nan Ya America

Nan Ya America, a wholly owned subsidiary of Nan Ya Plastics Corporation, is a producer of low melt PSF headquartered in Livingston, New Jersey. Nan Ya America operates three business units in the United States: (1) flexible PVC films (Batchelor, Louisiana), (2) polyester fiber (Lake City, South Carolina), and (3) ethylene glycol production (Point Comfort, Texas).[4] Established in 1990, Nan Ya America's Lake City, South Carolina plant is the firm's largest U.S. production site[5] and began production of low melt PSF in 2008.[6] In addition to low melt PSF, this site produces polyester chip (resin) for textile and bottle/sheet industries, other polyester staple fiber, and polyester continuous filament yarns.[7] The firm estimates that this site produces 2 billion pounds of polyester polymer per year.[8]

Nan Ya Plastics Corporation, which is headquartered in Taipei, Taiwan, focuses on the production of petrochemical products, polyester products and electronics. In 2016, Nan Ya Plastics Corporation reported revenue of $8.5 billion, a decrease of 8.2% from the $9.3 billion reported for 2015.[9]

Producers were asked to report any changes in operations such as plant openings, plant closings, relocations, expansions, acquisitions, consolidations, prolonged shutdowns or production curtailments since January 1, 2015. Such changes are presented in table III-3.

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[1] *Fiber Innovation Technology webpage*, http://www.fitfibers.com/, April 13, 2018.

[2] *The Cha Technologies Group webpage*, http://www.chatechnologies.com/who-we-are/the-cha-group/, accessed April 13, 2018.

[3] *The Cha Technologies Group webpage*, http://www.chatechnologies.com/who-we-are/group-structure/, April 13, 2018.

[4] *Nan Ya Plastics Corporation, America webpage*, http://www.npcam.com/nno1.htm, accessed April 13, 2018.

[5] *Nan Ya Plastics Corporation, America webpage*, http://www.npcam.com/nj-sc/AAAAA-01.htm, accessed April 13, 2018

[6] Conference transcript, p. 19 (Sparkman).

[7] *Nan Ya Plastics Corporation, America webpage*, http://www.npcam.com/nj-sc/AAAAA-01.htm, accessed April 13, 2018.

[8] *Nan Ya Plastics Corporation, America webpage*, http://www.npcam.com/nj-sc/AAAAA-01.htm, accessed April 13, 2018.

[9] Nan Ya Plastics webpage, https://www.npc.com.tw/j2npc/enus/company_highlights.jsp, accessed April 13, 2018.

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

* * * * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. U.S. producers' annual production capacity *** from 2015 to 2017. Their total production of low melt PSF *** from 2015 to 2016, then increased by *** percent from 2016 to 2017. Similarly, U.S. producers' capacity utilization rate *** from 2015 to 2016, then increased by *** percentage points from 2016 to 2017.[10]

Table III-4
Low melt PSF: U.S. producers' production, capacity, and capacity utilization, 2015-2017

* * * * * * *

Figure III-1
Low melt PSF: U.S. producers' production, capacity, and capacity utilization, 2015-17

* * * * * * *

U.S. producers' production capacity is calculated based on ***.[11] Nan Ya testified that efficient low melt PSF production requires a continuous high volume production to maintain efficiencies.[12] Furthermore, maintaining a high level of capacity utilization is essential because stopping and restarting production is inefficient and raises production costs.[13] During the preliminary phase, Nan Ya asserted that it could make adjustments to double its capacity with existing equipment should pricing make it commercially justifiable.[14] At the hearing, Nan Ya testified that they "converted an existing production line to produce low melt, doubling their effective capacity."

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[10] Beginning in January 2018, Nan Ya's reported low melt PSF production capacity is *** pounds. As of the hearing, Nan Ya states that "right now going forward" it is producing low melt PSF at a rate of around 180 million pounds annually, i.e., a *** percent capacity utilization rate. Hearing conference, p. 44 (Freeman). *See also* fn. 15 *infra.*

[11] Nan Ya's producer questionnaire response, section II-3b. FIT Fibers' producer questionnaire response, section II-3b.

[12] Conference transcript, p. 22 (Sparkman).

[13] Ibid.

[14] Ibid.

The Commission asked producers to report constraints on capacity to produce low melt PSF. FIT Fibers reported that the *** are production constraints. Nan Ya reported that *** is a production constraint.

Alternative products

As shown in table III-5, low melt PSF accounted for between *** percent of total production on the same equipment and machinery during 2015-17. *** firm, ***, reported producing products other than low melt PSF on the same equipment and machinery used to make low melt PSF.[15] ***. FIT Fibers reported ***.

Table III-5
Low melt PSF: U.S. producers' overall plant capacity and production on the same equipment as subject production, 2015-17

* * * * * * *

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. U.S producers ship *** of their low melt PSF domestically, with U.S. shipments accounting for *** percent, *** percent, and *** percent of total shipments in 2015, 2016, and 2017, respectively.

Table III-6
Low melt PSF: U.S. producers' U.S. shipments, exports shipments, and total shipments, 2015-17

* * * * * * *

From 2015 to 2017, U.S. producers' U.S. shipments increased by *** percent with the majority of the increase occurring from 2016 to 2017 by quantity. U.S. producers' export shipments increased by *** percent from 2015 to 2016 but decreased by *** percent from 2016 to 2017, ending *** percent lower than in 2015.[18] U.S. producers' total shipments increased by *** percent from 2015 to 2017.[19] There was no internal consumption or transfers to related firms during the period for which data were collected.

After decreasing by *** percent from 2015 to 2016, the value of U.S. producers' U.S. shipments increased by *** percent from 2016 to 2017, ending *** percent higher than in 2015. The value of export shipments, on the other hand, decreased irregularly by *** percent

[15] ***.

[18] ***.

[19] Nan Ya states ***. Petitioner's posthearing brief, p. 8-9.

from 2015 to 2017. The value of U.S. producers' total shipments decreased from 2015 to 2016 by *** percent, but increased from 2016 to 2017 by *** percent, ending *** percent higher than in 2015.[20]

The unit value of U.S. producers' U.S. shipments and export shipments decreased by *** percent and *** percent, respectively, from 2015 to 2017. The unit value of U.S. producers' total shipments decreased by *** percent from 2015 to 2016, but increased by *** percent from 2016 to 2017, ending *** percent lower than in 2015.

Table III-7 presents U.S. producers' low melt PSF U.S. shipments by product type. The majority of U.S. production of low melt PSF is neither dyed nor crystalline. During 2015-17, only *** reported producing low melt PSF in a type other than neither dyed nor crystalline. Beginning in ***, *** reported that *** percent of its low melt PSF production was of a type other than neither dyed nor crystalline.[21] However, *** percent of total U.S. production remained neither dyed nor crystalline in ***.[22]

Table III-7
Low melt PSF: U.S. producer's U.S. shipments by product type, 2015-17

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-8 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments**.** U.S. producers' inventories of low melt PSF decreased by *** percent from 2015 to 2016 and then increased by *** percent from 2016 to 2017, ending *** percent higher than in 2015. The ratio of inventories to production, inventories to U.S. shipments, and inventories to total shipments each decreased from 2015 to 2017, by ***, ***, and *** percentage points, respectively.

[20] ***. *** email message to USITC staff, May 18, 2018.

[21] ***.

[22] At the hearing, Nan Ya testified that it "would like to start producing black low melt," but that the market conditions do not exist for it to do so profitably. Nan Ya also testified that to produce black low melt it would not need to open a new production line or permanently convert an existing line, but that it "should be able to make that with the existing lines that [it] has." Hearing transcript, pp. 41-42 (Sparkman).

Table III-8
Low melt PSF: U.S. producers' inventories, 2015-17

* * * * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

No U.S. producer reported imports or purchases of low melt PSF during 2015-17.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") increased by *** percent from 2015 to 2017. Total hours worked increased by *** percent from 2015 to 2017, despite decreasing slightly by *** percent from 2015 to 2016. Total wages paid increased by *** percent from 2015 to 2017. Hourly wages increased from 2015 to 2016 by *** percent, then decreased by *** percent from 2016 to 2017, for an overall increase of *** percent. Productivity increased from *** pounds per hour in 2015, to *** pounds per hour in 2016, to *** pounds per hour in 2017. Unit labor costs remained constant during 2015-17.

Table III-9
Low melt PSF: Average number of production and related workers, hours worked, wages paid to such employees, hourly wages, productivity, and unit labor costs, 2015-17

* * * * * * *

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 30 firms believed to be importers of subject low melt PSF, as well as to all U.S. producers of low melt PSF.[1] Staff received usable importer questionnaire responses from nineteen companies,[2] representing an estimated *** percent of subject U.S. imports from Korea and *** percent of U.S. imports from Taiwan in 2017 under HTS statistical reporting number 5503.20.0015. Table IV-1 lists all responding U.S. importers of low melt PSF from Korea, Taiwan, and other sources, their locations, and their shares of U.S. imports, in 2017.

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

Firm	Headquarters	Share of imports by source (percent)						
		Korea subject	Taiwan	Subject sources	Korea nonsubject	All other sources	Nonsubject sources	All import sources
3M	St. Paul, MN	***	***	***	***	***	***	***
Albany Fiber	New Albany, MS	***	***	***	***	***	***	***
Bernet	Los Angeles, CA	***	***	***	***	***	***	***
Consolidated Fibers	Charlotte, NC	***	***	***	***	***	***	***
Custom Nonwoven	New Albany, MS	***	***	***	***	***	***	***
Fibertex	Teaneck, NJ	***	***	***	***	***	***	***
Goetz	Dallas, TX	***	***	***	***	***	***	***
HSM	Hickory, NC	***	***	***	***	***	***	***
Miliken	Spartanburg, SC	***	***	***	***	***	***	***
NC Works	Franklin, OH	***	***	***	***	***	***	***
Piana Nonwovens	Cartersville, GA	***	***	***	***	***	***	***
Poole	Greenville, SC	***	***	***	***	***	***	***
RSM	Charlotte, NC	***	***	***	***	***	***	***
Shalag	Oxford, NC	***	***	***	***	***	***	***
Spuntech	Roxboro, NC	***	***	***	***	***	***	***
Stein Fibers	Albany, NY	***	***	***	***	***	***	***
Tenowo	Lincolnton, NC	***	***	***	***	***	***	***
William Barnet	Spartanburg, SC	***	***	***	***	***	***	***
WMT Burnett	Baltimore, MD	***	***	***	***	***	***	***
Total		***	***	***	***	***	***	***

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

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 statistical reporting number 5503.20.0015 in 2017.

