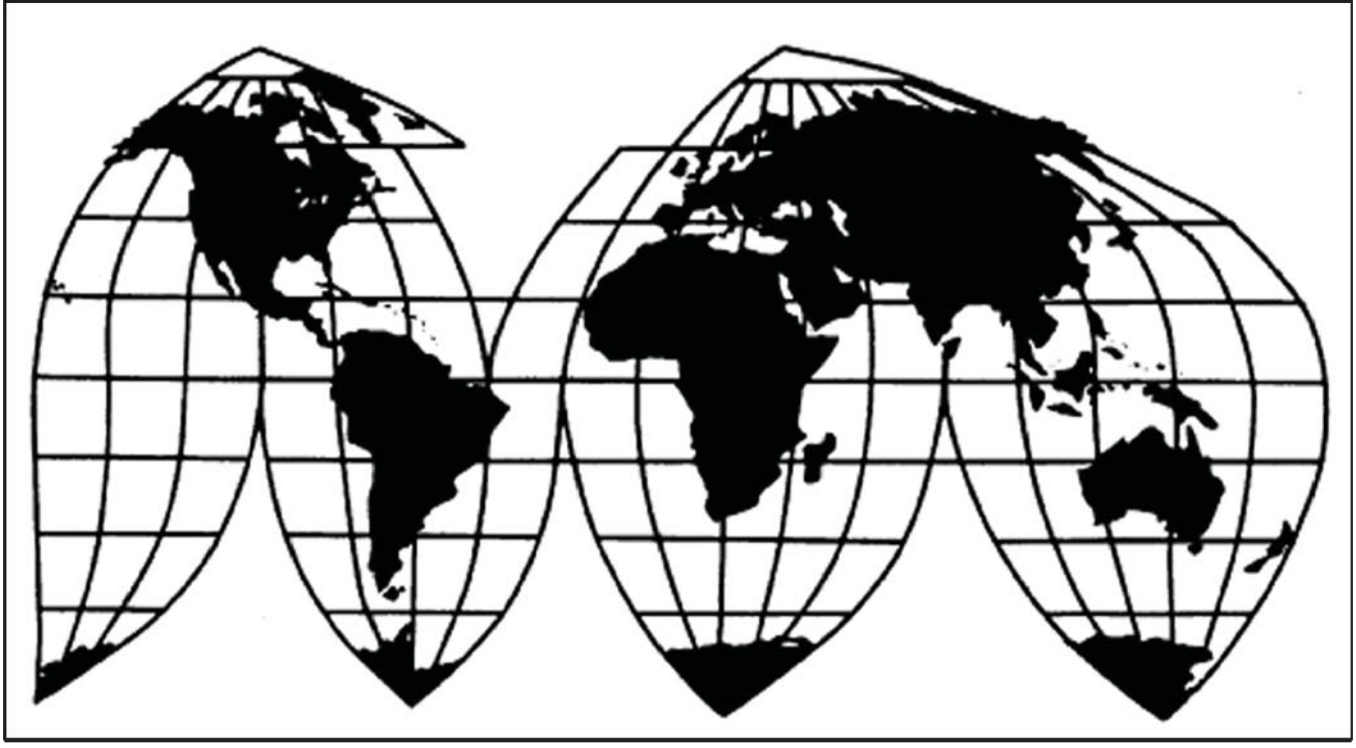
Fine Denier Polyester Staple Fiber from China and India

Investigation Nos. 701-TA-579-580 (Final)

Publication 4765 **March 2017**

U.S. International Trade Commission



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CONTENTS

CONTENTS

CONTENTS

CONTENTS

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UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation Nos. 701-TA-579-580 (Final)

Fine Denier Polyester Staple Fiber from China and India

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 fine denier polyester staple fiber ("fine denier PSF") from China and India, provided for in subheading 5503.20.00 of the Harmonized Tariff Schedule of the United States, that have been found by the U.S. Department of Commerce ("Commerce") to be subsidized by the governments of China and India.

BACKGROUND

The Commission, pursuant to section 705(b) of the Act (19 U.S.C. 1671d(b)), instituted these investigations effective May 31, 2017, following receipt of a petition filed with the Commission and Commerce by DAK Americas LLC, Charlotte, NC; Nan Ya Plastics Corporation, America, Lake City, SC; and Auriga Polymers Inc., Charlotte, NC. The final phase of the investigations was scheduled by the Commission following notification of preliminary determinations by Commerce that imports of fine denier PSF from China and India were being subsidized within the meaning of section 703(b) of the Act (19 U.S.C. 1671b(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 November 27, 2017 (82 FR 56050). The hearing was held in Washington, DC, on January 17, 2018, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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

Views of the Commission

Based on the record in the final phase of these investigations, we determine that an industry in the United States is materially injured by reason of imports of fine denier polyester staple fiber ("PSF") from China and India found by the U.S. Department of Commerce ("Commerce") to be subsidized by the governments of China and India.

I. Background

DAK Americas LLC ("DAK"); Nan Ya Plastics Corporation ("Nan Ya"); and Auriga Polymers Inc. ("Auriga") (collectively "Petitioners"), domestic producers of fine denier PSF, filed petitions in these investigations on May 31, 2017.[1] Representatives of the petitioners appeared at the hearing accompanied by counsel and submitted prehearing and posthearing briefs as well as final comments. A representative of Palmetto Synthetics ("Palmetto"), another domestic producer of fine denier PSF, also appeared at the hearing.

Two respondent groups participated in the final phase of these investigations. Representatives and counsel for China Chamber of Commerce for Import and Export of Textile and Apparel; Jiangsu Huaxicun Co., Ltd.; Jiangyin Yangxi International Trade Co., Ltd.; Jiangyin Hailun Chemical Fiber Co., Ltd.; and Jiangyin Huahong Chemical Fiber Co., Ltd. (collectively, "Chinese Respondents"), producers of subject merchandise in China, appeared at the hearing and jointly submitted prehearing and posthearing briefs and final comments. Representatives and counsel for Reliance Industries, Ltd. ("Reliance"),[2] a producer of subject merchandise in India, also appeared at the hearing and submitted prehearing and posthearing briefs and final comments.

Although petitions for antidumping duty investigations concerning imports from China, India, Korea, and Taiwan were filed on the same day as the petitions for the countervailing duty investigations concerning imports from China and India, the investigation schedules became staggered when Commerce did not align its final countervailing duty determinations with its final antidumping duty determinations, thereby reaching earlier final determinations in the countervailing duty investigations than in the antidumping duty investigations.[3]

U.S. industry data are based on the questionnaire responses from five domestic producers that accounted for the vast majority of domestic production of fine denier PSF in

[1] Petitioners also filed an antidumping duty petition concerning imports from Vietnam, but withdrew this petition on June 29, 2017. Commerce and the Commission subsequently terminated their investigations concerning Vietnam. 82 Fed. Reg. 33480 (July 20, 2017); 82 Fed. Reg. 33926 (July 21, 2017).

[2] Reliance and Chinese Respondents are hereinafter collectively referred to as ("Respondents").

[3] *See* 19 U.S.C. § 1677(7)(g)(iii). The record in the countervailing duty investigations concerning subject imports from China and India closed on February 9, 2018. Commerce is currently scheduled to issue its final antidumping duty determinations concerning subject imports from China, India, Korea, and Taiwan on May 11, 2018. Confidential Report ("CR") at I-2; Public Report ("PR") at I-2; *see also* 83 Fed. Reg. 662 (Jan. 5, 2018); 83 Fed. Reg. 665 (Jan. 5, 2018); 83 Fed. Reg. 668 (Jan. 5, 2018).

2016.[4] U.S. import data are based on official Commerce import statistics and from questionnaire responses of 29 U.S. importers of fine denier PSF from subject sources over the January 2014 through September 2017 period of investigation ("POI"). U.S. import data accounted for *** percent of subject imports from China in 2016, *** percent of subject imports from India, *** percent of subject imports from Korea, and *** percent of subject imports from Taiwan.[5] Foreign industry data are based on questionnaire responses from four foreign producers that accounted for approximately *** percent of U.S. imports of subject merchandise from China in 2016,[6] and three foreign producers that accounted for approximately *** percent of U.S. imports of subject merchandise from India in 2016.[7] The Commission did not receive a response to its questionnaires from any subject foreign producer in Korea or Taiwan in the final phase of the investigations.[8]

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 first defines the "domestic like product" and the "industry."[9] 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."[10] 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."[11]

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[4] CR at I-6; PR at I-5.

[5] CR at I-6, IV-1; PR at I-5, IV-1.

[6] CR/PR at VII-3.

[7] CR at VII-11; PR at VII-9.

[8] CR at VII-19, VII-22; PR at VII-14, VII-16 – VII-17 & CR/PR at Table IV-12. One Taiwanese firm, Tainan Spinning, submitted a usable response to the Commission's questionnaire in the final phase of these investigations. However, in its preliminary determinations, Commerce calculated an antidumping duty rate of zero percent for this firm; therefore it is not subject to investigation and its data were not included in the report. In the preliminary phase, the Commission received questionnaire responses from three firms in Taiwan that accounted for approximately *** percent of U.S. imports of subject merchandise from Taiwan in 2016. Accordingly, data regarding the fine denier PSF industry in Taiwan is based on the questionnaire responses of three firms received in the preliminary phase of these investigations. *Id.* As in the preliminary phase of these investigations, the Commission did not receive a response to its questionnaire from any Korean producer. CR at VII-19; PR at VII-14.

[9] 19 U.S.C. § 1677(4)(A).

[10] 19 U.S.C. § 1677(4)(A).

[11] 19 U.S.C. § 1677(10).

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.[12] No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the facts of a particular investigation.[13] The Commission looks for clear dividing lines among possible like products and disregards minor variations.[14] 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 ("LTFV'),[15] the Commission determines what domestic product is like the imported articles Commerce has identified.[16]

B. Product Description

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

> Fine denier polyester staple fiber (fine denier PSF), not carded or combed, measuring less than 3.3 decitex (3 denier) in diameter. The scope covers all fine denier PSF, whether coated or uncoated.

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[12] *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).

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

[14] *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.").

[15] *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).

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

> The following products are excluded from the scope:
>
> (1) PSF equal to or greater than 3.3. decitex (more than 3 denier, inclusive) currently classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheadings 5503.20.0045 and 5503.20.0065.
>
> (2) Low-melt PSF defined as a bi-component fiber with a polyester core and an outer, polyester sheath that melts at a significantly lower temperature than its inner polyester core currently classified under HTSUS subheading 5503.20.0015.[17]

Fine denier PSF[18] is a manmade fiber, similar in appearance to cotton or wool, that is used for knit, woven, and nonwoven applications.[19] It is converted either to yarn for knitting or weaving into a fabric, or into a nonwoven product through bonding by a chemical, mechanical, or heat process. Knit and woven applications include the production of textiles, such as

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[17] *Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber from the People's Republic of China: Final Affirmative Determination*, 83 Fed. Reg. 3120 (Jan. 23, 2018); *Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber from India: Final Affirmative Determination*, 83 Fed. Reg. 3122 (Jan. 23, 2018); *Fine Denier Polyester Staple Fiber from the People's Republic of China, India, the Republic of Korea, and Taiwan: Preliminary Affirmative Determinations of Sales at Less-Than-Fair-Value Postponement of Final Determinations, and Extension of Provisional Measures,* 83 Fed. Reg. 660, 662, 665, 668 (Jan. 5, 2018). Commerce did not align its final countervailing duty determinations with its final antidumping duty determinations. Commerce has not yet completed its final determinations in its antidumping investigations. CR/PR at I-1 n. 5. Fine denier PSF is classifiable under subheading 5503.20.0025 of the Harmonized Tariff Schedule of the United States ("HTSUS").

[18] Denier is a weight-per-unit length measure of filament fibers or yarns. Denier is the equivalent to the weight in grams of 9,000 meters of fiber. Fabriclink Textile Dictionary, found at http://www.fabriclink.com/Dictionaries/Textile.cfm#D (accessed June 23, 2017). Denier is a direct numbering system in which the lower numbers represent the finer sizes and the higher numbers represent the coarser sizes. Denier is not a unit of measure commonly used in the HTSUS. There are two types of PSF excluded from the scope definition. The first is PSF measuring 3 denier or greater in diameter. This PSF is primarily used as stuffing or batting in sleeping bags, mattresses, ski jackets, comforters, cushions, pillows, furniture, and can also be used to produce carpeting. CR/PR at II-1 n. 2. PSF of 3 denier or greater from China, Korea, and Taiwan is currently subject to antidumping duty orders. *See generally* CR at I-7 – I-11; PR at I-5 – I-8. Also excluded is "low melt" PSF. Low-melt PSF is a bi-component fiber that has an outer, non-polyester sheath that melts at a significantly lower temperature than the inner polyester core and is used in batting. Nan Ya, a petitioner in these investigations, filed an antidumping petition concerning low-melt PSF from Korea and Taiwan on June 27, 2017. *Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan*, Inv. Nos. 701-TA-579-580 and 731-TA-1369-1372 (Preliminary), USITC Pub. 4709 (July 2017) ("*Preliminary Determinations*") at 6 n. 17.

[19] CR at I-17; PR at I-13.

clothing and bed linens. Nonwoven applications include household and hygiene products such as baby wipes, diapers, or coffee filters.[20] Petitioners estimate that approximately *** percent of fine denier PSF is used for spinning end uses for the production of knit or woven textiles; approximately *** percent of fine denier PSF is used in nonwoven end uses.[21]

Distinguishing physical characteristics of fine denier PSF include the denier count, the length of the fiber, and the fiber's tenacity, or strength. Other characteristics of fine denier PSF can be the finish applied to the fiber, and the "crimp" of the fiber, which affects the fiber's tenacity.[22]

Fine denier PSF is sold cut-to-length, which differentiates it from filament – a long continuous strand of fiber. After extrusion and stretching, fine denier PSF is cut in lengths, generally of five inches (125 mm) or less. Some fine denier PSF is known as "short cut" fine denier PSF, which is cut to lengths of 10mm or below. Finishes are also sprayed onto the fiber during the manufacturing process, and can include a silicone or a "slick" finish (known as "siliconized fine denier PSF"), an oil finish, or other finishes, depending on the end-use application. Fine denier PSF can also be black or non-white in color.[23] Certain types of fine denier PSF can share more than one of these specialty characteristics.[24]

In the preliminary phase of these investigations, petitioners asked the Commission to define a single domestic like product coextensive with the scope of the investigations, while respondents[25] asserted that the Commission should define as separate like products four different types of fine denier PSF that are within the scope of the investigations: post-consumer recycled ("PCR") fine denier PSF; short cut fine denier PSF; siliconized fine denier PSF; and black fine denier PSF. The Commission found that these four proposed separate like products were each small volume specialty products and observed that, in investigations such as these where domestically manufactured merchandise is made up of a grouping of similar products or involves specialty products, the Commission does not consider each item of merchandise to be a separate domestic like product that is only "like" its identical counterpart in the scope. Rather, the Commission considers the grouping itself to constitute the domestic like product and "disregards minor variations," absent a "clear dividing line" between particular products in the group.[26] The Commission evaluated each individual proposed domestic like product as follows.