[2] Two firms, *** and ***, certified that it had not imported any low melt PSF since January 1, 2015. *** also certified that it had not imported any low melt PSF since January 1, 2015.

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of low melt PSF from Korea, subject and nonsubject, Taiwan, and all other sources. From 2015 to 2016, total U.S. imports from all sources by quantity increased by *** percent, but from 2016 to 2017 total U.S. imports from all sources decreased by *** percent, for an overall increase of *** percent. By value, imports from all sources decreased by *** percent from 2015 to 2017. Subject imports from Korea and Taiwan increased by *** percent and 6.7 percent, respectively, from 2015 to 2017.

Table IV-2
Low melt PSF: U.S. imports by source, 2015-17

Item	Calendar year		
	2015	2016	2017
	Quantity (1,000 pounds)		
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	50,115	60,060	53,450
Subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	5,534	3,589	6,484
Nonsubject sources	***	***	***
All import sources	176,352	202,730	183,175
	Value (1,000 dollars)		
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	32,304	30,981	30,923
Subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	4,245	2,827	5,432
Nonsubject sources	***	***	***
All import sources	120,256	117,067	117,921
	Unit value (dollars per pound)		
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	0.64	0.52	0.58
Subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	0.77	0.79	0.84
Nonsubject sources	***	***	***
All import sources	0.68	0.58	0.64

Table continued on next page.

Table IV-2--Continued
Low melt PSF: U.S. imports by source, 2015-17

Item	Calendar year		
	2015	2016	2017
	Share of quantity (percent)		
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	28.4	29.6	29.2
Subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	3.1	1.8	3.5
Nonsubject sources	***	***	***
All import sources	100.0	100.0	100.0
	Share of value (percent)		
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	26.9	26.5	26.2
Subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	3.5	2.4	4.6
Nonsubject sources	***	***	***
All import sources	100.0	100.0	100.0
	Ratio to U.S. production		
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	***	***	***
Subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	***	***	***
Nonsubject sources	***	***	***
All import sources	***	***	***

Source: Compiled from official U.S. import statistics and *** records using HTS statistical reporting number 5503.20.0015, accessed March 27, 2018.

Figure IV-1
Low melt PSF: U.S. imports volumes and prices, 2015-17

* * * * * * *

As a share of U.S. imports of low melt PSF by quantity, subject sources increased from *** percent in 2015, to *** percent in 2016, to *** percent in 2017. As a ratio to U.S. production, U.S. imports from subject sources decreased by *** percentage points from 2015 to 2017. Nonsubject imports from Korea increased from 2015 to 2016 by *** percent by quantity before decreasing from 2016 to 2017 by *** percent for an overall decrease from 2015 to 2017 of *** percent.

The value of subject imports from Korea increased by *** percent while the value of imports from Taiwan decreased by 4.3 percent from 2015 to 2017. Nonsubject imports from Korea decreased in value by *** percent from 2015 to 2017. By unit value, subject imports from Korea decreased from 2015 to 2016 by *** percent before increasing from 2016 to 2017 by *** percent, for an overall decrease from 2015 to 2017 of *** percent. The unit value of imports from Taiwan followed a similar trend, decreasing from 2015 to 2016 by 18.8 percent, before increasing from 2016 to 2017 by 11.5 percent, for an overall decrease from 2015 to 2017 of 9.4 percent. In each year from 2015 to 2017, the unit value of low melt PSF imports from Taiwan was *** than imports from any other import source. In contrast, the unit value of nonsubject imports from Korea was *** than either subject imports from Korea or from Taiwan.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[3] Negligible imports are generally defined in the Act, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the petition or the initiation of the investigation. However, if there are imports of such merchandise from a number of countries subject to investigations initiated on the same day that individually account for less than 3 percent of the total volume of the subject merchandise, and if the imports from those countries collectively account for more than 7 percent of the volume of all such merchandise imported into the United States during the applicable 12-month period, then imports from such countries are deemed not to be negligible.[4] Subject imports from Korea accounted for *** percent of total imports of low melt PSF by quantity from June 2016 through May 2017. Imports from Taiwan accounted for 30.6 percent of total imports of low melt PSF by quantity from June 2016 to May 2017. Table IV-3 presents U.S. imports in the twelve month period preceding the filing of the petition.

[3] 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)).

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

Table IV-3
Low melt PSF: U.S. imports in the twelve month period preceding the filing of the petition, by source

Item	June 2016 through May 2017	
	Quantity (1,000 pounds)	Share of quantity (percent)
U.S. imports from.--		
Korea subject	***	***
Taiwan	59,536	30.6
Subject sources	***	***
Korea nonsubject	***	***
All other sources	3,307	1.7
Nonsubject sources	***	***
All import sources	194,739	100.0

Source: Compiled from official U.S. import statistics and proprietary Customs records using HTS statistical reporting number 5503.20.0015, accessed March 27, 2018.

CRITICAL CIRCUMSTANCES

On June 22, 2018, Commerce issued its final determination that "critical circumstances" exist, in part, with regard to imports from Korea of low melt PSF. Commerce found that critical circumstances do not exist for Huvis Corporation or "all others," but do exist for Toray Chemical Korea.[5] Commerce did not find critical circumstances for imports of low melt PSF from Taiwan.[6] Petitioner withdrew its allegation of critical circumstances after Commerce's final determination.[7] In this investigation, if both Commerce and the Commission make affirmative final critical circumstances determinations, certain subject imports may be subject to antidumping duties retroactive by 90 days from February 2, 2018, the effective date of Commerce's preliminary affirmative LTFV determination. Table IV-4 and figure IV-2 present critical circumstances data for imports of low melt PSF from Korea.

[5] *Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*, 83 FR 29094, June 22, 2018. When petitioners file timely allegations of critical circumstances, Commerce examines whether there is a reasonable basis to believe or suspect that (1) either there is a history of dumping and material injury by reason of dumped imports in the United States or elsewhere of the subject merchandise, or the person by whom, or for whose account, the merchandise was imported knew or should have known that the exporter was selling the subject merchandise at LTFV and that there was likely to be material injury by reason of such sales; and (2) there have been massive imports of the subject merchandise over a relatively short period.

[6] *Low Melt Polyester Staple Fiber From Taiwan: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*, 83 FR 4903, February 2, 2018.

[7] Hearing transcript, p. 93 (Rosenthal); Petitioner's posthearing brief, p. 1.

Table IV-4
Low melt PSF: U.S. imports from Korea subject to Commerce's final AD critical circumstance findings, January through December 2017

* * * * * * *

Figure IV-2
Low melt PSF: U.S. imports from Korea subject to Commerce's final AD critical circumstance findings, January through December 2017.

* * * * * * *

In the twelve month period around the filing of the petition, June 27, 2017, imports of low melt PSF from Toray of Korea *** in the months immediately around the filing date. Imports began to *** in June 2017, with a *** percent increase over May 2017, by quantity. Imports by quantity *** in July with *** percent increase over June. Imports *** in July 2017, at *** pounds. In the six months after the petition was filed, cumulative imports of low melt PSF from Toray *** the cumulative imports for the six months prior to the filing of the petition by *** percent.

CUMULATION CONSIDERATIONS

In assessing whether imports should be cumulated, the Commission determines whether U.S. imports from the subject countries compete with each other and with the domestic like product and has generally considered four factors: (1) fungibility, (2) presence of sales or offers to sell in the same geographical markets, (3) common or similar channels of distribution, and (4) simultaneous presence in the market. Information regarding channels of distribution, market areas, and interchangeability appear in Part II. Additional information concerning fungibility, geographical markets, and simultaneous presence in the market is presented below.

Fungibility

The commission collected data on U.S. producers' and U.S. importers' U.S. shipments of low melt PSF by product type, including dyed but not crystalline, crystalline but not dyed, both crystalline and dyed, and neither dyed nor crystalline.[10] Table IV-5 and figure IV-3 present U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of low melt PSF by product type.

[10] "Dyed but not crystalline" low melt PSF is commonly referred to as "black" low melt PSF while "neither dyed nor crystalline" low melt PSF is commonly referred to as "white" low melt PSF throughout these investigations. However, note that dyed low melt PSF may include other colors as well.

Table IV-5
Low melt PSF: U.S. producers and U.S. importers' U.S. shipments by product type, 2017.

* * * * * * *

Figure IV-3
Low melt PSF: U.S. producers and U.S. importers' U.S. shipments by product type, 2017.

* * * * * * *

The majority of U.S. producers' U.S. shipments and U.S. importers' U.S. shipments were neither dyed nor crystalline (white) low melt PSF. Neither dyed nor crystalline low melt PSF accounted for *** percent of U.S. producers' and U.S. importers' U.S. shipments of low melt PSF in 2017. Dyed but not crystalline (black) low melt PSF comprised *** percent of the overall share, followed by crystalline but not dyed (*** percent) and both crystalline and dyed (***), respectively. Neither dyed nor crystalline (white) low melt PSF accounted for *** percent of U.S. importers' subject U.S. shipments and *** percent of U.S. producers' U.S. shipments in 2017. Dyed but not crystalline (black) low melt PSF accounted for *** percent of U.S. importers' U.S. shipments of subject imports and *** percent of U.S. importers' U.S. shipments of nonsubject imports. Imports accounted for greater than *** percent of U.S. shipments of dyed but not crystalline (black) low melt PSF.