PCR Fine Denier PSF. The Commission found that PCR PSF had product qualities essentially indistinguishable from virgin fine denier PSF, that the two products were interchangeable, and that they had the same end uses. The Commission observed that the

[20] CR at I-17; PR at I-13.

[21] CR/PR at II-1 n. 1.

[22] CR at I-17 – I-18; PR at I-13.

[23] CR at I-18; PR at I-13.

[24] Hearing Transcript ("Tr.") at 92, 179 (Cannon), 115 (Groden); Petitioners Posthearing Br. at Exhibit 8.

[25] Several respondent entities participated in the preliminary phase of these investigations, including Chinese Respondents, along with various importers, exporters, and producers of subject merchandise.

[26] *Preliminary Determinations*, USITC Pub. 4709 at 7-9; *see also* footnote 14.

production process for fine denier PSF differed depending upon whether it is produced from raw materials or recycled materials, but that both were primarily sold to end users, generally yarn producers. It further observed that certain purchasers view PCR PSF as different because it is environmentally friendly and desired by certain consumers for that reason and that, because its production process is more expensive, PCR PSF may command a premium price. Concluding that the similarities between the two products outweighed the limited differences, the Commission declined to define PCR fine denier PSF as a separate domestic like product.[27]

Short Cut PSF. The Commission found that domestically produced short cut fine denier PSF differed physically from other fine denier PSF only in terms of the length of fibers, with short cut PSF generally consisting of fibers that were 5-6 mm in length versus other fine denier PSF products with fibers generally over 30 mm. The Commission further found that there was some overlap in end uses for short cut PSF with other fine denier PSF products and that short cut PSF had the same production process and employees (*i.e.*, it was simply cut shorter and left uncrimped) as other fine denier PSF. Accordingly, the Commission declined to define short cut PSF as a separate like product.[28]

Siliconized PSF. The Commission found that siliconized PSF only differs from other fine denier PSF in that it is coated with silicon instead of another finish and has the same end uses as other fine denier PSF products. It further found that siliconized PSF is similar to other fine denier PSF products with respect to manufacturing facilities, production processes, employees, and producer perceptions. As a result, the Commission declined to define siliconized PSF as a separate domestic like product.[29]

Black PSF. The Commission noted that black PSF is distinguishable from other fine denier PSF by its black color, which is achieved by introducing carbon black dye into the polymer before it is extruded to make fine denier PSF. Black PSF is generally sold to yarn spinners to produce heather yarn, similar to other fine denier PSF products, including those that are dyed pink, green, and blue and also used to make heather yarn. The Commission found that black fine denier PSF is one of several colored fine denier PSF products that is used to produce heather yarn and that, aside from its color, it is similar to other fine denier PSF products in terms of physical characteristics and end uses, and shares common manufacturing processes and employees with those other products. It observed that, although black fine denier PSF lacked interchangeability with other products, such limited interchangeability is also true for other fine denier PSF products that serve a range of applications. Consequently, given the limited distinctions between black fine denier PSF and other fine denier PSF products, the Commission declined to define black fine denier PSF as a separate domestic like product.[30]

Thus, in the preliminary phase of these investigations, the Commission defined one domestic like product coextensive with Commerce's scope definition.[31]

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[27] *Preliminary Determinations*, USITC Pub. 4709 at 10-11.
[28] *Preliminary Determinations*, USITC Pub. 4709 at 11-12.
[29] *Preliminary Determinations*, USITC Pub. 4709 at 12-13.
[30] *Preliminary Determinations*, USITC Pub. 4709 at 13-14.
[31] *Preliminary Determinations*, USITC Pub. 4709 at 14.

C. Arguments of the Parties

Petitioners maintain that the Commission should again define a single domestic like product that is coextensive with the scope in these investigations.[32] Chinese Respondents do not challenge the Commission's definition in its preliminary determinations.[33] In the final phase investigations, Reliance made specific arguments for three separate specialty products: (1) short cut PSF; (2) black dyed PSF; (3) and siliconized PSF.[34] Reliance's arguments rely on purported distinctions between the domestically produced products and products that it produces.[35]

D. Domestic Like Product Analysis

As discussed above, the Commission examined Reliance's proposed three separate products in the preliminary phase of these investigations and declined to define them as separate domestic like products. Reliance's claims in the final phase of these investigations are based on its own production processes and alleged distinctions between its foreign produced products and domestically produced items. The statute defines the "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."[36] Emphasizing the statute's mandate to identify a domestic item that is like or most similar to subject imports, the Commission has reasoned that defining a domestic like product that is not produced domestically would ignore this mandate and contradict the statute.[37] Because Reliance has not attempted to define its proposed separate like products based on variants in domestically produced fine denier PSF, it has provided no basis for revisiting the Commission's definition of the domestic like product in the preliminary phase of these investigations.

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[32] Petitioners Posthearing Br. at 3; Petitioners Prehearing Br. at 5-11.

[33] Chinese Respondents Prehearing Br. at 5.

[34] Reliance Prehearing Br. at 2. Reliance also identified PCR fine denier PSF as a separate domestic like product but did not address it further.

[35] Reliance Prehearing Br. at 2-5. Specifically, Reliance argues that its Recron r3 short cut PSF is a highly specialized product that is used in specific applications primarily as a reinforcing agent in paper products, is made on a dedicated production line using a different production process, is sold through different channels of distribution, and is perceived as a unique specialty product by producers and consumers. Reliance also argues that its dope dyed black PSF product is distinct from other products in terms of physical attributes, production processes, and channels of distribution, and it is unaware of any comparable product being made in the United States. Finally, Reliance contends that its siliconized fiber-fill products are also produced using a dedicated manufacturing process that results in unique product characteristics and that the product is distributed directly to downstream bedding manufacturers, which perceive the product to be specific to bedding products. *Id.*

[36] 19 U.S.C. § 1677(10).

[37] *Certain Aluminum Extrusions from China*, Inv. Nos. 701-TA-475 and 731-TA-1177 (Review), USITC Pub. 4677 (March 2017), at 12-14; *Cold-Drawn Mechanical Tubing from China and India*, Inv. Nos. 701-TA-576-577(Final), USITC Pub. 4755 (Jan. 2018), at 13-15.

Accordingly, based on the record, and for the reasons set forth in the preliminary determinations, we define a single domestic like product consisting of fine denier PSF coextensive with the scope in 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."[38] 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.

These investigations raise the issue of whether appropriate circumstances exist to exclude any domestic producers from the domestic industry pursuant to section 771(4)(B) of the Tariff Act. This provision allows the Commission, if appropriate circumstances exist, to exclude from the domestic industry producers that are related to an exporter or importer of subject merchandise or which are themselves importers.[39] Exclusion of such a producer is within the Commission's discretion based upon the facts presented in each investigation.[40]

In these investigations, two U.S. producers, William Barnet & Son, LLC ("Barnet") and DAK, imported fine denier PSF from subject countries,[41] and domestic producer Nan Ya is wholly owned by Nan Ya Plastics Corporation, a producer and exporter of fine denier PSF in Taiwan.[42] Therefore, each of these domestic producers is a related party. No party argues that any U.S. producer should be excluded from the domestic industry pursuant to the related

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[38] 19 U.S.C. § 1677(4)(A).

[39] *See Torrington Co. v. United States*, 790 F. Supp. 1161, 1168 (Ct. Int'l Trade 1992), *aff'd without opinion*, 991 F.2d 809 (Fed. Cir. 1993); *Sandvik AB v. United States*, 721 F. Supp. 1322, 1331-32 (Ct. Int'l Trade 1989), *aff'd mem*., 904 F.2d 46 (Fed. Cir. 1990); *Empire Plow Co. v. United States*, 675 F. Supp. 1348, 1352 (Ct. Int'l Trade 1987).

[40] The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude a related party include the following:

(1) the percentage of domestic production attributable to the importing producer;

(2) the reason the U.S. producer has decided to import the product subject to investigation (whether the firm benefits from the LTFV sales or subsidies or whether the firm must import in order to enable it to continue production and compete in the U.S. market);

(3) whether inclusion or exclusion of the related party will skew the data for the rest of the industry;

(4) the ratio of import shipments to U.S. production for the imported product; and

(5) whether the primary interest of the importing producer lies in domestic production or importation. *Changzhou Trina Solar Energy Co. v. USITC*, 100 F. Supp.3d 1314, 1326-31 (Ct. Int'l. Trade 2015); see *also Torrington Co. v. United States*, 790 F. Supp. at 1168.

[41] CR at III-11; PR at III-5.

[42] CR/PR at Tables III-2, IV-6; CR at IV-12 n. 8. *** may also be a related party due to its relationship to a producer of subject merchandise in China, but it is not clear from the record whether its affiliate is also an exporter of subject merchandise. *Id.*

parties provision.[43] As discussed below, we find that appropriate circumstances do not exist to exclude any U.S. producers from the domestic industry.

Barnet. Barnet accounted for *** percent of domestic production during 2016; it was a significant producer of short cut fine denier PSF that year.[44] During the POI, it imported *** pounds of subject fine denier PSF in 2014, *** pounds in 2015, and *** pounds in 2016; it reported importing *** pounds of subject imports in January through September ("interim") 2016 and *** pounds in interim 2017. These imports were the equivalent of *** percent of Barnet's domestic production in 2014, *** percent in 2015, and *** percent in 2016; they were equivalent to *** percent in interim 2016 and *** percent in interim 2017.[45] Barnet explained that it "***."[46] Barnet ***.[47]

During the POI, Barnet's level of subject imports was roughly comparable to its level of production in 2014 and 2015 and, as it explained, the higher level of subject imports in 2016 was in part to increase its competiveness. We further observe that in 2016, its domestic shipments of short cut fine denier PSF exceeded the U.S. imports of short cut fine denier PSF from all subject sources combined.[48] Although Barnet submitted trade data, it ***.[49] Accordingly, to the extent it may have benefited from its importation of subject merchandise, its inclusion will not skew the financial results of the domestic industry in these investigations. Finally, no party argues that Barnet should be excluded from the domestic industry as a related party. We therefore find that appropriate circumstances do not exist to exclude Barnet pursuant to the related parties provision.

DAK. Petitioner DAK was the *** domestic producer in 2016, accounting for *** percent of domestic production that year.[50] During the POI, it imported *** pounds of fine denier PSF from India in 2014, *** pounds in 2015, and *** pounds in 2016; it imported *** pounds in interim 2016 and *** pounds in interim 2017. These imports were the equivalent of *** percent of DAK's domestic production in 2014, *** percent in 2015, and *** percent in 2016; they were equivalent to *** percent in interim 2016 and *** percent in interim 2017. DAK reported that it ***.[51]

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[43] Petitioners specifically argue that the Commission should not exclude Nan Ya, DAK, or Barnet from the domestic industry. Petitioners Prehearing Br. at 11-13; Petitioners Final Comments at 3 n. 1. Although they did not specifically argue for its exclusion as a related party, Chinese Respondents indicated in their final comments that the fact that Barnet *** on whether it should be included in the domestic industry. Chinese Respondents Final Comments at 1.

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

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

[46] CR/PR at Table III-8. *See also* Petitioners Postconference Br. at Exhibit 7 (***).

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

[48] *Compare* CR/PR at Table IV-6 (which includes Barnet's U.S. shipments of short cut fine denier PSF) *with* Prehearing CR/PR at Table IV-6 (which does not include Barnet's U.S. shipments of short cut fine denier PSF).

[49] CR/PR at VI-1 n. 1.

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

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

DAK's primary interest appears to lie in domestic production as its U.S. production was considerably larger than its imports of subject merchandise and it made *** during the POI.[52] DAK is a petitioner in these investigations, and no party has argued for it to be excluded from the domestic industry. We find that appropriate circumstances do not exist to exclude DAK from the domestic industry.

Nan Ya. Petitioner Nan Ya was the *** domestic producer in 2016, accounting for *** percent of domestic production during that year.[53] Nan Ya's domestic production of *** pounds far exceeds its parent firm's exports to the United States of *** pounds of subject merchandise in 2016.[54] Nan Ya is a petitioner whose principal interest appears to be in domestic production, and no party has argued for it to be excluded from the domestic industry. Accordingly, we find that appropriate circumstances do not exist to exclude Nan Ya from the domestic industry.

We consequently define the domestic industry to include all U.S. producers of fine denier PSF.

IV. Cumulation[55]

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:

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[52] DAK Americas' capital expenditures were ***. *See* CR/PR at Table VI-5. It reports that it invested over $*** in upgrades and new PSF capacity. *See* CR/PR at Table III-3.

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

[54] CR/PR at Tables III-4, VII-12. Nan Ya Plastics Corporation did not return a foreign producer questionnaire response in the final phase of these investigations. CR at VII-22 n. 15; PR at VII-17 n. 15.

[55] Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of the petition shall be deemed negligible. 19 U.S.C. §§ 1671b(a), 1673b(a), 1677(24)(A)(i), 1677(24)(B); *see also* 15 C.F.R. § 2013.1 (developing countries for purposes of 19 U.S.C. § 1677(36)). In the case of countervailing duty investigations involving developing countries (as designated by the United States Trade Representative), the statute indicates that the negligibility limit is 4 percent, rather than 3 percent. 19 U.S.C. § 1677(24)(B). The United States Trade Representative has designated India to be a developing country subject to the 4 percent negligibility threshold for countervailing duty investigations. 15 C.F.R. § 2013.1; *see also* 19 U.S.C. § 1677(24)(B).

Imports from each subject country exceed the statutory negligibility threshold. Subject imports from China, India, Korea, and Taiwan accounted for *** percent, *** percent, *** percent, and *** percent of total imports of fine denier PSF by quantity, respectively, during May 2016 through April 2017. CR at IV-8; PR at IV-6. We find that imports from each subject source are not negligible.