Crystalline low melt product accounted for a comparatively small share of the overall market. In 2017, both crystalline and dyed low melt made up less than *** of combined U.S. shipments, while crystalline but not dyed low melt comprised *** of U.S. shipments. Crystalline but not dyed low melt PSF accounted for just *** percent of U.S. producers' U.S. shipments in 2017; and both crystalline and dyed low melt PSF accounted for just *** percent of U.S. producers' U.S. shipments in 2017. Importers reported *** shipments of either type of crystalline low melt PSF product from subject sources in 2017. From nonsubject sources, *** of shipments were crystalline but not dyed; and *** percent of shipments were both crystalline and dyed.

Geographical markets

Table IV-6 presents U.S. imports of low melt PSF by border of entry in 2017. In 2017, a majority of subject imports from Korea and Taiwan entered through U.S. ports located in the East. Such imports accounted for *** percent and 66.0 percent of subject imports from Korea and Taiwan, respectively. Most imports from nonsubject sources also entered through eastern U.S. ports (***).[12]

[12] Eastern points of entry include Baltimore, MD; Boston, MA; Charleston, SC; Charlotte, NC; Norfolk, VA; and Savannah, GA. Northern points of entry include Chicago, IL; Cleveland, OH; Minneapolis, MN; and St. Louis, MO. Southern points of entry include Dallas-Fort Worth, TX; Houston-Galveston, TX;

(*continued*...)

Table IV-6
Low melt PSF: U.S. imports by border of entry, 2017.

Item	Border of entry				
	East	North	South	West	Total
	Quantity (1,000 pounds)				
U.S. imports from.--					
Korea subject	***	***	***	***	***
Taiwan	35,251	5,034	5,248	7,917	53,450
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
All other sources	5,146	61	654	624	6,484
Nonsubject sources	***	***	***	***	***
All import sources	125,302	9,278	23,836	24,759	183,175
	Share across (percent)				
U.S. imports from.--					
Korea subject	***	***	***	***	***
Taiwan	66.0	9.4	9.8	14.8	100.0
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
All other sources	79.4	0.9	10.1	9.6	100.0
Nonsubject sources	***	***	***	***	***
All import sources	68.4	5.1	13.0	13.5	100.0
	Share down (percent)				
U.S. imports from.--					
Korea subject	***	***	***	***	***
Taiwan	28.1	54.3	22.0	32.0	29.2
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
All other sources	4.1	0.7	2.7	2.5	3.5
Nonsubject sources	***	***	***	***	***
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Compiled from official U.S. import statistics and *** records using HTS statistical reporting number 5503.20.0015, accessed March 27, 2018.

(…*continued*)
Mobile, AL; and New Orleans, LA. Western points of entry include Columbia-Snake, OR; Los Angeles, CA; and Seattle, WA.

Presence in the market

Table IV-7 presents monthly imports of low melt PSF for January 2015 through December 2017.

Table IV-7
Low melt PSF: Monthly U.S. imports, by source, January 2015 through December 2017

Item	U.S. imports						
	Korea subject	Taiwan	Subject sources	Korea nonsubject	All other sources	Nonsubject sources	All import sources
2015.--							
January	***	3,395	***	***	402	***	15,168
February	***	4,680	***	***	1,111	***	12,316
March	***	4,873	***	***	1,429	***	14,966
April	***	3,865	***	***	483	***	21,180
May	***	5,010	***	***	598	***	19,938
June	***	5,579	***	***	711	***	16,962
July	***	2,182	***	***	132	***	10,335
August	***	1,984	***	***	67	***	8,318
September	***	4,086	***	***	129	***	12,016
October	***	5,002	***	***	66	***	14,391
November	***	5,090	***	***	84	***	15,341
December	***	4,369	***	***	322	***	15,421
2016.--							
January	***	4,015	***	***	693	***	18,015
February	***	5,053	***	***	339	***	13,976
March	***	4,708	***	***	218	***	16,675
April	***	5,257	***	***	177	***	18,088
May	***	7,305	***	***	369	***	20,602
June	***	5,791	***	***	126	***	16,531
July	***	4,860	***	***	450	***	16,008
August	***	3,946	***	***	46	***	16,944
September	***	3,585	***	***	229	***	11,153
October	***	5,090	***	***	419	***	20,946
November	***	4,703	***	***	197	***	16,233
December	***	5,746	***	***	325	***	17,560
2017.--							
January	***	6,663	***	***	483	***	20,432
February	***	3,563	***	***	528	***	13,736
March	***	5,293	***	***	139	***	17,402
April	***	4,514	***	***	245	***	13,878
May	***	5,780	***	***	119	***	13,916
June	***	3,693	***	***	268	***	12,343
July	***	5,437	***	***	148	***	19,776
August	***	5,872	***	***	144	***	19,697
September	***	3,675	***	***	504	***	13,471
October	***	2,654	***	***	1,491	***	12,109
November	***	5,476	***	***	1,177	***	12,960
December	***	829	***	***	1,237	***	13,455

Source: Compiled from official U.S. import statistics and *** records using HTS statistical reporting number 5503.20.0015, accessed March 27, 2018.

Subject imports from Taiwan and Korea were present throughout 2015-17. Imports from nonsubject sources were also present throughout 2015-17.

APPARENT U.S. CONSUMPTION

Table IV-8 presents data on apparent U.S. consumption for low melt PSF from 2015 to 2017.

Table IV-8
Low melt PSF: Apparent U.S. consumption, 2015-17

Item	Calendar year		
	2015	2016	2017
	Quantity (1,000 pounds)		
U.S. producers' U.S. shipments	***	***	***
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	50,115	60,060	53,450
All subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	5,534	3,589	6,484
Nonsubject sources	***	***	***
All import sources	176,352	202,730	183,175
Apparent U.S. consumption	***	***	***
	Value (1,000 dollars)		
U.S. producers' U.S. shipments	***	***	***
U.S. imports from.--			
Korea subject	***	***	***
Taiwan	32,304	30,981	30,923
All subject sources	***	***	***
Korea nonsubject	***	***	***
All other sources	4,245	2,827	5,432
Nonsubject sources	***	***	***
All import sources	120,256	117,067	117,921
Apparent U.S. consumption	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics and *** records using HTS statistical reporting number 5503.20.0015, accessed March 27, 2018.

Apparent U.S. consumption based on quantity increased by *** percent from 2015 to 2016, then decreased by *** percent from 2016 to 2017, ending *** percent higher than in 2015. By value, apparent U.S. consumption increased irregularly from 2015 to 2017 by *** percent.

U.S. MARKET SHARES

U.S. market share data are presented in table IV-9. U.S. producers' market share, by quantity, increased overall from *** percent in 2015, down to *** percent in 2016, and then back up to *** percent in 2017. Korea subject imports' market share, by quantity, increased from *** percent in 2015, to *** percent in 2016, and to *** percent in 2017. Taiwan's market

share increased from *** percent in 2015 to *** percent in 2016, and then decreased to *** percent in 2017. The market share for nonsubject sources decreased from *** percent in 2015, to *** percent in 2016, and to *** percent in 2017.

By value, U.S. producers' market share declined from *** percent in 2015, to *** percent in 2016, and then increased to *** percent in 2017. Korea subject imports' market share, by value, increased from *** percent in 2015, to *** percent in 2016, to *** percent in 2017. Taiwan's market share increased from *** percent in 2015 to *** percent in 2016, and then decreased to *** percent in 2017. Nonsubject imports from Korea decreased in market share by value from *** percent in 2015 to *** percent in 2017.

Table IV-9
Low melt PSF: Market shares, 2015-17

* * * * * * *

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PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The primary raw materials used to produce low melt PSF are monoethylene glycol ("MEG"), purified terephthalic acid ("PTA"), and purified isophthalic acid ("PIA").[1] U.S. producers' raw material costs, as a share of the cost of goods sold ("COGS"), increased from *** in 2015 to *** percent in 2017, after decreasing to *** in 2016. ***.[2]

Overall, the prices of MEG and PTA both increased irregularly from January 2015 to December 2017 (figure V-1). The price of MEG increased by *** percent during this time, while the price of PTA increased by *** percent. However, as shown in the figure, both MEG and PTA prices were lower in most of 2016 than in the beginning of 2015.

Figure V-1
Raw materials: Costs of purified terephthalic acid ("PTA") and monoethylene glycol ("MEG"), monthly, January 2015-December 2017

* * * * * * *

U.S. producers, importers, and purchasers were asked how the prices of the raw materials used to make low melt PSF had changed since January 1, 2015. ***, seven importers, and five purchasers[3] stated that raw material prices had fluctuated with no clear trend. ***, 4 importers, and 11 purchasers stated that resin prices had increased since 2015. Importers *** attributed the changes in raw material prices to changes in oil and gas prices, while importers *** stated that there was no discernable correlation between fluctuating raw material prices and petrochemical prices. Importer *** described MEG and PTA prices from both U.S. and Asian suppliers as falling. Importer *** described raw material prices as falling for two years after 2015, but as having risen now to levels above those of 2015.

*** and nine importers stated that their sales prices of low melt PSF were not based directly on published prices of any raw materials. Importer *** stated that its imported low melt PSF costs are related to raw material costs as well as supply and demand factors. Importer

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[1] Some low melt PSF is also manufactured using recycled raw materials, but the types of materials used and the production processes are the same, whether the low melt PSF is virgin or recycled. Petitioner's brief, pp. 13-14.

[2] ***. Additionally, ***.

[3] Purchaser comments in this section suggest that multiple purchasers interpreted "raw materials" to mean their raw materials, i.e., low melt PSF, and thus described the trends in low melt PSF prices. In addition to the responses described above, four purchasers described a decrease in raw material costs and one described constant raw material costs.

*** stated that it has one customer that links its buying prices to raw material prices, and that other customers track raw material prices "generally."