(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.[56]

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.[57] Only a "reasonable overlap" of competition is required.[58]

The statutory threshold for cumulation is satisfied in these investigations because Petitioners filed the antidumping and countervailing duty petitions with respect to all four subject countries on the same day, May 31, 2017.[59] We also find that there is a reasonable overlap in competition among subject imports from the four 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 fine denier PSF is at least moderately fungible, regardless of source. All responding U.S. producers reported that fine denier PSF from all sources was always interchangeable.[60] In comparisons of the domestic like product with subject imports from China, India, Korea, and Taiwan, the vast majority of importers and purchasers reported that the products were at least sometimes interchangeable, and in comparisons of imports from different subject sources, all importers

[56] *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).

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

[58] 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.").

[59] None of the statutory exceptions to cumulation applies.

[60] CR/PR at Table II-11.

and almost all purchasers reported that subject merchandise was at least sometimes interchangeable.[61]

U.S. producers and importers of fine denier PSF from each subject source reported U.S. shipments of almost all of the specialty fine denier PSF products, including black or colored fine denier PSF, siliconized fine denier PSF, and micro denier PSF. Domestic producers and U.S. importers of fine denier PSF from three of the four subject sources reported U.S. shipments of PCR fine denier PSF (***) and reported U.S. shipments of short cut fine denier PSF (***).[62] Furthermore, the record contains pricing and/or direct import purchase observations for product 2 for domestically produced product and subject imports from China, India, Korea, and Taiwan, which demonstrates sales of competing products from all sources in the U.S. market.[63] Thus, the record indicates that there is sufficient fungibility between and among subject imports from China, India, Korea, and Taiwan and the domestic like product to satisfy the reasonable overlap of competition standard.

Reliance argues that there is not a reasonable overlap of competition with respect to imports of fine denier PSF from India and other sources.[64] Specifically, Reliance contends that a *** of the imports of fine denier PSF from India that is distributed and sold in the U.S. market consists of specialty products, including black fine denier PSF, siliconized fine denier PSF, and short cut fine denier PSF, that do not compete with domestically produced fine denier PSF.[65] As discussed above, however, the domestic industry supplies each of these specialty products, competing with subject imports from India.[66] Moreover, during the POI, subject imports of standard fine denier PSF from India increased.[67] Furthermore, in focusing on only the domestic like product, Reliance ignores that producers of fine denier PSF from other subject sources also supply the U.S. market with standard and specialty fine denier PSF, in competition with subject imports from India at comparable quantities for at least black or colored fine denier PSF as well as siliconized fine denier PSF.[68] Thus, the record does not support Reliance's claims that there

[61] CR/PR at Table II-11.

[62] CR/PR at Tables IV-5 – IV-9.

[63] CR/PR at Tables V-4, V-8. Product 2 is virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 1.15 denier through and including 1.8 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier. *Id.*

[64] Reliance Prehearing Br. at 21-24; Reliance Posthearing Br. at 11-13.

[65] Reliance Prehearing Br. at 24; Reliance Posthearing Br. at 12 & Exhibit 4.

[66] CR/PR at Tables IV-5 – IV-9. Reliance further argues that subject imports serve a limited customer base. Reliance Final Comments at 5-6; Reliance Posthearing Br. at 3. We observe, however, that Reliance indicated that these customers purchased specialty fine denier PSF that is also produced by the domestic industry, including black, siliconized, and short cut fine denier PSF. *Id.*

[67] Subject imports of standard fine denier PSF from India increased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016 for a *** percent increase; they were *** pounds in interim 2016 and *** pounds in interim 2017. Calculated from CR/PR at Tables D-2 – D-4. Moreover, the volume of specialty fine denier PSF may be overstated due to the possibility of double counting fine denier PSF that might fall into more than one specialty category (*e.g.*, siliconized fine denier PSF which is also short cut).

[68] CR/PR at Tables D-2 – D-4.

is not a sufficient overlap in competition between subject imports from India and the domestic like product and among subject imports from all sources.

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 and importers of fine denier PSF from each subject country sold to end users. U.S. producers and importers of fine denier PSF from China, India, and Korea sold to both woven and nonwoven end users, while importers of fine denier PSF from Taiwan primarily sold to ***.[69]

In arguing that subject imports from India should not be cumulated with imports from other subject countries, Reliance claims that the majority of imports of fine denier PSF from India are not distributed and sold in the U.S. market but rather are re-exported to third countries.[70] According to Reliance, the volume data overstate subject imports from India because it includes fine denier PSF that was subsequently re-exported to third country markets. The record shows that Reliance is mistaken. Neither the import volume data reported by *** nor official import statistics include fine denier PSF from India that was re-exported.[71] Consequently, the fact that some imports of fine denier PSF from India may be re-exported to third countries does not warrant not cumulating subject imports from India with imports from all other sources, particularly when the import volume data upon which we rely in our analysis does not include such imports.[72]

Geographic Overlap. The domestic like product and subject imports from China, India, and Korea were sold in all regions of the contiguous United States during the POI, while subject imports from Taiwan were sold in the Northeast, Southeast, Central Southwest, and Pacific Coast regions.[73]

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

[70] Reliance Prehearing Br. at 22; Reliance Posthearing Br. at 12 & Exhibit 3.

[71] CR/PR at Tables III-13 & IV-2; *see also* DAK's Original Importer Questionnaire Response (EDIS Doc. 630751); DAK's Revised Importer Questionnaire Response (EDIS Doc. 634403); Petitioners Posthearing Br., Responses to Commission Questions at 30-31.

[72] Reliance further argues that a certain distribution agreement currently in place between *** indicates that it ***, and therefore subject imports from India should not be cumulated with other subject imports. Reliance Prehearing Br. at 24. We disagree. As an initial matter, we observe that *** is not the sole, or even the largest, importer of subject imports from India, CR/PR at IV-1, and Reliance is not the sole exporter of fine denier PSF from India into the United States. CR/PR at Table VII-6. Moreover, Reliance's arguments regarding the agreement with *** have been confusing, inconsistent, and relied upon outdated information. Specifically, Reliance initially argued that ***. In response, Reliance appears to have abandoned its earlier claims, arguing in its final comments only that *** is a *** importer. Reliance Final Comments at 4-5. We find that the existence of Reliance's agreement with *** does not provide any basis for declining to cumulate subject imports from India with imports of fine denier PSF from other sources.

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

Simultaneous Presence in Market. Subject imports from China, India, Korea, and Taiwan were present in the U.S. market in each month of the POI.[74] The domestic like product was likewise present in the U.S. market throughout the POI.[75]

Conclusion. Because the antidumping and countervailing duty petitions were filed on the same day and the record indicates that there is a reasonable overlap of competition between and among subject imports and the domestic like product, we analyze subject imports from China, India, 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 this investigation, we find that an industry in the United States is materially injured by reason of imports of fine denier PSF from China and India that Commerce has found to be subsidized by the governments of China and India.

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.[76] 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.[77] The statute defines "material injury" as "harm which is not inconsequential, immaterial, or unimportant."[78] 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.[79] 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."[80]

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

[74] CR/PR at Table IV-11.

[75] CR/PR at Tables V-3 – V-6 & C-1.

[76] 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.

[77] 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).

[78] 19 U.S.C. § 1677(7)(A).

[79] 19 U.S.C. § 1677(7)(C)(iii).

[80] 19 U.S.C. § 1677(7)(C)(iii).

imports,[81] 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.[82] 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.[83]

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.[84] In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.[85] Nor does the

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[81] 19 U.S.C. §§ 1671d(a), 1673d(a).

[82] *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).

[83] 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 LTFV 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).

[84] 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-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.

[85] 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 ... .
(Continued...)

"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.[86] It is clear that the existence of injury caused by other factors does not compel a negative determination.[87]

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."[88] Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed "rigid adherence to a specific formula."[89]

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

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(…Continued)
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.").

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

[87] *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.").

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

[89] *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.").

presence of price-competitive nonsubject imports.[90] 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.[91] 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.[92]

The question of whether the material injury threshold for subject imports is satisfied notwithstanding any injury from other factors is factual, subject to review under the substantial evidence standard.[93] Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.[94]

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.

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

[91] *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).

[92] 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.

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

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

1. Demand Considerations

Demand for fine denier PSF depends on demand for the downstream products in which it is incorporated, and it can be used in knit or woven, as well as nonwoven applications. These include apparel (such as socks, hosiery, liners, and other worn fabrics, apparel and textiles), wipes (such as baby wipes, hygiene products, and household cleaning wipes), filters and filter papers (such as water filters, face masks, air filters, and needlepunch filtration), fiberfill and batting (for cushions, pillows, bedding, furniture, and automotive interiors), medical gowns and drapes, sterilization wraps, apparel sewing threads, battery separators, nonwoven fabrics, mop yarn, cluster fiber, spunlace, and insulation.[95]

Apparent U.S. consumption fell overall from 2014 to 2016, although it was higher in interim 2017 than in interim 2016. Apparent U.S. consumption was *** pounds in 2014, *** pounds in 2015, and *** pounds in 2016; it was *** pounds in interim 2016 and *** pounds in interim 2017.[96] Notwithstanding this overall decline in demand, most market participants indicated that demand had increased. In explaining this discrepancy, some firms reported that while overall demand for fine denier PSF had decreased (primarily in the textile market), demand in certain smaller segments had increased (such as in the nonwoven market).[97]

2. Supply Considerations

During the POI, the U.S. fine denier PSF market was supplied by domestic producers, subject imports, and nonsubject imports.

The domestic industry was the largest supplier of fine denier PSF to the U.S. market throughout the POI. As discussed above, the domestic industry produces standard as well as specialty fine denier PSF, including black or colored fine denier PSF, siliconized fine denier PSF, and micro denier PSF.[98] The vast majority of domestic production of fine denier PSF consists of standard fine denier PSF.[99] During the POI, the domestic industry's share of the U.S. fine denier PSF market declined from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; its market share was essentially the same in the interim periods at *** percent in interim 2016 and *** percent in interim 2017.[100]

Parties disagree on whether a series of events that occurred during and prior to the POI affected the domestic industry's ability to serve the U.S. market. Respondents claim that these events disrupted the domestic industry's ability to reliably supply fine denier PSF, while

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[95] CR at II-14; PR at II-8.

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

[97] CR at II-16 – II-17; PR at II-9 – II-10. ***, a client of ***, ***, and therefore reportedly reduced its volume of purchases of fine denier PSF from ***. Chinese Respondents Prehearing Br. at 10 (citing *** Purchaser Questionnaire Response). According to Chinese Respondents, the loss of *** business accounted for *** percent of the decline in *** sales from 2014 to 2015. *Id.*

[98] CR at IV-10 – IV-20; PR at IV-7 – IV-10; CR/PR at Tables IV-5 – IV-9 & D-1 – D-5.

[99] CR at IV-10 – IV-20; PR at IV-7 – IV-10; CR/PR at Tables IV-5 – IV-9 & D-1 – D-5.

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

Petitioners argue that they had either no effect or only minimal effects on domestic supplies of fine denier PSF.

In 2013, prior to the POI, DAK closed its Cape Fear, North Carolina, production facility, from which it had produced purified terephthalic acid ("PTA"), one of two key raw materials required for production of fine denier PSF, and a small volume of fine denier PSF.[101] DAK testified that the shutdown of its Cape Fear facility did not affect its overall supply of fine denier PSF because its production of fine denier PSF for the U.S. market was shifted to its Cooper River, South Carolina, production facility.[102]

In 2014, British Petroleum's ("BP") Cooper River chemical facility declared a *force majeure* and stopped production of PTA. U.S. producers, however, reported that this incident had no effect on their supplies of fine denier PSF.[103]

At the end of 2015, DAK experienced an unexpected 29-day shutdown due to a power failure.[104] ***.[105] Notwithstanding this, DAK reported that ***.[106]

During the POI, subject imports accounted for the second-largest supply of fine denier PSF. Subject import market share increased steadily from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017.[107] Nonsubject imports accounted for the smallest source of fine denier PSF during the POI. Nonsubject import market share was *** percent in 2014, *** percent in 2015, and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017.[108] The largest sources of nonsubject imports in 2016 were Germany, Mexico, and ***.[109]

3. Substitutability and Other Conditions

As discussed above in section IV, market participants generally found the subject imports to be at least somewhat interchangeable with the domestic like product. Respondents

[101] CR at II-10; PR at II-6; Hearing Tr. at 23, 79 (Ruday).

[102] Petitioners Posthearing Br. at 12, Exhibit 1 at 25-26 & Exhibit 4. Chinese Respondents argue that DAK's *** capacity utilization rate and the volume of imports in 2014 suggests that DAK was unable to meet supply needs from its Cooper River facility at that time. Chinese Respondents Posthearing Br. at 6-7 (citing CR/PR at Tables III-4 &III-8). We do not find that the record supports this assertion. Although DAK's capacity utilization rate was *** in 2014, its volume of imports that year was lower than in 2015 and not significantly higher than the volume of imports in 2016. CR/PR at Tables III-4 & III-8.

[103] Petitioners Posthearing Br. at 11-12 & Exhibits 4, 6, 8, 9; Hearing Tr. at 80-81 (Sparkman). In particular, ***. Petitioners Posthearing Br. at Exhibit 4. Similarly, Nan Ya, Palmetto, and Auriga reported that ***. *Id.* at Exhibit 6, 8, & 9.

[104] CR at II-10 – II-11; PR at II-5.

[105] CR at II-10 – II-11; PR at II-5.

[106] CR at II-11; PR at II-5 – II-6; Petitioners Posthearing Br. at 26 & Exhibit 4. Importer *** reported that it lost 1 million pounds of yarn production in December 2015 due to DAK's shutdown. CR at II-10; PR at II-6.

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

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

[109] CR at II-9; PR at II-5. During the POI, nearly all of the exports to the United States from Mexico came from ***. *** reports that ***. CR at VII-31; PR at VII-22.

argue that the domestic industry did not supply specialty products including PCR fine denier PSF, short cut fine denier PSF, siliconized fine denier PSF, and black fine denier PSF, in sufficient quantities during the POI, and as a result, competition between the domestic like product and subject imports was limited.[110] The record, however, demonstrates that the domestic industry does, in fact, supply at least some volume of these specialty forms of fine denier PSF.[111] In addition, large shares of both subject imports and the domestic like product were comprised of standard fine denier PSF. Therefore, we find that the domestic industry competes meaningfully with subject imports for sales of these specialty products as well as standard fine denier PSF. We further find that there is a moderate-to-high degree of substitutability between domestically produced fine denier PSF and subject imports, depending on the type of product; for product types and applications in which both domestic producers and importers of subject product compete in substantial volumes, there is a high degree of substitutability between domestic products and subject imports.[112]

We also find that price is an important factor in fine denier PSF purchasing decisions. When asked to list the top three factors considered in purchasing decisions, 35 responding producers listed price, more frequently than any other factor.[113] In addition, 34 out of 36 purchasers identified price as a very important factor in purchasing decisions.[114] With the exception of fine denier PSF from Taiwan, most purchasers identified U.S.-produced fine denier PSF to be inferior to that of subject imports in terms of price.[115] Purchasers generally reported the domestic like product and subject imports to be comparable in terms of availability,[116] product consistency,[117] quality meeting industry standards,[118] and reliability.[119]

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[110] Chinese Respondents Prehearing Br. at 29-33; Reliance Prehearing Br. at 6-7.

[111] As discussed above in section IV, U.S. producers reported U.S. shipments of all of the specialty fine denier PSF products, including PCR fine denier PSF, short cut fine denier PSF, black or colored fine denier PSF, siliconized fine denier PSF, and micro denier PSF. CR/PR at Tables D-1 – D-5.

[112] CR at II-19; PR at II-11.

[113] CR/PR at Table II-6. Quality was identified as a top factor by 31 purchasers, and availability and supply chain security identified by 16 purchasers. *Id.*

[114] CR/PR at Table II-7. Availability, product consistency, quality meeting industry standards, and reliability of supply were among the factors also identified as very important. *Id.*

[115] CR/PR at Table II-10a. With respect to price, the domestic like product was identified as inferior by 14 out of 20 purchasers for subject imports from China, 8 out of 10 purchasers for subject imports from India, and 9 out of 11 purchasers for subject imports from Korea; three purchasers identified the domestic like product to be superior to subject imports from Taiwan in terms of price, while 2 identified it to be inferior. *Id.*

[116] A majority of responding purchasers identified subject imports from China and Korea to be comparable to the domestic like product in terms of availability. CR/PR at Table II-10a. In comparing subject imports from India to the domestic like product, five purchasers reported the domestic like product as inferior in terms of availability, four reported it to be comparable, and two reported it to be superior. *Id.* In comparing subject imports from Taiwan to the domestic like product, three purchasers reported the domestic like product as superior in terms of availability, and two each reported it to be comparable or inferior. *Id.*

[117] A majority of responding purchasers reported the domestic like product and subject imports from all sources to be comparable in terms of product consistency. CR/PR at Table II-10a.

Another important characteristic of this market is that a substantial and increasing share of subject imports entered the United States as direct imports.[120] Reported direct import cost data accounted for substantial portions of imports from China and Taiwan. Specifically, direct import cost data accounted for *** percent of reported imports from China and *** percent of reported subject imports from Taiwan in 2016.[121] Notably, direct imports from China accounted for nearly half (*** percent) of reported subject merchandise entering into the United States during the POI.[122] The most commonly reported benefit of directly importing fine denier PSF was the cost savings.[123]

Most U.S. producers reported selling fine denier PSF via either transaction-by-transaction negotiations or contracts, while the majority of importers sell fine denier PSF through transaction-by-transaction negotiations, and less than half reported selling through contracts.[124] Three out of four responding U.S. producers reported that their contracts set prices based on a comparison to raw material costs or price indexes; the majority of importers reported that they do not set their contract prices based on a comparison to raw material costs or price indexes.[125] Petitioners assert that U.S. producers DAK and Nan Ya ***.[126] As a result, they assert that raw material costs are essentially a "pass through" in the majority of their price agreements, and as such, they affect prices but not profits earned on sales of fine denier PSF.[127] Respondents also emphasize that prices of fine denier PSF follow MGA and PTA price trends.

(…Continued)

[118] A majority of responding purchasers reported the domestic like product and subject imports from all sources to be comparable in terms of quality meeting industry standards. CR/PR at Table II-10a. We further find that this evidence undercuts Respondents' assertions that the domestic like product was inferior in terms of quality. *See* Chinese Respondents Posthearing Br., Responses to Commission Questions at 10-12; Reliance Final Comments at 7-8.

[119] A majority of responding purchasers reported the domestic like product and subject imports from China, Korea, and Taiwan to be comparable in terms of reliability of supply. CR/PR at Table II-10a. In comparing subject imports from India to the domestic like product, four purchasers reported the domestic like product as inferior in terms of reliability of supply, four reported it to be comparable, and three reported it to be superior. *Id.*

[120] Petitioners' Posthearing Br. at 7-8; Hearing Tr. at 197 (Marshak).

[121] CR at V-24; PR at V-11.

[122] Calculated from CR/PR at Tables V-7 – V-9 & Importer Questionnaire Responses at questions II-5a, II-6a, II-7a, and II-8a.

[123] CR at V-25; PR at V-12. Other benefits included mitigation of risk associated with domestic supply disruptions, quality control, lack of domestic supply, and availability. *Id.*

[124] CR at V-8; PR at V-5; CR/PR at Table V-1.

[125] CR at V-11; PR at V-7.

[126] Petitioners Final Comments at 9; Petitioners Posthearing Br. at 9-10 & Responses to Commission Questions at 4-6. Petitioners explain that the "adder" component covers ***. Petitioners' Posthearing Br. at 9.

[127] Petitioners Final Comments at 9; Petitioners Posthearing Br. at 9-10 & Responses to Commission Questions at 4-6.

They assert that the observed price declines in fine denier PSF during the POI were directly caused by price declines in raw materials during the same period.[128]

As previously mentioned, the primary raw material inputs used to produce fine denier PSF are MEG and PTA.[129] During the POI, the prices of both MEG and PTA decreased overall although the prices for both increased during 2017. Between January 2014 and December 2016, the price of MEG decreased by *** percent, and the price of PTA decreased by *** percent. Between December 2016 and September 2017, the prices of MEG and PTA increased by *** percent and *** percent, respectively.[130] Between 2014 and 2016, U.S. producers' raw material costs as a share of the costs of goods sold ("COGS") decreased from *** percent to *** percent. During January through September 2017, U.S. producers' raw material costs as a share of COGS was *** percent.[131]

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."[132]

The volume of cumulated subject imports increased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016, for an increase of *** percent from 2014 to 2016. Subject import volume was slightly lower in interim 2017 at *** pounds than in interim 2016 at *** pounds. As apparent consumption declined overall from 2014 to 2016, the share of the U.S. market held by subject imports increased steadily each year, primarily at the expense of the domestic industry. Subject import market share was *** percent in 2014, *** percent in 2015, and *** percent in 2016. Subject import market share was *** percent in interim 2016 and *** percent in interim 2017. In contrast, the domestic industry's market share was *** percent in 2014, *** percent in 2015, *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017.[133]

Respondents argue that the increased volume and market share of subject imports is due to subject imports' concentration in specialty fine denier PSF, which they contend the domestic industry does not supply.[134] As discussed above, we recognize that the vast majority of the domestic industry's shipments consist of standard fine denier PSF but also find that the domestic industry participated meaningfully in the U.S. market for specialty fine denier PSF products. Moreover, we find that subject imports' volume in standard fine denier PSF increased significantly during the POI. Based on Chinese Respondents' calculations, which do not account for the potential double counting of specialty fine denier PSF products or include

[128] Chinese Respondents Posthearing Br. at 10-11.

[129] CR/PR at V-1.

[130] CR at V-2; PR at V-1.

[131] CR/PR at V-1.

[132] 19 U.S.C. § 1677(7)(C)(i).

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

[134] Chinese Respondents Final Comments at 1-2; Chinese Respondents Posthearing Br. at 2-4 & Responses to Commission Questions at 6-8; Reliance Posthearing Br. at 10-11.

micro denier products (hence, their "best case scenario"), subject imports of standard fine denier PSF increased significantly in absolute terms and took market share from the domestic industry.[135] We further observe that aggregated pricing and purchase cost data, which do not include specialty fine denier PSF products, show that the domestic industry's volume and shares for standard products fell from 2014 to 2016 while cumulated subject import volume and shares of standard products increased during that time.[136] Consequently, we find that the increased volume of subject imports is not explained by their concentration in specialty fine denier PSF products and that subject imports increased their volume of standard fine denier PSF during the POI at the expense of the domestic industry.

Thus, we find that the volume of 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

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[135] Chinese Respondents Final Comments at Exhibit A. According to Chinese Respondents, cumulated subject imports of standard fine denier PSF increased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016; they were *** pounds in interim 2016 and *** pounds in interim 2017. *Id.* Subject import market share of standard fine denier PSF increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. *Id.* In contrast, the domestic industry's share of the market for standard fine denier PSF decreased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. Chinese Respondents acknowledge that these calculations represent the "best case scenario" for them. *Id.*

[136] Domestic producers' pricing data by quantity fell from *** in 2014 to *** pounds in 2015 and *** pounds in 2016; it was *** pounds in interim 2016 and *** pounds in interim 2017. As a share of its total fine denier PSF, the domestic industry's pricing data fell from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; they accounted for *** percent in interim 2016 and *** in interim 2017. As a share of total fine denier PSF consumption, the domestic industry's pricing data by quantity fell from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. The volume of subject imports' aggregated pricing and purchase cost data increased from *** in 2014 to *** pounds in 2015 and *** pounds in 2016; it was *** pounds in interim 2016 and *** pounds in interim 2017. As a share of its total fine denier PSF, the volume of subject imports' aggregated pricing and purchase cost data increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** in interim 2017. As a share of total fine denier PSF consumption, the volume of subject imports' aggregated pricing and purchase cost data increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. Calculated from CR/PR at Tables V-3 – V-9.

> (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.[137]

As discussed above in Section V.B.3., we find that there is a high degree of substitutability between subject imports and the domestic like product for products of the same type 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 U.S. customers.[138] Three of the five responding U.S. producers and 12 of the 29 responding importers provided usable pricing data for sales of the requested products although not all firms reported data for all products for all quarters.[139] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of fine denier PSF in 2016, *** percent of shipments of subject imports from China, *** percent of shipments of subject imports from India, and *** percent of shipments of subject imports from Korea. No importer reported price data for their commercial sales of subject imports from Taiwan.[140]

Prices for fine denier PSF imported from all subject countries combined were below those for U.S. produced product in 22 instances (involving *** pounds) with margins of underselling ranging from 0.7 to 18.2 percent. In the remaining 55 instances (involving *** pounds), prices for fine denier PSF imported from subject countries were above prices for the domestic like product with margins of underselling ranging from between 0.1 and 216.1 percent.[141]

As previously discussed, direct imports were an increasingly significant aspect of the U.S. fine denier PSF market. Importers reported direct import purchase cost data that accounted for *** percent of reported imports from China and *** percent of reported imports from Taiwan in 2016. When comparing direct import purchase costs with domestic prices, the

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[137] 19 U.S.C. § 1677(7)(C)(ii).

[138] The four pricing products are as follows:

Product 1.—Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 0.85 denier to less than 1.15 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier;

Product 2 – Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 1.15 denier through and including 1.8 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier;

Product 3 – Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 1.15 denier through and including 1.8 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 3.0-5.0 grams per denier; and

Product 4 -- Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 1.8 denier through and including 3.0 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier.

CR at V-14 – V-15; PR at V-9.

[139] CR at V-15; PR at V-9.

[140] CR at V-15; PR at V-9 – V-10.

[141] CR at V-34; PR at V-13.

purchase cost of imports from China was lower than domestic prices in *** pounds. The purchase cost of imports from Taiwan was lower than domestic prices in ***; in the remaining ***.[142]

Although direct imports may not be at the same level of trade as shipments by U.S. producers or importers to unrelated U.S. customers, we nonetheless find them to be relevant to our pricing analysis. In an effort to strengthen this analysis, the Commission requested that direct importers provide additional estimated costs above landed duty-paid value associated with their importing activities. Firms reported the following estimates as a share of landed duty-paid value for the following factors: logistical or supply chain costs, 0.3 to 8.0 percent; warehousing costs, 0.5 to 1.9 percent; and additional non-freight-related insurance costs, less than 0.1 to 0.5 percent.[143] The average difference between direct import purchase costs and domestic prices, however, was almost 20 percent, which was significantly higher than the estimated additional costs reported by direct importers for their importing activities.[144]

Lost sales and lost revenue data further support a finding that cumulated subject imports were often priced lower than the domestic like product and that subject imports gained sales as a result of lower prices. In the final phase of these investigations, all five domestic firms reported that they had lost sales to subject imports and had to reduce prices during the POI.[145] The Commission received responses to the domestic industry's allegations of lost sales and lost revenues from 37 purchasers.[146] Of these responding purchasers, 23 out of 36 firms reported that they had purchased subject imports rather than the domestic like product and 15 of 22 responding purchasers identified at least one subject country for which import prices were lower than prices for domestically produced fine denier PSF.[147] Moreover, 11 responding purchasers reported that price was a primary reason for purchasing subject

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[142] CR at V-35; PR at V-15.

[143] CR at V-24 – V-25; PR at V-11. In addition, another firm reported a cost of 0.5 percent for "harboring mtc/broker/processing fee(s)" and another reported a cost of 3.0 percent for "buying commissions." *Id.*

[144] Calculated from CR/PR at Tables V-7 – V-9. The parties disagree on how the Commission should assess direct import purchase cost data in these investigations. Petitioners' Prehearing Br. at 23-25, 27, 29; Petitioners Posthearing Br. at 7-8; Chinese Respondents Prehearing Br. at 46-48. However, the parties acknowledge that direct imports represented a significant share of subject imports during the POI. Petitioners' Posthearing Br. at 7-8; Hearing Tr. at 197 (Marshak). Given the significant volume of direct imports in this market, we find it appropriate to use this data set in our analysis; failure to do so would ignore a large part of the market, including the only price comparisons on the record regarding subject imports from Taiwan and the majority of imports from China, the largest source of subject imports during the POI. We note that, consistent with our practice in other investigations, we have collected data that enable us to assess the direct import purchase cost data in light of purchasers' costs for direct importing. Based on this record, the purchase cost data for direct imports demonstrates that subject imports were generally available at a lower cost to purchasers than the prices of the domestic like product, supporting a finding of significant underselling.