Nineteen purchasers also stated that their purchase prices of low melt PSF were not based directly on published prices of any raw materials. However, three (***) did, with *** stating that some of its purchases from U.S. producers use formula pricing while other purchases do not. The other two purchasers described prices as indexed to petrochemical (MEG and PTA) prices.

Purchasers were also asked if they tracked prices of the raw materials used to make low melt PSF, even if they do not directly incorporate raw material prices into their purchase prices of low melt PSF. Thirteen answered that they do not, while eight answered that they did, stating that they used PCI or IHS data on PTA, MEG, and other raw material components. *** indicated that it had ***.

Transportation costs to the U.S. market

Transportation costs for low melt PSF shipped from subject countries to the United States averaged 8.4 percent for Korea and 10.7 percent for Taiwan during 2017. These estimates were derived from official import data and represent the transportation and other charges on imports.[4]

U.S. inland transportation costs

*** and seven importers reported that they typically arrange transportation to their customers, while three importers reported that their customers typically arrange transportation. U.S. producers reported that their U.S. inland transportation costs were *** percent while most responding importers reported costs of 1.5 to 5.0 percent. Eight importers indicated that they ship imported Korean and/or Taiwan low melt PSF from their storage facilities, while two did so from their point of importation.

Importers of Korean and/or Taiwan low melt PSF for their own use were requested to estimate U.S. inland transportation costs (from the port of importation to the point of use). Two importers responded that U.S. inland transportation costs for own-use imports of Korean low melt PSF were between 2 and 4 percent of total cost, while three importers responded that such costs for own-use imports of Taiwan low melt PSF were between 1 and 5 percent.

[4] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2017 and then dividing by the customs value based on the HTS reporting number 5503.20.0015.

PRICING PRACTICES

Pricing methods

U.S. producers and importers reported using transaction-by-transaction negotiations and, *** to set prices for low melt PSF, as presented in table V-1. Nan Ya stated that its customers generally request spot market pricing as opposed to longer-term pricing based off of formulas.[5]

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

Method	U.S. producers	Importers
Transaction-by-transaction	***	***
Contract	***	5
Set price list	***	***
Other	***	***
Responding firms	2	9

[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.

Sixteen of 22 purchasers indicated that their purchases of low melt PSF usually involve negotiations between supplier and purchaser. Seven of those 16 indicated that they do not share competing prices during negotiations, but two indicated that they might refer to such prices. Purchasers reported negotiating with suppliers over price, quality, delivery, availability, and delivery terms. *** stated that it negotiates an annual contract with a base price and feedstock prices that adjust quarterly. *** also indicated that it negotiates pricing arrangements based on an index. No other purchasers did. *** described low melt PSF as a "commodity item" with price negotiated every three months.

U.S. producers and importers reported selling the vast majority of their low melt PSF in the spot market (for U.S. producers) or under short-term contracts (for U.S. importers), as shown in table V-2. Among U.S. producers, ***. Among importers, seven sold at least 65 percent of their low melt PSF under short-term contracts (and the rest generally in the spot market), while two sold 100 percent of their low melt PSF in the spot market.

[5] Hearing transcript, p. 52 (Sparkman).

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

* * * * * * *

***. Eight importers indicated that their short-term contracts did not allow price renegotiation, fixed quantity and price, and did not have meet-or-release provisions. Importers' short-term contracts ranged from 30 to 120 days.

Eight purchasers reported that they purchase product weekly, five purchase monthly, five purchase quarterly, and two purchase daily. Two reported quarterly contracts that allowed more frequent (than quarterly) purchases. Seventeen of 22 responding purchasers reported that their purchasing frequency had not changed since January 1, 2015. Those describing changes mostly described increased purchasing frequencies or volumes due to increased demand. Most (17 of 22) purchasers contact 1 to 4 suppliers before making a purchase, although others contacted more than that.

Sales terms and discounts

*** three importers typically quote prices on a delivered basis, while *** seven importers typically quote prices on an f.o.b. point of shipment basis. *** and eight importers reported sales terms of net 30 days, while five importers reported sales terms of net 60 days. *** indicated that they had no discount policy, while *** indicated that it offered quantity discounts.

Price leadership

Purchasers were asked to identify any firms that they considered price leaders in the low melt PSF market. Six listed Huvis, and three of those listed both Huvis and Nan Ya. Other purchasers reported importers/distributors as price leaders, including Bernet, Fibertex, RSM, and William Barnet. Huvis was described as leading through having a large market share and through its reputation. *** stated that announced price changes from Huvis and Nan Ya were typically followed by price changes from other suppliers. Other listed price leaders were described as leading through competitive prices or effective communication of pricing changes.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value or purchase import costs of the following low melt PSF products shipped to unrelated U.S. customers during 2015-17.[6] Data for all products were

[6] These products differed from the products requested in the preliminary phase in that products 1-3 were specified to be white and non-crystalline in this final phase. This change was made to eliminate any (*continued*...)

requested separately for sales to distributors and end users. Products 1 and 3 are used primarily in automotive, bedding, filtration, and wipe end uses, while products 2 and 4 are used primarily in automotive end uses.[7]

Product 1.--Low melt polyester staple fiber, white, non-crystalline, 4 denier in diameter, 37-76 mm in cut length, sheath melt point of 110°C.

Product 2.--Low melt polyester staple fiber, white, non-crystalline, 4 denier in diameter, 37-76 mm in cut length, sheath melt point of 180°C.

Product 3.--Low melt polyester staple fiber, white, non-crystalline, 2 denier in diameter, 37-76 mm in cut length, melt point of 110°C.

Product 4.--Low melt polyester staple fiber, dyed/solution dyed/colored, color match and controlled (+/- 1.0 Delta E), non-crystalline, 4 denier in diameter, 37-76 mm in cut length, melt point of 110°C.

Two U.S. producers and 6 importers provided usable pricing or cost data for sales of the requested products to unrelated parties, although not all firms reported pricing for all products for all quarters.[8] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of low melt PSF to distributors and *** percent of U.S. producers shipments of low melt PSF to end users. Among importers, pricing data represented *** percent of U.S. importers' shipments of subject Korean product to end users, *** percent of U.S. importers' shipments of Taiwan product to distributors, and *** percent of U.S. importers' shipments of Taiwan product to end users in 2017.[9] As noted in Part II, most subject imports were shipped to end users rather than distributors, and this fact is reflected in the pricing data as well.

(…*continued*)
price difference between different types (e.g., white, black, or crystalline) of low melt PSF. See conference transcript, p. 89 (Edwards) and petitioner comments on draft questionnaires, January 8, 2018, p.2. Product 4 was added at the request of importer Milliken in order to obtain pricing data on a dyed/solution dyed/colored product. Milliken comments on draft questionnaires, January 8, 2018, p. 2.

[7] Email from Gina Beck, economist for petitioner, April 26, 2018.

[8] 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.

[9] A few firms submitted price data that were generally higher-priced than the data from other firms. U.S. producer *** provided price data only for product ***. Its reported prices were substantially higher than ***. In the preliminary phase of these investigations, *** reported that ***. These data were included in the pricing data analysis.

Importer ***. In the preliminary phase of these investigations, ***. These data were included in the pricing data analysis.

Price data for products 1-4 are presented in tables V-3 to V-9 and figures V-2 to V-8. No firms supplied any data for sales of product 4 to distributors. Nonsubject price data (from Korean producer Huvis) are presented in Appendix D.

Table V-3
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 sold to distributors, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Table V-4
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 sold to end users, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Table V-5
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold to distributors, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Table V-6
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 sold to end users, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Table V-7
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold to distributors, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Table V-8
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 sold to end users, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Table V-9
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 sold to end users, and margins of underselling/(overselling), by quarter, January 2015-December 2017

* * * * * * *

Figure V-2
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 1, sold to distributors, by quarter, January 2015-December 2017

* * * * * * *

Figure V-3
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 1, sold to end users, by quarter, January 2015-December 2017

* * * * * * *

Figure V-4
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 2, sold to distributors, by quarter, January 2015-December 2017

* * * * * * *

Figure V-5
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 2, sold to end users, by quarter, January 2015-December 2017

* * * * * * *

Figure V-6
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 3, sold to distributors, by quarter, January 2015-December 2017

* * * * * * *

Figure V-7
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 3, sold to end users, by quarter, January 2015-December 2017

* * * * * * *

Figure V-8
Low melt PSF: Weighted-average prices and quantities of domestic and imported product 4, sold to end users, by quarter, January 2015-December 2017

* * * * * * *

Import purchase costs

The Commission also requested that importers provide landed duty-paid values and quantities for imports used for internal consumption (direct imports). Eight importers provided such data, and their purchase cost data for imports of products 1-4 are presented in tables V-10

to V-13 and figures V-9 to V-12, along with U.S. sales prices to end users (previously presented).[10]

These importers were asked to identify the benefits of directly importing low melt PSF as opposed to purchasing it from a U.S. producer or importer. *** stated that it does so because it can obtain a "better product" at a lower price. *** stated that direct importing was less expensive than purchasing from an unrelated party until the bonding requirements were imposed. Three other importers described direct importing in order to obtain product (including black and/or crystalline low melt) that was not available from U.S. producers, with one of those (***) adding that price was also a factor.

Three importers estimated that they saved between *** percent of landed duty-paid value by importing themselves rather than purchasing. Additionally, *** estimated that the logistical or supply chain costs of direct importing amounted to about 4 percent of the landed duty-paid value of low melt PSF, *** estimated that such costs were 20 percent, and *** estimated that such costs were about $0.05 per kilogram (or $0.11 per pound), or about *** percent of its reported landed duty-paid values for its pricing products.

Table V-10
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 1 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 1, by quarter, January 2015-December 2017

* * * * * * *

Table V-11
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 2 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 2, by quarter, January 2015-December 2017

* * * * * * *

Table V-12
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 3 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 3, by quarter, January 2015-December 2017

* * * * * * *

Table V-13
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 4 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 4, by quarter, January 2015-December 2017

* * * * * * *

[10] ***.