[145] CR at V-36; PR at V-15.

[146] CR at V-36; PR at V-15.

[147] CR at V-36 – V-37; PR at V-16.

imports instead of the domestic like product in purchases involving *** pounds of fine denier PSF.[148] Furthermore, twelve purchasers reported increasing their share of subject imports by the same percentage points that they decreased their purchases of domestic like product.[149]

Considering all quarterly pricing data available, including importers' resale data and direct import purchase cost data, as well as lost sales and lost revenues data, we find that subject import prices were lower than the prices for the domestic like product, involving a substantial volume of fine denier PSF.[150] Consequently, we find that subject imports undersold the domestic like product to a significant degree.

We have also considered whether subject imports had significant price-depressing effects. Prices for domestically produced fine denier PSF declined overall for the four pricing products with declines of *** percent, *** percent, *** percent, and *** percent, respectively, from January 2014 through September 2017.[151] Prices for each pricing product fell primarily between 2014 and 2016 before recovering slightly in interim 2017.[152] The average unit sales value ("AUVs") followed similar trends, falling from 2014 to 2016, but AUVs were higher in interim 2017 than in interim 2016.[153] As discussed above in section V.B.3., raw material costs generally fell from January 2014 to December 2016 but increased from December 2016 to September 2017. In addition, apparent U.S. consumption declined from 2014 to 2016; it was higher in interim 2017 than in interim 2016. Given the declining demand and the fact that most

[148] CR/PR at Table V-15. The parties disagree to what extent the volume of lost sales may be overstated or understated based on the purchasers' responses. Although some purchasers provided additional comments regarding non-price reasons for purchasing subject imports, we find it appropriate to rely on purchasers' confirmations that price was a primary reason for purchasing subject imports instead of domestically produced fine denier PSF for the volumes of lost sales they reported. CR/PR at Table V-15. Even if we do not include firms that responded both "yes" and "no" to the question of whether price was a primary reason for their decision to purchase subject imports, *see* CR at V-37 n. 26, PR at V-16 n. 26, the volume of lost sales is *** pounds of fine denier PSF. CR/PR at Table V-15. We further observe that 5 purchasers reported that the domestic industry reduced prices to compete with subject imports during the POI. CR/PR at Table V-18.

[149] CR/PR at Table V-13.

[150] As discussed above, subject imports were priced lower in 22 out of 77 quarterly comparisons in the traditional pricing comparisons. In addition, the purchase costs for direct imports were lower than U.S. producer prices in *** comparisons involving imports from China and *** comparisons involving imports from Taiwan. These lower priced subject imports accounted for *** pounds of fine denier PSF involving the traditional pricing data while direct imports with lower purchase costs accounted for *** pounds of subject imports. In contrast, subject imports were priced higher in *** instances involving traditional pricing comparisons, accounting for *** pounds of subject imports. For direct imports, the purchase cost of subject imports was higher than U.S. producer prices in *** instances involving imports from Taiwan, accounting for *** pounds.

[151] CR/PR at Tables V-3 – V-10.

[152] CR/PR at Tables V-3 – V-9 & Figures V-3 – V-9.

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

U.S. producers reported that their fine denier PSF prices were indexed to raw material costs, we do not find that subject imports depressed domestic prices to a significant degree.[154]

We have also considered whether subject imports suppressed domestic prices to a significant degree. During the POI, the domestic industry's ratio of COGS to net sales fluctuated within a relatively narrow range from *** percent in 2014, to *** percent in 2015, and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017.[155] The domestic industry's COGS generally tracked trends in raw material costs; from 2014 to 2016, the domestic industry's COGS fell, but were higher in interim 2017 than in interim 2016.[156] As discussed above, domestic prices and AUVs followed similar trends. Accordingly, we do not find that the record indicates that subject imports suppressed domestic prices to a significant degree.

As discussed above, we find that subject imports undersold the domestic like product to a significant degree. This underselling allowed the significant volume of subject imports to increase and to take market share and sales of fine denier PSF from the domestic industry.

We therefore conclude that cumulated subject imports had significant price effects.

E. Impact of the Subject Imports[157]

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."[158] These factors include output, sales, inventories, capacity

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[154] As discussed in section V.B.3., Petitioners argue that raw material costs are "passed through" and that subject imports depressed domestic prices by decreasing the "adder" aspect of the pricing formula. Because we only have information regarding "adders" from two members of the domestic industry, we are unable to fully evaluate petitioners' assertions.

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

[156] The domestic industry's COGS were $*** in 2014, $*** in 2015, and $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. Unit COGS fell from $*** in 2014 to $*** in 2015 and $*** 2016; unit COGS were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table C-1.

[157] 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 preliminary determinations of sales at LTFV, Commerce found antidumping duty margins of 63.26 to 181.46 percent for imports from China, 2.66 to 21.43 percent for imports from India, 30.15 to 45.23 percent for imports from Korea, and 0.00 to 48.86 percent for imports from Taiwan. CR at I-14 – I-15. We take into account in our analysis the fact that Commerce has made preliminary findings that all subject producers in all subject countries are selling subject imports in the United States at LTFV. In addition to this consideration, our impact analysis has considered other factors affecting domestic prices. Our analysis of the significant underselling of subject imports, described in both the price effects discussion and below, is particularly probative to an assessment of the impact of the subject imports.

[158] 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 (Continued...)

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 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."[159]

We have examined the domestic industry's performance with respect to a number of factors during the POI. The domestic industry increased capacity from 2014 to 2016.[160] In particular, ***. The domestic industry, however, was unable to utilize its new and existing capacity, as production and capacity utilization fell during the POI.[161] The domestic industry's U.S. shipments also fell from 2014 to 2016 but were higher in interim 2016 than in interim 2017.[162] From 2014 to 2016, the domestic industry's output declined at a greater rate than apparent U.S. consumption.[163] Consequently, the domestic industry lost market share as the volume of subject imports increased in a declining market from 2014 to 2016.[164] The domestic industry's inventories increased from 2014 to 2016, but were lower in interim 2017 than in interim 2016.[165]

(…Continued)
may demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports.").

[159] 19 U.S.C. § 1677(7)(C)(iii). This provision was amended by the Trade Preferences Extension Act of 2015, Pub. L. 114-27.

[160] The domestic industry's capacity increased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016; it was *** pounds in interim 2016 and *** pounds in interim 2017. CR/PR at Table III-4.

[161] Production decreased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016; it was *** pounds in interim 2016 and *** pounds in interim 2017. Capacity utilization fell from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. CR/PR at Table III-4.

[162] U.S. shipments decreased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016; they were *** pounds in interim 2016 and *** pounds in interim 2017. CR/PR at Table III-6.

[163] Apparent U.S. consumption fell *** percent from 2014 to 2016. CR/PR at Table C-1. The domestic industry's production fell *** percent and U.S. shipments fell *** percent during that time. Apparent U.S. consumption was *** percent higher in interim 2017 than in interim 2016. The domestic industry's production was *** percent lower in interim 2017 than in interim 2016, but U.S. shipments were *** percent higher in interim 2017 than in interim 2016. *Id.*

[164] The domestic industry's market share fell from *** percent in 2014 to *** in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. Subject import market share increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. CR/PR at Table C-1.

[165] The domestic industry's inventories were *** pounds in 2014, *** pounds in 2015, and *** pounds in 2016; inventories were *** pounds in interim 2016 and *** pounds in interim 2017. CR/PR at Table C-1.

Production related workers ("PRWs"), total hours, and wages paid fluctuated during the POI[166] while the average hours worked per PRW increased over the POI.[167] Productivity declined from 2014 to 2016; it was higher in interim 2017 than in interim 2016.[168]

Net sales by quantity and value fell from 2014 to 2016 but were higher in interim 2017 than in interim 2016.[169] The domestic industry's COGS decreased from 2014 to 2016 and were higher in interim 2017 than in interim 2016.[170] The ratio of COGS to net sales was high and fluctuated over the POI.[171] SG&A expenses fluctuated over the POI.[172] As the domestic industry's net sales declined it had fewer revenues to spread across fixed costs, which became more substantial relative to net sales.[173] Gross profits,[174] operating income,[175] and net income[176] all declined overall from 2014 to 2016 but were higher in interim 2017 than in interim 2016.[177] The domestic industry's capital expenditures increased overall from 2014 to

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[166] PRWs were *** in 2014, *** in 2015, and *** in 2016; PRWs were *** in interim 2016 and *** in interim 2017. Total hours worked were *** in 2014, *** in 2015, and *** in 2016; they were *** in interim 2016 and interim 2017. Wages paid were $*** in 2014, $*** in 2015, and $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table III-9.

[167] The average hours per PRW were *** hours in 2014, *** in 2015, and *** in 2016; they were *** hours in interim 2016 and *** in interim 2017. CR/PR at Table III-9.

[168] Productivity was *** pounds per hour in 2014, *** pounds per hour in 2015, *** pounds per hour in 2016; it was *** pounds per hour in interim 2016 and *** pounds per hour in interim 2017. CR/PR at Table III-9.

[169] Net sales by quantity decreased from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016; they were *** pounds in interim 2016 and *** pounds in interim 2017. In terms of value, net sales decreased from $*** in 2014 to $*** in 2015 and $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-1.

[170] The domestic industry's COGS were $*** in 2014, $*** in 2015, and $*** in 2016; COGS $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-1.

[171] The ratio of COGS to net sales was *** percent in 2014, *** percent in 2015, and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. CR/PR at Table VI-1.

[172] SG&A expenses were $*** in 2014, $*** in 2015, and $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-1.

[173] The ratio of other factory costs, which includes many fixed costs in relation to production and sales, to net sales increased from *** percent in 2014 to *** percent in 2015 and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. CR/PR at Table VI-1. Likewise, SG&A expenses may also include many fixed costs in relation to production and sales; the ratio of SG&A expenses to net sales increased from *** percent in 2014 to *** percent in 2015, and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. *Id.*

[174] Gross profits were $*** in 2014, $*** in 2015, and $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-1.

[175] Operating income was $*** in 2014, $*** in 2015, and $*** in 2016; it was $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-1.

[176] Net income was $*** in 2014, $*** in 2015, and $*** in 2016; it was $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-1.

[177] The average operating return on assets was *** percent in 2014, *** percent in 2015, and *** percent in 2016. CR/PR at Table VI-6.

2016 and were lower in interim 2017 than in interim 2016.[178] Its research and development ("R&D") expenses fluctuated over the POI.[179]

Accordingly, as the volume of low-priced subject imports increased significantly from 2014 to 2016, subject imports took sales of fine denier PSF from U.S. producers and increased their market share at the expense of the domestic industry. As a result, the domestic industry reported lower production, shipments, and sales than would have otherwise occurred during that time, particularly in light of the domestic industry's available capacity. Consequently, the domestic industry lost revenue that it otherwise would have obtained, and these lost revenues were reflected in its poor and declining financial performance from 2014 to 2016. As the volume of subject imports was lower in interim 2017, the domestic industry was able to achieve higher production, U.S. shipments, sales, and financial performance compared to interim 2016. We therefore find that the significant volume of cumulated subject imports had a significant impact on the domestic industry.[180]

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. As discussed above, apparent U.S. consumption decreased from 2014 to 2016; however, this decline was modest relative to the declines in production, shipments, and sales experienced by the domestic industry. We have also considered the presence of nonsubject imports in the U.S. fine denier PSF market. Although nonsubject imports had an appreciable presence in the U.S. market, their market share declined overall from 2014 to 2016.[181] In addition, although the volume and market share of nonsubject imports was higher in interim 2017 than in interim 2016, this did not prevent the domestic industry from obtaining higher shipments, sales, and revenues in interim 2017 compared to interim 2016 as discussed above. Thus, there are no other factors that could reasonably explain the domestic industry's loss in market share, output, and revenues that resulted from increases in cumulated subject imports. We therefore conclude that subject imports had a significant impact on the U.S. fine denier PSF industry.

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[178] Capital expenditures increased from $*** in 2014 to $*** in 2015 and then decreased to $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-5.

[179] R&D expenses were $*** in 2014, $*** in 2015, and $*** in 2016; they were $*** in interim 2016 and $*** in interim 2017. CR/PR at Table VI-5.

[180] Chinese Respondents argue that, because subject imports were lower in interim 2017, but the financial performance of the members of the domestic industry other than *** was lower in interim 2017 than in interim 2016, this indicates a lack of correlation between subject imports and the financial performance of the domestic industry. Chinese Respondents Posthearing Br. at 8-9 & Responses to Commission Questions at 17-19, 24; Chinese Respondents Prehearing Br. at 48-51. We are required, however, by statute to evaluate the impact of subject imports on the domestic industry as a whole. 19 U.S.C. § 1677(4)(A). Moreover, we observe that each domestic producer suffered declines in their respective financial performance indicators in 2016 as the volume of low-priced subject imports peaked. CR/PR at Table VI-3.

[181] Nonsubject import market share was *** percent in 2014, *** percent in 2015, and *** percent in 2016; it was *** percent in interim 2016 and *** percent in interim 2017. CR/PR at Table C-1.

In addition, we have considered respondents' arguments, including claims that any injury to the domestic industry is due to its lack of participation in the U.S. market for specialty products.[182] As discussed above, however, we find that the record demonstrates that the domestic industry supplied the U.S. market with specialty products, including PCR fine denier PSF, black or colored fine denier PSF, short cut fine denier PSF, and siliconized fine denier PSF. Moreover, we observe that each of the domestic producers that produced these specialty products had significant excess capacity as well as inventories with which it could have supplied more of these products during the POI.[183] Furthermore, respondents' arguments ignore the fact that subject imports of standard fine denier PSF increased significantly in absolute terms and took market share from the domestic industry as discussed in Section V.C. above. Accordingly, we find that, contrary to respondents' claims, the domestic industry meaningfully participated in the market for specialty fine denier PSF products.

We have further considered Respondents' assertion that we should disaggregate the domestic industry for purposes of analyzing the impact of subject imports arguing that *** financial performance was different from the *** experienced by the other members of the domestic industry, *** from 2014 to 2016.[184] However, pursuant to 19 U.S.C. § 1677(4)(A), we are statutorily required to analyze the domestic industry as a whole. Moreover, we find that the record does not support Respondents' assertions because the other members of the domestic industry experienced declines in production, net sales, gross profits, operating income, and net income, particularly coinciding with peak volumes of subject imports in 2016.[185] Further, all members of the domestic industry had significant excess capacity in 2016, which would have permitted them to produce additional fine denier PSF.[186]

We further find unpersuasive Respondents' assertions that any injury to the domestic industry is due to supply constraints, rather than low-priced subject imports. As discussed above in Section V.B.2., *** was the only domestic producer that reported supply constraints, and it reported *** during the POI that occurred at the end of 2015. We initially observe that, during that same year, *** actually *** capacity.[187] Moreover, other domestic producers also had excess capacity during the POI.[188] Indeed, *** actively sought to increase its sales of fine denier PSF as a result of *** but was ***.[189]

Moreover, the record indicates that several large purchasers, *** specifically included provisions regarding mitigating risks concerning the reliability of supply in their contracts with ***, such as ***.[190] In other words, notwithstanding the ability of these purchasers to contract

[182] Chinese Respondents Posthearing Br. at 2-4; Reliance Posthearing Br. at 19; Reliance Posthearing Br. at 10-11.

[183] CR/PR at Table III-4; Petitioners Posthearing Br. at Exhibit 6, 7, & 8.

[184] Chinese Respondents Posthearing Br. 8-9 & Responses to Commission Questions at 17-19, 24; Chinese Respondents Prehearing Br. at 48-51.

[185] CR/PR at Tables III-4 & VI-3.

[186] CR/PR at Table III-4.

[187] CR/PR at Table III-4.

[188] CR/PR at Table III-4.

[189] Petitioners Postconference Br. at Exhibit 6.

[190] Petitioners Posthearing Br. at Exhibit 4, Attachments 1, 2.

specifically to mitigate supply concerns and the willingness of *** to agree to such terms, these purchasers nonetheless turned to subject imports. Other record evidence also undercuts their claims that the domestic industry's reliability of supply caused purchasers to switch to subject imports. In particular, *** and *** reported certain purchasers recently increased purchases of domestically produced fine denier PSF due to lower prices or the pendency of these investigations.[191] In addition, ***.[192] ***.[193]

VI. Conclusion

For the reasons stated above, we determine that an industry in the United States is materially injured by reason of imports of fine denier PSF from China and India found by Commerce to be subsidized by the governments of China and India.

[191] Petitioners Posthearing Br. at Exhibits 4, 6. Petitioners provided additional examples showing competition with subject imports based on price that tend to undercut Respondents' assertions regarding the domestic industry's supply constraints. *See, e.g.,* Petitioners Posthearing Br. at 5-6, 14-15, 26, 28-29, Responses to Commission Questions at 6 & Exhibits 4, 6; Petitioners Prehearing Br. at 32 & Exhibit 2.

[192] Petitioners Posthearing Br. at 26 & Exhibit 4; *** Purchaser Questionnaire Response at question II-1.

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

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 DAK Americas LLC, Charlotte, North Carolina ("DAK Americas"); Nan Ya Plastics Corporation, America, Lake City, South Carolina ("Nan Ya"); and Auriga Polymers Inc., Charlotte, North Carolina ("Auriga") on May 31, 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 fine denier polyester staple fiber ("fine denier PSF") [1] from China, India, Korea, and Taiwan, and subsidized by the Governments of China and India.[2] The following tabulation provides information relating to the background of these investigations.[3] [4] [5]

[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] 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).

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

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

[5] Commerce did not align its final countervailing duty determinations with its final antidumping duty determinations. Commerce's final determinations in its antidumping investigations have not yet been completed as of the issue date of the Commission's staff report. Therefore, this report includes information from Commerce's published preliminary phase antidumping duty investigations, as well as Commerce's published final phase countervailing duty investigations.

Effective date	Action
May 31, 2017	Petition filed with Commerce and the Commission; institution of the Commission's investigation
June 20, 2017	Commerce's notices of initiation (82 FR 29023, June 27, 2017; 82 FR 29029, June 27, 2017)
July 17, 2017	Commission's preliminary determination (82 FR 33925, July 21, 2017)
November 6, 2017	Commerce's preliminary CVD determinations (82 FR 51387, November 6, 2017; 82 FR 51396, November 6, 2017); scheduling of final phase of Commission investigation (82 FR 56050, November 27, 2017)
January 5, 2018	Commerce's preliminary AD determinations (83 FR 660; 83 FR 662; 83 FR 665; 83 FR 668)
January 17, 2018	Commission's hearing
January 23, 2018	Commerce's final CVD determinations (83 FR 3120; 83 FR 3122)
February 16, 2018	Commission's vote (CVD)
March 7, 2018	Commission's views (CVD)
May 11, 2018	Scheduled date for Commerce's final AD determinations
PENDING	Scheduled date for the Commission's vote (AD)
PENDING	Scheduled date for Commission's views (AD)

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--[6]

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

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—[7]

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

Organization of report

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

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

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

Fine denier PSF is generally used for knit or woven, and nonwoven, applications. Knit or woven applications include the production of textiles, while nonwoven applications include the production of household and hygiene products. The leading U.S. producers of fine denier PSF are DAK Americas and Nan Ya, while leading producers of fine denier PSF outside the United States include Jaingyin Hailun Chemical Fiber Co., Ltd. ("Hailun Chemical") and Jiangyin Huahong Chemical Fiber Co., Ltd. ("Huahong Chemical") of China; Reliance Industries Ltd. ("Reliance") and Bombay Dyeing and Manufacturing Company Limited ("Bombay Dyeing") of India; Toray Chemical Korea Inc. ("Toray") and Huvis Corporation ("Huvis") of Korea;[8] and Tainan Spinning Co., Ltd. ("Tainan Spinning") of Taiwan.[9] The leading U.S. importers of fine denier PSF from China are *** and ***; the leading importers of fine denier PSF from India are *** and ***; the leading importers of fine denier PSF from subject sources in Korea are *** and ***; and the leading importers of fine denier PSF from subject sources in Taiwan are *** and ***. Leading importers of product from nonsubject countries (primarily Germany, Indonesia, Mexico, and Thailand) include ***.

Responding purchasers represented firms in a variety of market sectors, including textiles and apparel, home furnishings (pillows and bedding), personal hygiene, automotive, and filtration for industrial and commercial applications. According to questionnaire data, the largest purchasers and/or importers for internal use of fine denier PSF in 2016 were ***. These firms' purchases/imports for internal use accounted for *** percent and *** percent of total imports in 2016.

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[8] These firms were identified by petitioners as Korea's major producers of fine denier PSF. See *Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan, Inv. Nos. 701-TA-579-580 and 731-TA-1369-1372 (Preliminary),* USITC Publication 4709, July 2017, p. VII-15. Questionnaires were issued to these firms, but they did not submit any responses to the Commission.

Toray was assessed a *de minimis* duty margin by Commerce in its preliminary antidumping duty determinations regarding Korea. See *Fine Denier Polyester Staple Fiber From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures,* 83 FR 660, January 5, 2018.

[9] Tainan Spinning was assessed a 0.00% duty margin by Commerce in its preliminary determinations regarding Taiwan. See *Fine Denier 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 668, January 5, 2018.

Apparent U.S. consumption of fine denier PSF totaled approximately *** pounds ($***) in 2016. Currently, at least five firms are known to produce fine denier PSF in the United States. U.S. producers' U.S. shipments of fine denier PSF totaled *** pounds ($***) in 2016, and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from subject sources totaled *** pounds ($***) in 2016 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled *** pounds ($***) in 2016 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 five firms that accounted for the vast majority of U.S. production of fine denier PSF during 2016. U.S. imports are based on official U.S. import statistics for HTS statistical reporting number 5503.20.0025, with adjustments to identify the zero or de minimis rate firms identified by Commerce (Toray and Tainan Spinning) and to remove out-of-scope imports imported from *** using proprietary Customs records.[10]

PREVIOUS AND RELATED INVESTIGATIONS

Korea and Taiwan

On April 2, 1999, a petition was filed by E.I. DuPont de Nemours, Arteva Specialties S.a.r.l, Nan Ya Plastics Corporation, America, Wellman, Inc., and Intercontinental Polymers, Inc. alleging that imports of certain polyester staple fiber from Korea and Taiwan were being sold at LTFV.[11] Following Commerce's final affirmative dumping determinations, the Commission made affirmative injury determinations with respect to imports from Korea and Taiwan.[12] Commerce issued antidumping duty orders with weighted-average margins of 7.91 percent to 14.10 percent ad valorem for imports from Korea, and 3.79 percent to 11.50 percent ad valorem for imports from Taiwan.[13]

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[10] These imports were confirmed to be out-of-scope polyester staple fiber in the preliminary phase of these investigations. See *Investigation Nos. 701-TA-570-580 and 731-TA-1369-1372 (Preliminary): Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan--Staff Report,* INV-PP-087, July 10, 2017, pp. IV-3-IV-4.

[11] *Certain Polyester Staple Fiber from Korea and Taiwan*, 65 FR 19795, April 12, 2000.

[12] The Commission made a negative determination with respect to imports of low-melt polyester staple fiber from Korea and Taiwan. *Certain Polyester Staple Fiber from Korea and Taiwan,* 65 FR 33576-33577, May 24, 2000.

[13] Polyester staple fiber within the scope of these orders measures "3.3 decitex (3 denier, inclusive) or more in diameter." Fine denier PSF however, as currently defined in Commerce's scope for these investigations, measures less than 3 denier. (Such PSF is in fact specifically excluded from these orders.)

(*continued*...)

On March 31, 2005, the Commission instituted its first five year reviews of the antidumping duty orders on imports of certain PSF from Korea and Taiwan.[14] On August 5, 2005, Commerce determined that revocation of the antidumping duty orders would likely lead to continuation or recurrence of dumping at a weighted-average margin of 7.91 percent ad valorem for Korea, and a range of 3.79 to 11.50 percent ad valorem for Taiwan.[15] On March 23, 2006, the Commission published its determinations in its full 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 foreseeable time.[16] Commerce published its notice of continuation of the antidumping duty orders on imports of certain PSF from Korea and Taiwan on April 3, 2006.[17]

On March 1, 2011, the Commission instituted the second five year reviews of the antidumping duty orders on imports of certain PSF from Korea and Taiwan.[18] On July 1, 2011, Commerce determined that revocation of the antidumping duty orders would likely lead to continuation or recurrence of dumping at a weighted-average margin of 7.91 percent ad valorem for Korea and a range of 3.79 percent to 11.50 percent for Taiwan.[19] On September 19, 2011, the Commission published its determinations in its expedited second 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 foreseeable time.[20] Commerce published its notice of continuation of the antidumping duty orders on imports of certain PSF from Korea and Taiwan on September 30, 2011.[21]

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.[22] 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

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(…*continued*)
Notice of Amended Final Determination of Sales at Less Than Fair Value: Certain Polyester Staple Fiber from the Republic of Korea and Antidumping Duty Orders: Certain Polyester Staple Fiber From the Republic of Korea and Taiwan, 65 FR 33807, May 25, 2000.

[14] *Polyester Staple Fiber from Korea and Taiwan*, 70 FR 16522, March 31, 2005.

[15] *Certain Polyester Staple fiber from the Republic of Korea and Taiwan: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 70 FR 45368, August 5, 2005.

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

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

[18] *Certain Polyester Staple Fiber from Korea and Taiwan*, 76 FR 11268, March 1, 2011.

[19] *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 76 FR 38612, July 1, 2011.

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

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

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

valorem for Korea and 9.90 percent for Taiwan.[23] 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 foreseeable time.[24] Commerce published its notice of continuation of the antidumping duty orders on imports of certain PSF from Korea and Taiwan on February 10, 2017.[25]

China

On June 23, 2006, a petition was filed by DAK Americas, LLC; Nan Ya Plastics Corporation; and Wellman, Inc, alleging that certain polyester staple fiber imported from China was being sold at LTFV.[26] Following Commerce's final affirmative dumping determination, the Commission made an affirmative injury determination with respect to imports from China.[27] Commerce issued an antidumping duty order with weighted-average margins of 3.47 percent to 44.30 percent ad valorem for imports from China on June 1, 2007.[28]

On May 1, 2012, the Commission instituted its first five year review of the antidumping duty order on imports of certain PSF from China.[29] On September 6, 2012, Commerce determined that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at a weighted-average margin of 3.47 percent to 44.30 percent ad valorem for China.[30] On October 12, 2012, the Commission published its determination in its expedited first five-year review that revocation of the antidumping duty order on imports of certain PSF from China would likely lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.[31] Commerce published its notice of continuation of the antidumping duty order on imports of certain PSF from China on October 12, 2012.[32]

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[23] *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.

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

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

[26] *Certain Polyester Staple Fiber from China,* 71 FR 37097, June 29, 2006.

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

[28] Polyester staple fiber within the scope of these orders measures "3.3 decitex (3 denier, inclusive) or more in diameter." Fine denier PSF however, as currently defined in Commerce's scope for these investigations, measures less than 3 denier. (Such PSF is in fact specifically excluded from these orders.) *Antidumping Duty Orders: Certain Polyester Staple Fiber from the People's Republic of China*, 72 FR 30545, June 1, 2007.

[29] *Polyester Staple Fiber from China*, 77 FR 25744, May 1, 2012.

[30] *Certain Polyester Staple fiber from the People's Republic of China: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 77 FR 54898, September 6, 2012.

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

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

On May 1, 2012, the Commission instituted its first five-year review of the antidumping duty order on imports of certain PSF from China.[33] On September 6, 2012, Commerce determined that revocation of the antidumping duty order would likely lead to continuation or recurrence of dumping at a weighted-average margin of 3.47 percent to 44.30 percent ad valorem for China.[34] On October 12, 2012, the Commission published its determination in its expedited first five-year review that revocation of the antidumping duty order on imports of certain PSF from China would likely lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.[35] Commerce published its notice of continuation of the antidumping duty order on imports of certain PSF from China on October 12, 2012.[36]

On September 1, 2017, the Commission instituted its second five-year review of the antidumping duty order on imports of certain PSF from China.[37]

NATURE AND EXTENT OF SUBSIDIES AND SALES AT LTFV

Subsidies

On January 23, 2018, Commerce published notices in the *Federal Register* of its final determinations of countervailable subsidies for producers and exporters of product from China and India.[38] Tables I-1 and I-2 present Commerce's findings of subsidization of fine denier PSF in China and India, respectively.

[33] *Polyester Staple Fiber from China*, 77 FR 25744, May 1, 2012.

[34] *Certain Polyester Staple fiber from the People's Republic of China: Final Results of the Expedited Sunset Reviews of the Antidumping Duty Orders*, 77 FR 54898, September 6, 2012.