Figure V-9
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 1 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 1, by quarter, January 2015-December 2017

* * * * * * *

Figure V-10
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 2 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 2, by quarter, January 2015-December 2017

* * * * * * *

Figure V-11
Low melt PSF: Purchase costs. Weighted-average f.o.b. prices of domestic product 3 sold to end users and f.o.b. landed duty-paid values and quantities of imported product 3, by quarter, January 2015-December 2017

* * * * * * *

Figure V-12
Low melt PSF: Purchase costs. Weighted-average f.o.b. landed duty-paid values and quantities of imported product 4, by quarter, January 2015-December 2017

* * * * * * *

Price and import cost trends

In general, prices decreased during 2015-17. Table V-14 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases ranged from *** to *** percent during 2015-17, while Korean import price and cost decreases ranged from *** to *** percent and Taiwan import price and cost decreases ranged from *** to *** percent. Additionally, three product-source combinations (two involving Korea and one involving the United States) showed price increases over the period.

In additional comments, *** described low melt PSF pricing as having risen substantially, as much as 44 percent since the first quarter of 2017, since the imposition of the bonding requirements.

Table V-14
Low melt PSF: Summary of weighted-average f.o.b. prices and costs for products 1-4 from the United States, Korea, and Taiwan

* * * * * * *

Price comparisons

As shown in table V-15, prices for subject low melt PSF imported from Korea were below those for U.S.-produced product in 19 of 32 instances (*** million pounds); margins of underselling ranged from 0.4 to 64.5 percent. In the remaining 13 instances (*** million pounds) prices for subject low melt PSF product from Korea were between 1.0 and 54.3 percent

above prices for the domestic product. Prices for low melt PSF imported from Taiwan were below those for U.S.-produced product in 25 of 37 instances (*** million pounds); margins of underselling ranged from 1.2 to 65.2 percent. In the remaining 12 instances (*** million pounds), prices for low melt PSF product from Taiwan were between 0.1 and 15.6 percent above prices for the domestic product. All comparisons for Korean subject product, and most comparisons for Taiwan product, involved product for sales to end users.

Table V-15
Low melt PSF: Instances of underselling/overselling and the range and average of margins, by country, January 2015-December 2017

Source	Underselling				
	Number of quarters	Quantity[1] (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Korea subject	19	***	32.5	0.4	64.5
Taiwan	25	***	26.7	1.2	65.2
Total	44	***	29.2	0.4	65.2
Source	**(Overselling)**				
	Number of quarters	Quantity[1] (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Korea subject	13	***	-11.5	-1.0	-54.3
Taiwan	12	***	-6.4	-0.1	-15.6
Total	25	***	-9.0	-0.1	-54.3

[1] These data include only quarters in which there is a comparison between the U.S. and subject product.

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

LOST SALES AND LOST REVENUE

In the preliminary phase of the investigation, the Commission requested that U.S. producers of low melt PSF report purchasers where they experienced instances of lost sales or revenue due to competition from imports of low melt PSF from Korea and/or Taiwan during January 2014-March 2017. Both U.S. producers reported having lost sales and revenue, and *** identified five firms where *** lost sales or revenue (three consisting of lost sales allegations and two consisting of lost revenue allegations).[11]

In the final phase of the investigation, of the two responding U.S. producers, *** reported that *** had to reduce prices, *** reported that *** had to roll back announced price increases, and *** reported that *** had lost sales, since January 1, 2015.

[11] However, eight purchasers submitted lost sales lost revenue survey responses.

Staff contacted 31 purchasers and received responses from 22 purchasers.[12] Responding purchasers reported purchasing 286 million pounds of low melt PSF during January 2015-December 2017 (table V-16). Because purchasers often purchased from each other, however, this number likely double-counts some volume of purchases.

Of the 22 responding purchasers, 9 reported that, since 2015, they had purchased imported low melt PSF from subject Korean producers instead of U.S.-produced product, 12 reported that they had purchased Taiwan product instead of U.S.-produced product, and 15 reported that they had purchased nonsubject Korean product instead of U.S.-produced product (table V-17). Six of 10 responding purchasers reported that subject Korean import prices were lower than U.S.-produced product, 9 of 14 responding purchasers reported that prices for Taiwan product were lower than prices for U.S. product, and 8 of 15 responding purchasers reported that prices for nonsubject Korean product were lower than prices for U.S. product. Two of 10 responding purchasers indicated that price was a primary reason for purchasing subject Korean product rather than U.S. product, 6 of 13 responding purchasers did so for Taiwan, and 4 of 13 did so for nonsubject Korean product.

Of the five responding purchasers, none reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject sources (table V-18); 17 purchasers reported that they did not know.

Table V-16
Low melt PSF: Purchasers' responses to purchasing patterns

* * * * * * *

Table V-17
Low melt PSF: Purchasers' responses to purchasing subject imports instead of domestic product

* * * * * * *

Table V-18
Low melt PSF: Purchasers' responses to U.S. producer price reductions

* * * * * * *

[12] Two purchasers (***) submitted lost sales lost revenue survey responses in the preliminary phase, but did not submit purchaser questionnaire responses in the final phase.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

U.S. producers Nan Ya and FIT Fibers provided financial data on their operations of low melt PSF. These data are believed to account for all U.S. production of low melt PSF from 2015 to 2017. *** is the leading U.S. producer of low melt PSF, accounting for more than *** percent of the low melt PSF sales quantity in 2015, 2016, and 2017. *** reported internal consumption, transfers to related firms, or tolling. *** reported their financial results on a calendar year basis.

Operations on low melt PSF

Table VI-1 presents aggregated data on U.S. producers' operations on low melt PSF over the period examined; table VI-2 presents the change in average unit values for the data presented in table VI-1 between yearly periods; table VI-3 presents the cost of raw material inputs in 2017; and table VI-4 presents selected company-specific financial data.

Net sales

*** reported internal consumption or transfers to related firms, *** net sales ***. Within the same facility that produces low melt PSF, ***.[1] As shown in table VI-1, total net sales increased by *** percent by quantity and *** percent by value from 2015 to 2017. *** net sales quantity and value from 2015 to 2017.

On a per-pound basis, the net sales value decreased by *** percent from 2015 to 2017. However, table VI-4 shows that per-pound net sales values ***, with *** in every year examined primarily due to sales to different customer types. ***.[2] The two producers' channels of distribution also varied, with ***.[3]

Table VI-1
Low melt PSF: Results of operations of U.S. producers, 2015-17

* * * * * * *

Table VI-2
Low melt PSF: Changes in AUVs, between fiscal years and between partial year periods

* * * * * * *

[1] ***. ***. Staff telephone interview with ***, ***, email message to USITC staff, May 18, 2018, and *** U.S. producer questionnaire, II-3a.

[2] Staff telephone interview with ***.

[3] U.S. producers' questionnaire, II-8.

Cost of goods sold and gross profit or (loss)

As shown earlier in table VI-1, raw materials represented the largest component of COGS, ranging from *** to *** percent of total COGS during 2015 to 2017. The per-pound value of raw materials decreased in 2016 but increased overall by ***, or by *** percent, from 2015 to 2017.[4] [5] Firm-by-firm analysis in table VI-4 shows ***.[6] ***.[7] ***.[8] [9]

Other factory costs were the second largest component of COGS, representing *** to *** percent of total COGS during 2015 to 2017. Firm-by-firm analysis in table VI-4 shows ***. ***.[10]

Direct labor was the smallest component of COGS, representing *** to *** percent of total COGS during 2015 to 2017. As shown in table VI-1, per-pound direct labor costs were relatively constant during the reporting period. ***.

As shown in table VI-1, the total COGS ***. As shown in table VI-4, company-specific per-unit data show that ***.

The industry's gross profits declines from *** were attributable to ***. In contrast, ***. In 2017, ***.[11] ***.[12]

Table VI-3
Low melt PSF: U.S. producers' raw material inputs, by firm, 2017

* * * * * * *

[4] ***. U.S. producers' questionnaire, question III-7, and ***, email to Commission staff, April 19, 2018.

[5] Conference testimony alleged that due to the abundant supply of the main ingredient PTA in the Far East, the cost of this critical raw material is significantly lower than the price of PTA in the United States. Conference transcript, p. 17 (Menegaz).

[6] ***. U.S. producers' questionnaire, III-9b, ***, email to Commission staff, April 19, 2018, and staff telephone interview with ***.

[7] ***. ***, email to Commission staff, April 19, 2018.

[8] ***. ***. Staff telephone interview with ***.

[9] Nan Ya produces polyester chip, or resin, ***. Nan Ya's PET Textile Grade Resin (Chip) "covers a full range of luster and specifications through a wide processing window." Nan Ya's South Carolina Plant is "one of the major suppliers of PET Fiber Chip in North America" and "can be used for nonwovens, staple fiber, and continuous filament spinning processes." Nan Ya webpage, http://www.npcam.com/nj-sc/AAAAA-3.htm, retrieved April 24, 2018.

[10] Staff telephone interview with ***.

[11] ***. Staff telephone interview with ***.

[12] ***. ***'s U.S. producer questionnaire, III-18.

Selling general and administrative expenses and operating profit or (loss)

As shown in table VI-1, the industry's selling, general, and administrative ("SG&A") expense ratio (i.e., total SG&A expenses divided by total revenue) steadily increased from *** percent in 2015 to *** percent in 2017. Table VI-4 shows that ***. On a per-pound basis, ***.[13] ***. ***.

All other income and expenses

***.

Net income or (loss)

Net income followed the same trend as operating income, *** in 2016 and 2017, reflecting ***. *** in 2017.

Table VI-4
Low melt PSF: Select results of operations of U.S. producers, by company, 2015-17

* * * * * * *

Variance analysis

A variance analysis is not presented in this report due to ***.

Capital expenditures and research and development expenses

Table VI-5 presents capital expenditures and research and development ("R&D") expenses by firm. ***.[14] [15] ***.

Table VI-5
Low melt PSF: Capital expenditures and research and development expenses for U.S. producers, by firm, 2015-17

* * * * * * *

[13] ***. ***'s U.S. producer questionnaire, III-16 and III-17.
[14] ***. *** U.S. producer questionnaire, III-13.
[15] ***. ***, email to Commission staff, April 19, 2018.

ASSETS AND RETURN ON ASSETS

Table VI-6 presents data on the U.S. producers' total assets and their return on assets ("ROA"). ROA is calculated as the ratio of operating income (or loss) to total assets. Total assets increased from $*** in 2015 to $*** in 2017 while the ROA declined from *** percent in 2015 to *** percent in 2017.[16] *** total assets *** by *** percent from 2015 to 2017 and *** total assets *** by *** percent from 2015 to 2017.[17]

Table VI-6

Low melt PSF: Value of assets used in production, warehousing, and sales, and return on investment for U.S. producers by firm, 2015-17

* * * * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of low melt PSF to describe any actual or potential negative effects of imports of low melt PSF from Korea and Taiwan on their firms' growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-7 presents U.S. producers' responses in a tabulated format and table VI-8 provides their narrative responses.

Table VI-7

Low melt PSF: Actual and anticipated negative effects of imports on investment and growth and development

* * * * * * *

Table VI-8

Low melt PSF: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2015

* * * * * * *

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

[17] ***. U.S. producer questionnaires, III-12.

PART VII: THREAT CONSIDERATIONS AND INFORMATION ON NONSUBJECT COUNTRIES

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

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

---

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

(VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,

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

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

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

Information on the nature of the dumping margins was presented earlier in this report; information on the volume and pricing of imports of the subject merchandise is presented in *Parts IV* and *V*; and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts is presented in *Part VI*. Information on inventories of the subject merchandise; foreign producers' operations, including the potential for "product-shifting;" any other threat indicators, 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.

THE INDUSTRY IN KOREA

The Commission issued foreign producers' or exporters' questionnaires to 18 firms believed to produce and/or export low melt PSF from Korea.[3] The Commission received a

[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."

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

response from one Korean producer, Toray Chemical, during the final phase of these investigations.[4] According to petitioners, there are three major producers of low melt PSF in Korea: Huvis, Toray Chemical, and Taekwang Industrial. *** reported exports to the United States accounted for an estimated *** percent of subject imports from Korea in 2017. According to their reported estimate, *** accounts for *** percent of total low melt PSF production in Korea and *** percent of total low melt PSF exports from Korea to the United States. Petitioners noted that Huvis claims a total polyester staple fiber capacity of 1.1 billion pounds per year and expanded its capacity by adding a new low melt PSF production line in 2013.[5] Table VII-1 presents information on the low melt PSF operations of responding producers and exporters in Korea.

Table VII-1
Low melt PSF: Summary data on Korean producer Toray Chemical Korea, Inc, 2017

Firm	Production (1,000 pounds)	Share of reported production (percent)	Exports to the United States (1,000 pounds)	Share of reported exports to the United States (percent)	Total shipments (1,000 pounds)	Share of firm's total shipments exported to the United States (percent)
Toray Chemical Korea Inc	***	***	***	***	***	***
Total	***	***	***	***	***	***

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

Changes in operations

As presented in table VII-2, Toray Chemical reported *** operational changes since January 1, 2015.

Table VII-2
Low melt PSF: Reported changes in operations by producers in Korea, since January 1, 2015

* * * * * * *

Operations on low melt PSF

Table VII-3 presents information on low melt PSF operations of the responding firm in Korea. Toray's production capacity increased by *** percent from 2015 to 2017 and is *** through 2019. Toray's total production increased by *** percent from 2015 to 2017 and Toray reportedly expects total production to *** just slightly *** 2017 levels through 2019. Inventories increased by *** percent from 2015 to 2017 and Toray expects inventories to continue to increase through 2019 by an additional *** percent over 2017 inventories.

[4] Commission staff have made efforts to obtain additional responses, with emphasis on ***. See email message from Huvis counsel to USITC staff, April 9, 2018.

[5] Petitioner's postconference brief, p. 45.

Toray's home market shipments increased from 2015 to 2017 by *** percent. Total export shipments increased more markedly by comparison, increasing by *** percent over the same period. Export shipments to all markets other than the United States comprised the *** of Toray's total shipments at *** percent in 2017. Home market shipments made up *** percent of total shipments and export shipments to the United States made up *** percent of total shipments in 2017.

Table VII-3
Low melt PSF: Data on industry in Korea, 2015-17 and projection calendar years 2018 and 2019

* * * * * * *

Alternative products

As shown in table VII-4, Toray produced a *** amount of other products on the same equipment and machinery used to produce low melt PSF. Toray reported producing *** on the same equipment and machinery. Out-of-scope production accounted for *** percent of *** total production on shared equipment 2017. In describing constraints on product shifting, Toray reported that ***.

Table VII-4
Polyester staple fiber: Overall capacity and production on the same equipment as in-scope production by producers in Korea, 2015-17

* * * * * * *

Exports

Table VII-5 presents data from Global Trade Atlas ("GTA") on exports of polyester staple fiber from Korea.[6] According to GTA, the leading export markets for PSF from Korea are the United States, China, and Vietnam. During 2017, the United States was the top export market for PSF from Korea, accounting for 15.5 percent of exports by quantity, followed by the China, accounting for 11.3 percent of exports by quantity.

[6] Global trade databases present data based on six-digit HTS subheading 5503.20, which describes the article as: "synthetic staple fibers, not carded, combed or otherwise processed for spinning: of polyester." Harmonized Tariff Schedule of the United States (2018). HTS subheading 5503.20 covers products that are outside the scope of this investigation. Therefore, export data compiled from these databases may overstate the quantity of exports of low melt PSF.

Table VII-5:
Polyester staple fiber: Exports from Korea, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Quantity (1,000 pounds)		
Korea exports to the United States	272,174	289,033	262,296
Korea exports to other major destination markets.--			
China	143,494	143,050	189,968
Vietnam	101,461	99,584	111,148
Poland	75,675	75,934	92,879
Germany	102,577	101,294	87,559
Japan	60,806	72,272	85,662
Italy	78,396	93,810	82,145
United Kingdom	73,127	69,261	70,308
Russia	44,132	39,381	63,961
All other destination markets	544,276	591,334	642,068
Total Korea exports	1,496,118	1,574,954	1,687,994
	Value (1,000 dollars)		
Korea exports to the United States	153,283	143,008	142,835
Korea exports to other major destination markets.--			
China	82,589	73,176	112,762
Vietnam	64,162	57,364	70,283
Poland	38,048	33,504	44,417
Germany	60,082	52,467	50,245
Japan	35,258	39,114	46,808
Italy	41,581	43,723	42,712
United Kingdom	36,802	30,655	32,916
Russia	24,954	20,131	33,706
All other destination markets	311,349	296,580	357,803
Total Korea exports	848,107	789,722	934,487

Table continued on next page.

Table VII-5—Continued
Polyester staple fiber: Exports from Korea, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Unit value (dollars per pound)		
Exports from Korea to the United States	0.56	0.49	0.54
Exports from Korea to other major destination markets.--			
China	0.58	0.51	0.59
Vietnam	0.63	0.58	0.63
Poland	0.50	0.44	0.48
Germany	0.59	0.52	0.57
Japan	0.58	0.54	0.55
Italy	0.53	0.47	0.52
United Kingdom	0.50	0.44	0.47
Russia	0.57	0.51	0.53
All other destination markets	0.57	0.50	0.56
Total exports from Korea	0.57	0.50	0.55
	Share of quantity (percent)		
Exports from Korea to the United States	18.2	18.4	15.5
Exports from Korea to other major destination markets.--			
China	9.6	9.1	11.3
Vietnam	6.8	6.3	6.6
Poland	5.1	4.8	5.5
Germany	6.9	6.4	5.2
Japan	4.1	4.6	5.1
Italy	5.2	6.0	4.9
United Kingdom	4.9	4.4	4.2
Russia	2.9	2.5	3.8
All other destination markets	36.4	37.5	38.0
Total exports from Korea	100.0	100.0	100.0

Note.-- Data extracted using HS subheading 5503.20 which includes out-of-scope data

Source: Official exports statistics under HS subheading 5503.20 as reported by Korea Customs and Trade Development Institution in the IHS/GTA database, accessed March 27, 2018.

THE INDUSTRY IN TAIWAN

The Commission issued foreign producers' or exporters' questionnaires to 5 firms believed to produce and/or export low melt PSF from Taiwan.[7] The Commission did not receive a response from any Taiwan firm.[8] However, during the preliminary phase of these investigations, a usable response to the Commission's questionnaire was received from Far Eastern New Century Corporation ("FENC").[9] Firm specific data presented here is based on that previous submission. FENC's exports to the United States accounted for *** of U.S. imports of low melt PSF from Taiwan over 2014 to 2016, the period previously examined.[10] According to estimates requested of the responding Taiwan producers, the production of low melt PSF in Taiwan reported in this part of the report accounts for approximately *** percent of overall production of low melt PSF in Taiwan in 2016.

Far Eastern New Century Corporation

Far Eastern New Century Corporation ("FENC"), formerly known as Far Eastern Textile Limited, is headquartered in Taipei, Taiwan and operates three distinct business units (1) a petrochemicals, polyester and textiles production unit, (2) an industrial holdings unit that includes telecommunications, cement, retail, financial services and transportation, and (3) a land asset management and property development unit.[11]

Changes in operations

***.

Operations on low melt PSF

Table VII-6 presents information on the low melt PSF operations of the responding producers and exporters in Taiwan.

Table VII-6
Low melt PSF: Data on industry in Taiwan, 2015-16 and projection calendar years 2017 and 2018

. * * * * * * *

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

[8] As of April 16, 2018, staff is awaiting a response from ***.

[9] Commission staff have repeatedly attempted to obtain updated data from FENC. FENC is a registered APO party for these investigations and is represented by counsel.