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

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

[37] *Certain Polyester Staple Fiber From China; Institution of a Five-Year Review*, 82 FR 41654, September 1, 2017.

[38] *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; *Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber from India: Final Affirmative Determination*, 83 FR 3122, January 23, 2018.

Table I-1
Fine denier PSF: Commerce's final subsidy determination with respect to imports from China

Company	Subsidy rate (*percent*)
Jiangyin Hailun Chemical Fiber Co. Ltd[1]	38.00
Jiangyin Huahong Chemical Fiber Co. Ltd[2]	47.57
All others	42.79

[1] Commerce has found the following companies to be cross-owned with Jiangyin Hailun Chemical Fiber Co. Ltd.: Jiangyin Bolun Chemical Fiber Co., Ltd. (Bolun); Jiangyin Fenghua Synthetic Fiber Co., Ltd. (Fenghua); Jiangsu Hailun Petrochemicals Co., Ltd. (Hailun Petrochemical); Jiangyin Huamei Special Fiber Co., Ltd. (Huamei); Jiangyin Huasheng Polymerization Co., Ltd. (Huasheng); Jiangyin Huaxing Synthetic Co., Ltd. (Huaxing); Jiangying Huayi Polymerization Co., Ltd. (Huayi); Jiangsu Sanfangxiang Group Co., Ltd. (Sanfangxiang Group); Jiangsu Sanfangxiang International Trading Co., Ltd. (Sanfangxiang Trading); Sanhai International Trading PTE Ltd. (Sanhai); Jiangyin Xingsheng Plastic Co., Ltd. (Xingsheng Plastic); Jiangyin Xingtai New Material Co., Ltd. (Xingtai); Jiangsu Xingye Plastic Co., Ltd. (Xingye Plastic); Jiangsu Xingye Polytech Co., Ltd. (Xingye Polytech); Jiangyin Xingyu New Material Co., Ltd. (Xingyu); Jiangyin Xinlun Chemical Fiber Co., Ltd. (Xinlun); Jiangyin Xinyuan Thermal Power Co., Ltd. (Xinyuan Thermal); and Jiangyin Yunlun Chemical Fiber Co., Ltd. (Yunlun).
[2] Commerce has found Jiangsu Huahong Industrial Group Co., Ltd. to be cross-owned with Jiangyin Huahong Chemical Fiber Co. Ltd.; Jiangyin Hongkai Chemical Fiber Co., Ltd. (Hongkai); Jiangyin Huahong International Trade Co., Ltd. (Huahong International Trade); and Jiangyin Huakai Polyesterer Co., Ltd. (Huakai).

Source: 83 FR 3120, January 23, 2018.

Table I-2
Fine denier PSF: Commerce's final subsidy determination with respect to imports from India

Company	Subsidy rate (*percent*)
Bombay Dyeing & Manufacturing Company Limited	13.38
Reliance Industries Limited	27.36
All others	24.80

Source: 83 FR 3122, January 23, 2018.

Sales at LTFV

On January 5, 2018, Commerce issued its preliminary determinations of sales at LTFV with respect to imports from China, India, Korea, and Taiwan.[39] Tables I-3 and I-4 present

[39] *Fine Denier Polyester Staple Fiber From the People's Republic of China: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures*, 83 FR 665, January 5, 2018; *Fine Denier Polyester Staple Fiber From India: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures,* 83 FR 662, January 5, 2018; *Fine Denier Polyester Staple Fiber From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures,* 83 FR 660, January 5, 2018; *Fine Denier 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 668, January 5, 2018.

Commerce's preliminary dumping margins with respect to imports of fine denier PSF from China, India, Korea, and Taiwan.

Table I-3
Fine denier PSF: Commerce's preliminary weighted-average LTFV margins with respect to imports from China

Producer	Exporter	Weighted-average margin (*percent*)
Jiangyin Hailun Chemical Fiber Co. Ltd./Jiangyin Xinlun Chemical Fiber Co., Ltd./ Jiangyin Yunlun Chemical Fiber Co., Ltd./Jiangyin Bolun Chemical Fiber Co., Ltd./ Jiangyin Fenghua Synthetic Fiber Co., Ltd./Jiangyin Huamei Special Fiber Co., Ltd./ Jiangyin Huasheng Polymerization Co., Ltd./Jiangyin Huayi Polymerization Co., Ltd./ Jiangyin Huaxing Synthetic Co., Ltd./Jiangyin Xingsheng Plastic Co., Ltd.	Jianyin Hailun Chemical Fiber Co. Ltd.	181.46
Jiangyin Huahong Chemical Fiber Co., Ltd./Jiangyin Huakai Polyester Co., Ltd./ Jiangyin Hongkai Chemical Fiber Co., Ltd.	Jiangyin Huahong Chemical Fiber Co., Ltd.	63.26
Hangzhou Best Chemical Fiber Co., Ltd	Hangzhou Best Chemical Fiber Co., Ltd.	122.36
Cixi Jiangnan Chemical Fiber Co. Ltd	Cixi Jiangnan Chemical Fiber Co. Ltd	122.36
Jiangsu Xinsu Chemical Fiber Co., Ltd	Jiangsu Xinsu Chemical Fiber Co., Ltd	122.36
Jiangyin Jinyan Chemical Fiber Co., Ltd./Jiangsui Xiang He Tai Fiber Technology Co., Ltd.	Jiangyin Jinyan Chemical Fiber Co., Ltd.	122.36
Jiangsu Hengze Composite Materials Technology Co., Ltd./Chuzhou Prosperity Enviromental Protection Color Fiber Co., Ltd./Jiangsu Xiang He Tai Fiber Technology Co., Ltd./Jiangyin Hengfeng Chemical Fiber Co., Ltd./Jiangyin Shunze Chemical Fiber Co., Ltd.	Jiangyin Yangxi International Trade Co., Ltd.	122.36
Zhejiang Jinfuchun Industrial Co., Ltd	Zhejiang Jinfuchun Industrial Co., Ltd	122.36
Nanyang Textile Co., Ltd	Nanyang Textile Co., Ltd	122.36
Ningbo Dafa Chemical Fiber Co. Ltd	Ningbo Dafa Chemical Fiber Co. Ltd	122.36

Table continued on next page.

Table I-3--Continued
Fine denier PSF: Commerce's preliminary weighted-average LTFV margins with respect to imports from China

Producer	Exporter	Weighted-average margin (*percent*)
Zhaoqing Tifo New Fibre Co., Ltd	Zhaoqing Tifo New Fibre Co., Ltd.	122.36
Jiangyin Yueda Chemical Fiber Limited Company/Hangzhou BenMa Chemical and Spinning Company Ltd./Yizheng Chemical Fiber Limited Liability Company	Unifi Textiles (Suzhou) Co., Ltd.	122.36
Yuyao Dafa Chemical Fiber Co., Ltd	Yuyao Dafa Chemical Fiber Co., Ltd	122.36
Jiangyin Jindun Chemical Fiber Co., Ltd	Zhangjiagang City Hongtuo Chemical Fiber Co., Ltd.	122.36
Zhejiang Huashun Technology Co., Ltd	Zhejiang Linan Foreign Trade Co., Ltd.	122.36
Suzhou Zhengbang Chemical Fiber Co., Ltd	Suzhou Zhengbang Chemical Fiber Co., Ltd	122.36
PRC-Wide Entity		181.46

Source: 83 FR 665, January 5, 2018.

Table I-4
Fine denier PSF: Commerce's preliminary weighted-average LTFV margins with respect to imports from India, Korea, and Taiwan

Exporter/producer	Estimated weighted-average dumping margin (*percent*)
India	
Reliance Industries Limited	2.66
Bombay Dyeing & Manufacturing Company Limited	21.43
All others	2.66
Korea	
Toray Chemical Korea Inc.	*De minimis*
Huvis Corporation	45.23
Down Nara Co., Ltd.	45.23
All others	30.15
Taiwan	
Tainan Spinning Co., Ltd.	0.00
Far Eastern Textile Ltd. (AKA Far Eastern New Century Corporation)	48.86
All Others	24.43

Source: 83 FR 660, January 5, 2018; 83 FR 662, January 5, 2018; 83 FR 668, January 5, 2018.

THE SUBJECT MERCHANDISE

Commerce's scope

In the current proceeding, Commerce has defined the scope as follows:[40]

> *Fine denier polyester staple fiber (fine denier PSF), not carded or combed, measuring less than 3.3 decitex (3 denier) in diameter. The scope covers all fine denier PSF, whether coated or uncoated. The following products are excluded from the scope:*
>
> *(1) PSF equal to or greater than 3.3 decitex (more than 3 denier, inclusive) currently classifiable under Harmonized Tariff Schedule of the United States (HTSUS) subheadings 5503.20.0045 and 5503.20.0065.*
>
> *(2) Low-melt PSF defined as a bi-component polyester fiber having a polyester fiber component that melts at a lower temperature than the other polyester fiber component, which is currently classified under HTSUS subheading 5503.20.0015.*
>
> *Fine denier PSF is classifiable under the HTSUS subheading 5503.20.0025. Although the HTSUS subheadings are provided for convenience and customs purposes, the written description of the scope of 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 imported under statistical reporting number 5503.20.0025 of the Harmonized Tariff Schedule of the United States ("HTS"). The column 1-general rate of duty for subheading 5503.20.00 is 4.3 percent ad valorem, and applies to products of all respondent countries; originating goods of Korea are eligible for duty-free entry under the United States-Korea Free Trade Agreement. 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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[40] *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; *Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber from India: Final Affirmative Determination*, 83 FR 3122, January 23, 2018.

THE PRODUCT

Description and applications

Fine denier PSF is a manmade fiber, similar in appearance to cotton or wool. The distinguishing physical characteristics of fine denier polyester staple fiber include the denier count and the length of the fiber. Other variable characteristics of fine denier PSF may be the finish ("luster") applied to the fiber, and the "crimp" of the fiber, which impacts the fiber's tenacity, or strength.

Fine denier PSF is used for knit and/or woven, and nonwoven applications. Knit or woven applications include the production of textiles, such as clothing and bed linens. Nonwoven applications include the production of household and hygiene products such as baby wipes, diapers, or coffee filters. Knit or woven applications tend to require higher tenacity than nonwoven applications, and thus require more crimping. Fine denier PSF with a silicone finish or coating may also be used in certain fill applications, such as pillows.

Fine denier PSF is converted either to yarn for knitting or weaving into fabric, or to a nonwoven product (through bonding by chemical or mechanical or heat process, or solvent), prior to inclusion in the end product. It can also be used as fiberfill without conversion. Once converted, fine denier PSF-produced textiles are known for soft surface texture, resistance to stretching and shrinking, wrinkle-, abrasion-, and moisture-resistance, dyeability, and washability. Nonwoven fabrics made from fine denier PSF provide specific functions such as stretch, softness, fire-resistance, washability, cushioning, thermal and acoustic filtration, and sterility. Fine denier PSF used in fill applications provides softness and loft similar to down.[41]

Fine denier PSF can be "mechanically crimped," which involves adding a two- or three-dimensional saw-tooth sine-curve, or spiral shape to the fibers, normally at the rate of five to fifteen crimps per inch. Crimping simulates the natural folds in cotton to aid in processing and adds strength to the finished textile product.

The subject merchandise is sold cut-to-length, which differentiates it from filament—a long, continuous strand of fiber. After extrusion and stretching, fine denier polyester staple fiber is cut in lengths, generally of five inches (125 mm) or less.[42] Some PSF known as "short cut" PSF is cut to lengths of 10 mm or below.[43] Finishes are also sprayed onto the fiber during the manufacturing process, and can include a silicone or a "slick" finish (otherwise known as "siliconized PSF"), an oil finish, or other finishes, depending on the end-use application. Fine denier PSF can also be black or non-white in color. Black and colored fine denier PSF is combined with cotton by yarn spinners to make heather yarn, which can be used in colored apparel, as well as in non-woven applications.[44] Fine denier PSF is sold to end users in bales. The bales are then compressed to pack product as densely as possible for efficient shipment.

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[41] Petition, p. 18; and Conference transcript, p. 109 (Kunik).

[42] Petition, p. 6.

[43] See Hearing transcript, pp.72-73 (Sparkman, Casstevens); and Fibertex Corporation and Consolidated Fibers, Inc. postconference brief, p. 5.

[44] Hearing transcript, p. 34 (Casstevens).

The vast majority of end users have spinning mills that use the subject merchandise in the production of textiles.

Manufacturing processes[45]

The manufacture of fine denier PSF may be divided into two discrete stages. The first stage of the process is the polymer formation. The formation of the polymer PSF begins by reacting monoethylene glycol (MEG) with either purified terephthalic acid (PTA) or its methyl ester in the presence of an antimony catalyst. The reaction is carried out at a high temperature and in a vacuum to achieve the high molecular weights needed to form useful fiber. The mix is then sent through an esterification process before it is polymerized. Esterification is the chemical process of combining an acid with an alcohol to form an ester. Fine denier PSF produced from the raw materials MEG and PTA is referred to as virgin PSF. Virgin PSF is characterized by the purity of the whiteness of the fiber.

Polyester staple fiber may also be produced from recycled materials (polyester chips), and is called post-consumer recycled fine denier PSF ("PCR PSF" or "PCR"). In the production of fine denier PSF, the recycled materials are generally post-consumer recyclables such as polyethylene terephthalate ("PET") flakes from recycled plastic bottles. If recycled materials are used, the first step of the production process is to melt the chips to a liquid state prior to the second stage of the production process outlined below.

The second stage of the manufacturing process is the fiber formation, including extruding, stretching, cutting, and baling. These steps are the same whether the polymers are formed from virgin raw materials or recycled PET flake. After polymerization, the solid, molten plastic, which has a consistency similar to cold honey, must be heated and liquefied before it can be extruded. Once heated, 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. After extrusion, the semi-solid fibers are blasted with cold air to form solid fibers. This process is known as quenching.

During the second stage of production, the solid fiber is coated for the first time with an oil finish, usually only for internal use to facilitate further processing. The spun tow,[46] as it is now known, is collected into a can to be stretched. 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 may be sent through a crimping machine, which gives the fiber tow a two-dimensional,

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[45] Unless otherwise stated, information in this section is based on How Products Are Made, "Polyester" http://www.madehow.com/Volume-2/Polyester.html, accessed June 23, 2017; Cissco Machinery Co., "Polyester Staple Fiber Production Process", Cissco Machinery Co., https://prezi.com/19n7fxqvjxzd/polyester-staple-fiber-production-process-cissco-machinery-co/, accessed June 23, 2017; and Auburn University, "Polyester Manufacturing", http://schwartz.eng.auburn.edu/polyester/manufacturing.html, accessed June 23, 2017.