[10] "FENC believes that it accounts for 100 percent of Taiwan low melt PSF exports to the U.S." Respondent FENC postconference brief, p. 1.

[11] http://about.fenc.com/ir_report.aspx?lang=en, retrieved April 19, 2017.

Alternative products

As shown in table VII-7, the responding Taiwan firms produced other products on the same equipment and machinery used to produce low melt PSF.

Table VII-7
Low melt PSF: Overall capacity and production on the same equipment as in-scope production Taiwan, 2014-16, January to March 2016, and January to March 2017

* * * * * * *

Exports

According to GTA, the leading export markets for polyester staple fiber from Taiwan are Vietnam, the United States, and the United Kingdom. During 2017, Vietnam was the top export market for PSF from Taiwan, accounting for 23.0 percent by quantity, followed by the United States, accounting for 8.3 percent by quantity. Table VII-8 presents exports of low melt PSF from Taiwan by destination market.

Table VII-8
Polyester staple fiber: exports from Taiwan by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Quantity (1,000 pounds)		
Exports from Taiwan to the United States	73,306	88,759	69,579
Exports from Taiwan to other major destination markets.--			
Vietnam	190,971	187,461	193,790
China	28,889	35,485	47,497
United Kingdom	52,072	45,418	45,592
Pakistan	16,123	30,881	42,431
Thailand	25,084	32,935	34,700
Germany	33,160	30,365	33,159
Italy	24,025	25,998	30,894
Poland	17,463	25,237	25,307
All other destination markets	335,401	355,011	319,666
Total exports from Taiwan	796,495	857,550	842,614
	Value (1,000 dollars)		
Exports from Taiwan to the United States	41,431	42,922	37,781
Exports from Taiwan to other major destination markets.--			
Vietnam	94,980	85,479	98,678
China	18,482	21,048	29,680
United Kingdom	30,060	22,546	23,847
Pakistan	9,386	14,929	21,520
Thailand	14,558	16,726	19,674
Germany	18,822	15,243	17,440
Italy	12,633	12,247	15,767
Poland	9,102	11,964	13,104
All other destination markets	201,539	183,805	179,885
Total exports from Taiwan	450,993	426,910	457,376

Table continued on next page.

Table VII-8—Continued:
Polyester staple fiber: Taiwan exports by destination market, 2015-17

Destination market	Calendar year		
	2015	2016	2017
	Unit value (dollars per pound)		
Taiwan exports to the United States	0.57	0.48	0.54
Taiwan exports to other major destination markets.--			
Vietnam	0.50	0.46	0.51
China	0.64	0.59	0.62
United Kingdom	0.58	0.50	0.52
Pakistan	0.58	0.48	0.51
Thailand	0.58	0.51	0.57
Germany	0.57	0.50	0.53
Italy	0.53	0.47	0.51
Poland	0.52	0.47	0.52
All other destination markets	0.60	0.52	0.56
Total Taiwan exports	0.57	0.50	0.54
	Share of quantity (percent)		
Taiwan exports to the United States	9.2	10.4	8.3
Taiwan exports to other major destination markets.--			
Vietnam	24.0	21.9	23.0
China	3.6	4.1	5.6
United Kingdom	6.5	5.3	5.4
Pakistan	2.0	3.6	5.0
Thailand	3.1	3.8	4.1
Germany	4.2	3.5	3.9
Italy	3.0	3.0	3.7
Poland	2.2	2.9	3.0
All other destination markets	42.1	41.4	37.9
Total Taiwan exports	100.0	100.0	100.0

Note.-- Data extracted using HS subheading 5503.20 which includes out-of-scope data

Source: Official exports statistics under HS subheading 5503.20 as reported by Taiwan Directorate General of Customs in the IHS/GTA database, accessed March 27, 2018.

SUBJECT COUNTRIES COMBINED

Table VII-9 presents summary data on low melt PSF operations of the reporting producers in Korea and Taiwan combined.

Table VII-9
Low melt PSF: Data on industry in Korea and Taiwan combined, 2015-17 and projection calendar year 2018

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-10 presents data on U.S. importers' reported inventories of low melt PSF. Inventories from subject sources decreased from 2015 to 2017 by *** percent after first increasing by *** percent from 2015 to 2016 and then decreasing by *** percent from 2016 to 2017.

Table VII-10
Low melt PSF: U.S. importers' inventories, 2015-17

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of low melt PSF from Korea and Taiwan after January, 2018. These data are presented in table VII-11. Subject sources account for *** percent of arranged imports of low melt PSF from January 2018 through December 2018, while nonsubject sources account for *** percent of arranged imports, and nonsubject imports from Korea account for *** percent of arranged imports over the same period.

Table VII-11
Low melt PSF: Arranged imports, January 2018 through December 2018

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS[12]

According to petitioners, there have been several unfair trade remedy investigations in third-country markets on polyester staple fiber (without restriction to denier size or fiber

[12] Unless otherwise noted, information in this section is based on petitioner's postconference brief, exh. 11.

structure) from Korea and Taiwan. In 1993, Mexico issued an antidumping duty order on all forms of polyester staple fiber from Korea, which was extended in 2013. Turkey issued an antidumping duty order on all forms of polyester staple fiber from Korea in 2000, which was extended in 2012. In 2003, Turkey issued a similar antidumping order on all forms of polyester staple fiber from China, India, and Taiwan, which was extended in 2014. In 2011, Indonesia enacted antidumping duty orders on all forms of polyester staple fiber from China, India, and Taiwan, which were extended in 2016.

INFORMATION ON NONSUBJECT COUNTRIES

Table VII-12 presents global exports of polyester staple fiber.[13] Export data specifically for low melt PSF, as defined by the scope of this investigation, are not available from global trade databases. However, export data are available for a broader category of synthetic staple fiber that would include out-of-scope products such as coarse polyester staple fiber and fine denier polyester staple fiber. Global exports decreased by 0.48 percent by quantity and increased 7.2 percent by value during 2016–17. In 2017, the five leading country exporters (China, Korea, Taiwan, Thailand, and India) accounted for 77.5 percent of the quantity and 74.8 percent of the value, respectively, of global exports of synthetic staple fiber. Production capacity for polyester staple fiber from China, Korea, Taiwan, India, and other Asian countries rose 11.5 percent from 47.5 million pounds in 2016 to 53.0 million pounds in 2017.[14]

[13] Global trade databases present data based on six-digit HTS subheading 5503.20, which describes the article as: "synthetic staple fibers, not carded, combed or otherwise processed for spinning: of polyester." Harmonized Tariff Schedule of the United States (2018). HTS subheading 5503.20 covers products that are outside the scope of this investigation. Therefore, export data compiled from these databases may overstate the quantity of exports of low melt PSF.

[14] Fiber Organon. "Table 3: Worldwide Synthetic Fiber Producing Capacity by Fiber (Except Olefin): 2013 to 2018, Million Pounds," August 2017, pp. 152-153.

Table VII-12
Polyester staple fiber: Global exports by exporter, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Quantity (1,000 pounds)		
United States	97,775	96,151	119,235
Korea	1,496,118	1,574,954	1,687,994
Taiwan	796,495	857,550	842,614
All other major reporting exporters.-- China	2,079,684	2,219,563	2,210,516
Thailand	555,955	575,526	608,875
India	389,980	458,294	486,692
Indonesia	336,397	320,521	311,871
Malaysia	231,630	236,965	260,238
Ireland	181,710	180,364	190,036
Vietnam	135,600	132,210	---
Romania	110,768	116,410	115,151
Belgium	108,655	100,058	109,656
Belarus	103,506	124,512	---
Turkey	99,452	101,300	83,624
All other exporters	521,017	597,735	504,700
Total global exports	7,141,236	7,567,604	7,531,201
	Value (1,000 dollars)		
United States	83,847	78,934	92,755
Korea	848,107	789,722	934,487
Taiwan	450,993	426,910	457,376
All other major reporting exporters.-- China	987,901	940,967	1,027,661
Thailand	273,617	258,917	309,201
India	201,068	212,020	246,278
Indonesia	164,908	150,449	158,997
Malaysia	115,358	113,266	137,169
Ireland	128,301	118,592	125,271
Vietnam	96,815	68,372	---
Romania	71,262	61,817	67,804
Belarus	64,482	65,459	63,739
Belgium	51,611	56,692	---
Turkey	57,146	51,927	47,564
All other exporters	311,104	315,686	306,497
Total global exports	7,813,040	7,419,459	7,978,051

Table continued.

Table VII-12--Continued
Polyester staple fiber: Global exports by exporter, 2015-17

Exporter	Calendar year		
	2015	2016	2017
	Unit value (dollars per pound)		
United States	0.86	0.82	0.78
Korea	0.57	0.50	0.55
Taiwan	0.57	0.50	0.54
All other major reporting exporters.-- China	0.48	0.42	0.46
Thailand	0.49	0.45	0.51
India	0.52	0.46	0.51
Indonesia	0.49	0.47	0.51
Malaysia	0.50	0.48	0.53
Ireland	0.71	0.66	0.66
Vietnam	0.71	0.52	---
Romania	0.64	0.53	0.59
Belgium	0.59	0.65	0.58
Belarus	0.50	0.46	---
Turkey	0.57	0.51	0.57
All other exporters	8.19	6.48	8.79
Total global exports	1.09	0.98	1.06
	Share of quantity (percent)		
United States	1.4	1.3	1.6
Korea	21.0	20.8	22.4
Taiwan	11.2	11.3	11.2
All other major reporting exporters.-- China	29.1	29.3	29.4
Thailand	7.8	7.6	8.1
India	5.5	6.1	6.5
Indonesia	4.7	4.2	4.1
Malaysia	3.2	3.1	3.5
Ireland	2.5	2.4	2.5
Vietnam	1.9	1.7	---
Romania	1.6	1.5	1.5
Belgium	1.5	1.3	1.5
Belarus	1.4	1.6	---
Turkey	1.4	1.3	1.1
All other exporters	7.3	7.9	6.7
Total global exports	100.0	100.0	100.0

Note.--Top 10 countries based on 2016 data. Shares and ratios shown as "0.0" represent values greater than zero, but less than "0.05" percent.

Note.-- Data extracted using HS subheading 5503.20 which includes out-of-scope data

Source: Official exports statistics under HS subheading 5503.20 as reported by various national statistical authorities in the IHS/GTA database, accessed July 5, 2018.

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
82 FR 30907, July 3, 2017	*Low Melt Polyester Staple Fiber from Korea and Taiwan; Institution of Antidumping Duty Investigation and Scheduling of Preliminary Phase Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2017-07-03/pdf/2017-13910.pdf
82 FR 34277, July 24, 2017	*Low Melt Polyester Staple Fiber from Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2017-07-24/pdf/2017-15475.pdf
82 FR 39131, August, 17, 2017	*Low Melt Polyester Staple Fiber From Korea and Taiwan; Determination*	https://www.gpo.gov/fdsys/granule/FR-2017-08-17/2017-17360
82 FR 55091, November 20, 2017	*Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Postponement of Preliminary Determinations in the Less-Than-Fair-Value Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-20/pdf/2017-25084.pdf
83 FR 4903, February 2, 2018	*Low Melt Polyester Staple Fiber From Taiwan: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*	https://www.gpo.gov/fdsys/pkg/FR-2018-02-02/pdf/2018-02043.pdf
83 FR 8295, February 26, 2018	*Low Melt Polyester Staple Fiber (PSF) From Korea and Taiwan; Scheduling of the Final Phase of Anti-Dumping Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2018-02-26/pdf/2018-03796.pdf
83 FR 21306, May 9, 2018	*Low Melt Polyester Staple Fiber (PSF) From Korea and Taiwan; Revised Schedule for Final Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2018-05-09/pdf/2018-09819.pdf
83 FR 29094, June 22, 2018	*Low Melt Polyester Staple Fiber From the Republic of Korea: Final Determination of Sales at Less Than Fair Value and Final Affirmative Determination of Critical Circumstances, in Part*	https://www.gpo.gov/fdsys/pkg/FR-2018-06-22/pdf/2018-13448.pdf

83 FR 29099, June 22, 2018	*Low Melt Polyester Staple Fiber From Taiwan: Final Determination of Sales at Less Than Fair Value*	https://www.gpo.gov/fdsys/pkg/FR-2018-06-22/pdf/2018-13449.pdf

APPENDIX B

LIST OF HEARING WITNESSES

CALENDAR OF PUBLIC HEARING

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

Subject: Low Melt Polyester Staple Fiber ("PSF") from Korea and Taiwan

Inv. Nos.: 731-TA-1378 and 1379 (Final)

Date and Time: June 19, 2018 - 9:30 a.m.

Sessions were held in connection with these investigations in the Main Hearing Room (Room 101), 500 E Street, SW., Washington, DC.

OPENING REMARKS:

Petitioner (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)
Respondents (**Gregory S. Menegaz,** deKieffer & Horgan PLLC)

In Support of the Imposition of Antidumping Duty Order:

Kelley Drye & Warren LLP
Washington, DC
on behalf of

Nan Ya Plastics Corporation, America

Michael Sparkman, Senior Business Manager, Nan Ya Plastics Corporation, America

John Freeman, Assistant Director of Sales, Nan Ya Plastics Corporation, America

Gina E. Beck, Economist, Georgetown Economic Services LLC

Paul C. Rosenthal)
David C. Smith) – OF COUNSEL
Brooke M. Ringel)

In Opposition to the Imposition of
Antidumping Duty Order:

deKieffer & Horgan PLLC
Washington, DC
on behalf of

Consolidated Fibers, Inc.
Stein Fibers, Ltd.

Robert P. Kunik, President, Consolidated Fibers, Inc.

Sidney J. Stein, III, Vice President, Stein Fibers, Ltd.

Gregory S. Menegaz) – OF COUNSEL

CLOSING REMARKS:

Petitioner (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)
Respondents (**Gregory S. Menegaz,** deKieffer & Horgan PLLC)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Low melt PSF: Summary data concerning the U.S. market with Huvis as nonsubject, 2015-17
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year				Calendar year	
	2015	2016	2017	2015-17	2015-16	2016-17
U.S. consumption quantity:						
Amount	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***
Importers' share (fn1):						
Korea subject	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
Korea nonsubject	***	***	***	***	***	***
All other sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All import sources	***	***	***	***	***	***
U.S. consumption value:						
Amount	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***
Importers' share (fn1):						
Korea subject	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***
Korea nonsubject	***	***	***	***	***	***
All other sources	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***
All import sources	***	***	***	***	***	***
U.S. imports from:						
Korea subject:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Taiwan						
Quantity	50,115	60,060	53,450	6.7	19.8	(11.0)
Value	32,304	30,981	30,923	(4.3)	(4.1)	(0.2)
Unit value	$0.64	$0.52	$0.58	(10.2)	(20.0)	12.2
Ending inventory quantity	***	***	***	***	***	***
Subject sources:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Korea nonsubject:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
All other sources:						
Quantity	5,534	3,589	6,484	17.2	(35.1)	80.7
Value	4,245	2,827	5,432	28.0	(33.4)	92.2
Unit value	$0.77	$0.79	$0.84	9.2	2.7	6.4
Ending inventory quantity	***	***	***	***	***	***
Nonsubject sources:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
All import sources:						
Quantity	176,352	202,730	183,175	3.9	15.0	(9.6)
Value	120,256	117,067	117,921	(1.9)	(2.7)	0.7
Unit value	$0.68	$0.58	$0.64	(5.6)	(15.3)	11.5
Ending inventory quantity	25,639	41,687	38,101	48.6	62.6	(8.6)

Table continued on next page.

Table C-1--Continued
Low melt PSF: Summary data concerning the U.S. market with Huvis as nonsubject, 2015-17
(Quantity=1,000 pounds; Value=1,000 dollars; Unit values, unit labor costs, and unit expenses=dollars per pound; Period changes=percent--exceptions noted)

	Reported data			Period changes		
	Calendar year				Calendar year	
	2015	2016	2017	2015-17	2015-16	2016-17
U.S. producers':						
Average capacity quantity	***	***	***	***	***	***
Production quantity	***	***	***	***	***	***
Capacity utilization (fn1)	***	***	***	***	***	***
U.S. shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Export shipments:						
Quantity	***	***	***	***	***	***
Value	***	***	***	***	***	***
Unit value	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***
Inventories/total shipments (fn1)	***	***	***	***	***	***
Production workers	***	***	***	***	***	***
Hours worked (1,000s)	***	***	***	***	***	***
Wages paid ($1,000)	***	***	***	***	***	***
Hourly wages (dollars per hour)	***	***	***	***	***	***
Productivity (pounds 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)	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics and proprietary Customs records using HTS statistical reporting number 5503.20.0015, accessed March 27, 2018.

APPENDIX D

NONSUBJECT PRICE AND COST DATA

Six importers reported price data for Korean nonsubject producer Huvis for products 1-4. Price data reported by these firms accounted for *** percent of U.S. commercial shipments from Korean producer Huvis for sales to distributors, and *** percent for sales to end users. Price and quantity data for Korean producer Huvis are shown in tables D-1 to D-8 and in figure D-1 to D-7 (with domestic and subject sources).

In comparing nonsubject pricing data with U.S. producer pricing data, prices for product imported from Korean producer Huvis were lower than prices for U.S.-produced product in 19 instances and higher in 26 instances. In comparing nonsubject pricing data with subject country pricing data, prices for product imported from Korean producer Huvis were lower than prices for product imported from subject countries in 42 instances and higher in 49 instances. A summary of price differentials is presented in table D-8.

The Commission also requested importers of Korean nonsubject product provide landed-duty paid values and quantities for imports used for internal consumption. ***.

Table D-1
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 1 from Korean nonsubject producer Huvis sold to distributors, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-2
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 1 from Korean nonsubject producer Huvis sold to end users, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-3
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 2 from Korean nonsubject producer Huvis sold to distributors, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-4
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 2 from Korean nonsubject producer Huvis sold to end users, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-5
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 3 from Korean nonsubject producer Huvis sold to distributors, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-6
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 3 from Korean nonsubject producer Huvis sold to end users, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-7
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 4 from Korean nonsubject producer Huvis sold to distributors, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Table D-8
Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and product 4 from Korean nonsubject producer Huvis sold to end users, and margins of underselling/(overselling), by quarters, January 2015-December 2017

* * * * * * *

Figure D-1
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, sold to distributors, by quarters, January 2015-December 2017

* * * * * * *

Figure D-2
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 1, sold to end users, by quarters, January 2015-December 2017

* * * * * * *

Figure D-3
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, sold to distributors, by quarters, January 2015-December 2017

* * * * * * *

Figure D-4
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 2, sold to end users, by quarters, January 2015-December 2017

* * * * * * *

Figure D-5
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 3,[1] sold to distributors, by quarters, January 2015-December 2017

* * * * * * *

Figure D-6
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 3, sold to end users, by quarters, January 2015-December 2017

* * * * * * *

Figure D-7
Product: Weighted-average f.o.b. prices and quantities of domestic and imported product 4, sold to end users, by quarters, January 2015-December 2017

* * * * * * *

Table D-8
Low melt PSF: Summary of underselling/(overselling), by country, January 2015-December 2017

Comparison	Total number of comparisons	Nonsubject lower than the comparison source		Nonsubject higher than the comparison source	
		Number of quarters	Quantity (pounds)	Number of quarters	Quantity (pounds)
Nonsubject vs United States:					
Korea (Huvis) vs. United States	45	19	***	26	***
Nonsubject vs subject countries:					
Korea (Huvis) vs. Korea (subject)	45	27	***	18	***
Korea (Huvis) vs. Taiwan	46	15	***	31	***

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