[46] Tow is large groups of continuous manmade fiber filaments without definite twist collected in loose, rope-like form. Tow is the form that most manmade fiber takes before being cut into staple.

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 fiber tow is crimped and heat-set or directly after, depending on the preference of the manufacturer. Finally, the fiber tow is cut to length and baled.[47]

DOMESTIC LIKE PRODUCT ISSUES

In the preliminary phase of these investigations, the petitioners proposed that the Commission define the domestic like product as fine denier PSF, which is co-extensive with the scope of the investigations as defined by Commerce.[48] Respondents American Textile Company Inc. ("American Textile"), David C. Poole Company, Inc. ("David C. Poole"), Suominen Corporation ("Suominen"), Green Bay Nonwovens, Inc. ("Green Bay"), and Hollander Sleep Products, LLC ("Hollander") proposed that the Commission should consider post-consumer recycled fine denier PSF ("PCR fine denier PSF" or "PCR PSF") as a separate like product from virgin PSF.[49] Respondents Frontier and Gildan Yarns proposed that the Commission should consider black PSF as a separate like product.[50] Respondents Fibertex Corporation ("Fibertex") and Consolidated Fibers proposed that the Commission should consider short cut PSF and siliconized PSF as separate like products.[51] After assessing these four proposed products, the Commission determined to define one like product coextensive with Commerce's scope definition.[52]

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[47] Petition, p. 9.

[48] Petitioners' postconference brief, p. 5.

[49] Respondents David C. Poole, Suominen, Green Bay, and Hollander's postconference brief, p. 13.

[50] Respondent Frontier's postconference brief, p. 1.

[51] Respondents Fibertex and Consolidated Fibers' postconference brief, p. 2.

[52] Regarding PCR PSF, the Commission stated, "PCR PSF has product qualities essentially indistinguishable from virgin fine denier PSF, is interchangeable with it, and has the same uses…based on these similarities and limited differences, we do not define PCR fine denier PSF as a separate domestic like product."

Regarding short cut PSF, the Commission stated, "The record indicates that short cut PSF is a type of fine denier PSF that has shorter fibers than other fine denier PSF. The record also indicates that it has some overlap in uses with other fine denier PSF products. Short cut PSF also has the same production process as other fine denier PSF. In light of this record and that fact that the PSF within the scope has a range of physical characteristics…we do not define short cut PSF to be a distinct like product."

Regarding siliconized PSF, the Commission stated, "Siliconized PSF is similar to other fine denier PSF products with respect to physical characteristics and uses, producer perceptions, manufacturing facilities, production processes, and employees. Given that the record indicates that it shares these similarities with other fine denier PSF products, we do not define siliconized PSF as a separate domestic like product."

Regarding black PSF, the Commission stated, "Given the limited distinctions between black PSF and other fine denier PSF products, we do not define black PSF as a separate domestic like product."

See *Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan, Inv. Nos. 701-TA-579-580 and 731-TA-1369-1372 (Preliminary),* USITC Publication 4709, July 2017, pp. 4-14.

In the final phase of these investigations, Petitioners argued that the Commission "should continue to find that all fine denier is a single like product and should reject arguments that PCR fine denier, short-cut fine denier, or black/colored fine denier are discrete like products."[53] Chinese Respondents noted that they "recognize" the Commission's preliminary finding that all fine denier PSF "…encompassed within the class or kind of merchandise subject to investigation constitutes a single domestic like product…" and make no further argument concerning domestic like product.[54] Respondent party Reliance argues for five separate like products (specialty short-cut PSF; black dyed PSF; siliconized PSF; PCR PSF; and all other fine virgin denier PSF), and focuses specifically on arguing for short cut PSF, black PSF, and "siliconized fiber-fill" PSF via comparison with Reliance products.[55]

[53] Petitioners' prehearing brief, p. 5.

[54] China Chamber of Commerce for Import and Export of Textile and Apparel; Jiangsu Huaxicun Co., Ltd.; Jiangyin Yangxi International Trade Co., Ltd.; Jiangyin Hailun Chemical Fiber Co., Limited; and Jiangyin Huahong Chemical Fiber Co., Limited ("Chinese respondents") prehearing brief, p. 5.

[55] In their posthearing brief, Petitioners argues for rejecting Reliance's arguments because they are predicated on foreign production operations, not domestically-produced product. See Petitioners' posthearing brief, p. 3.

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

U.S. MARKET CHARACTERISTICS

Fine denier PSF is used primarily in woven, knit, or spun applications for apparel such as socks, hosiery, and other worn fabrics and textiles. It is also used in nonwoven applications, including wipes (baby wipes, hygiene products, and household cleaning wipes), filters (water filters, face masks, and air filters), and as fiberfill for pillows and cushions, bedding, furniture, and insulation.[1] Fine denier PSF differs from PSF of a larger diameter (greater than 3 denier) and from low-melt PSF in terms of end-use applications and, particularly for low-melt PSF, production processes.[2] Fine denier PSF is sold primarily to end users, which process the fibers into woven, knitted, or nonwoven forms for ultimate inclusion in downstream products. U.S. producers ship a majority of their product to end users for woven applications, whereas most imported product is shipped to end users for nonwoven applications.

Apparent U.S. consumption of fine denier PSF decreased irregularly from 2014 to 2016. Overall, apparent U.S. consumption was *** percent lower in 2016 than in 2014. Apparent U.S. consumption in January-September 2017 was *** percent higher than in January-September 2016.

U.S. PURCHASERS

The Commission received 37 usable questionnaire responses from firms that have purchased fine denier PSF since January 2014.[3] Seventeen responding purchasers are end users of fine denier PSF for non-woven applications, 6 are end users for woven applications, 3 are distributors, and 11 identified themselves as "other." Among these other end users, 5 identified themselves as yarn spinners and/or dyers, 3 identified themselves as manufacturers of pillows and/or other bedding products, 1 identified itself as a maker of apparel sewing thread, 1 identified itself as a manufacturer of filtration media, and 1 stated that it sold "fiber for licensed

[1] Petitioners estimate that most fine denier PSF (approximately *** percent) is used for the production of knit or woven textiles, and roughly *** percent is used in nonwoven products. Petitioners' postconference brief, Responses to staff questions, p. 11, Exhibit 9.

[2] PSF measuring 3 denier or greater in diameter is primarily used as stuffing or batting in sleeping bags, mattresses, ski jackets, comforters, cushions, pillows, and furniture, and can also be used to produce carpeting. Low-melt fiber is a bi-component fiber that has an outer, non-polyester sheath that melts at a significantly lower temperature than the inner polyester core, and is also used as batting. Petition, p. 13; Conference transcript, p. 35 (Cannon).

[3] Of the 37 responding purchasers, 31 purchased the domestic fine denier PSF, 24 purchased imports of the subject merchandise from China, 11 purchased imports of the subject merchandise from India, 12 purchased imports of the subject merchandise from Korea, 6 purchased imports of the subject merchandise from Taiwan, 8 purchased imports of fine denier PSF from other sources, and 2 purchased imports from unknown sources.

product." In general, responding U.S. purchasers were located in all regions of the United States except the Central Southwest,[4] but most (22 firms) were located in the Southeast.[5]

The responding purchasers represented firms in a variety of domestic industries, including textiles and apparel, home furnishings (pillows and bedding), personal hygiene, automotive, and filtration for industrial and commercial applications. According to questionnaire data, the largest purchasers and/or importers for internal use of fine denier PSF in 2016 were ***. These firms' purchases/imports for internal use accounted for *** percent and *** percent of total imports, respectively, in 2016.

CHANNELS OF DISTRIBUTION

The vast majority of fine denier PSF from both U.S. producers and importers is sold to end users (table II-1). While U.S. producers shipped most of their product to end users for woven applications, importers of subject product shipped most of their fine denier PSF from subject sources to end users for nonwoven applications.

Table II-1
Fine denier PSF: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2014-16, January-September 2016, and January-September 2017

* * * * * * *

GEOGRAPHIC DISTRIBUTION

All five U.S. producers reported selling fine denier PSF to the Northeast, Midwest, Southeast, and Central Southwest regions, while two firms (***) reported also selling to the Mountain and Pacific Coast regions (table II-2). Importers also reported selling fine denier PSF from most subject sources to all regions, though most sales were concentrated in the Southeast region for all four subject sources. For U.S. producers, 6.8 percent of sales were within 100 miles of their production facilities, 90.2 percent were between 101 and 1,000 miles, and 2.9 percent were over 1,000 miles. Importers sold 37.3 percent within 100 miles of their U.S. points of shipment, 54.5 percent between 101 and 1,000 miles, and 8.2 percent over 1,000 miles.

[4] The Central Southwest region includes Arkansas, Louisiana, Oklahoma, and Texas.

[5] The Southeast region includes Alabama, Delaware, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, and West Virginia, and the District of Columbia. Twelve firms alone were from the state of North Carolina.

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

Region	U.S. producers	Importers: China	Importers: India	Importers: Korea	Importers: Taiwan	Subject importers Total
Northeast	5	5	3	4	2	9
Midwest	5	6	2	5	---	9
Southeast	5	12	6	8	3	15
Central Southwest	5	6	2	3	1	9
Mountain	2	3	1	4	---	5
Pacific Coast	2	5	2	4	1	9
Other[1]	---	1	1	1	---	2
All regions (except Other)	2	3	1	3	---	5
Reporting firms	5	15	6	9	3	17

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

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

SUPPLY AND DEMAND CONSIDERATIONS

U.S. supply

Domestic production

Based on available information, U.S. producers of fine denier PSF have the ability to respond to changes in demand with moderate-to-large changes in the quantity of shipments of U.S.-produced fine denier PSF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are the availability of inventories, the ability to shift production to or from alternate products, some unused capacity, and some ability to shift shipments to or from alternate markets.

Industry capacity

Domestic capacity utilization decreased from *** percent in 2014 to *** percent in 2016, driven by a decrease in total production.[6] While total production capacity increased by *** percent between 2014 and 2016 ***,[7] total domestic production decreased by an average of *** percent.[8] During January-September 2017, domestic capacity utilization was ***

[6] Petitioners argue that high level of capacity utilization is necessary to remain profitable due to the high costs of ceasing and resuming production. Hearing transcript, p. 19 (Sparkman).

[7] ***.

[8] ***.

percent. This level of capacity utilization suggests that U.S. producers may have a moderate-to-large ability to increase production of fine denier PSF in response to an increase in prices.

Alternative markets

U.S. producers' exports as a percentage of total shipments increased from *** percent in 2014 to *** percent in 2016, from a total of *** to ***. During January-September 2017, export shipments were *** percent of total shipments. U.S. producers identified their primary export markets as Mexico (***) and Canada (***). *** also reported exporting to ***. These export levels indicate that U.S. producers may have some ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

U.S. producers' inventories of fine denier PSF increased *** 2014-2016. Relative to total shipments, U.S. producers' inventory levels increased from *** percent in 2014 to *** percent in 2016. During January-September 2017, inventory levels were *** percent. These inventory levels suggest that U.S. producers may have some ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

Four of the five responding U.S. producers stated that they could switch production from fine denier PSF to other products. *** on the same equipment. In general, the factors limiting these U.S. producers' ability to shift production were ***.

Subject imports[9]

Table II-3 provides a summary of the supply of fine denier PSF from reporting subject countries; additional data are provided in Part VII. Reported production capacity in China decreased between 2014 and 2016, while reported capacity in India increased, and reported capacity in Taiwan ***.[10] Reported capacity utilization increased for China and India during 2014-16, ***. Reported capacity utilization for each of these countries exceeded *** percent during 2014-16. Total reported inventories for each of these countries were *** percent or less of their total shipments during 2014-16. One of four responding producers from China, all three responding producers from India, *** reported being able to shift production from fine denier

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

[10] No Korean producer/exporter responded to the Commission's foreign producer questionnaire, so no primary data on the industry in Korea is reported in this section.

PSF to other types or sizes of PSF. One firm from India also reported being able to produce polyester chips on the same equipment.

All reporting subject foreign producers' shipments to non-U.S. markets represented *** percent or more of their total shipments in 2016, with a majority destined for the subject countries' home markets.[11] Most responding foreign producers reported their primary export markets as Europe, Southeast Asia, and/or South America.

Table II-3
Fine denier PSF: Foreign industry factors that affect ability to increase shipments to the U.S. market

	Capacity (*thousands of pounds*)		Capacity utilization (*percent*)		Ratio of inventories to total shipments (*percent*)		Ability to shift to alternate product (number of firms)	Shipments to all non-U.S. markets, 2016 (*percent*)	
Country	2014	2016	2014	2016	2014	2016		Home market shipments	Third country export markets
China	***	***	***	***	***	***	1	***	***
India	***	***	***	***	***	***	3	***	***
Korea	---	---	---	---	---	---	---	---	---
Taiwan	***	***	***	***	***	***	***	***	***

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

Nonsubject imports

Nonsubject imports accounted for *** percent of all U.S. imports of fine denier PSF in 2016.[12] The largest sources of nonsubject imports during 2016 were Germany, Mexico, and ***. Imports from Germany and Mexico accounted for *** percent and *** percent of all imports, respectively, and *** percent and *** of nonsubject imports, respectively, in 2016.

Supply constraints

U.S. producers and importers were asked if they had refused, declined, or been unable to supply fine denier PSF since January 2014. Only one U.S. producer reported doing so. DAK reported that an electrical outage at its Cooper River (Charleston), South Carolina facility limited production *** during November-December 2015, delaying full production for 29 days.[13] ***. DAK reported that it was able to supply the majority of its customers from

[11] Chinese respondents in particular described Chinese home market demand for fine denier PSF as strong and the main focus of Chinese producers. Chinese respondents' posthearing brief, p. 13.

[12] See table IV-3.

[13] Conference transcript, p. 67 (Ruday).

inventory, ***.[14] DAK also reported experiencing a shutdown of a plant in Cape Fear, North Carolina that produced PTA (one of the primary raw material inputs to PSF), PET resin, and PSF in 2013.[15] DAK testified that the volume of PSF produced by its Cape Fear facility was easily shifted to its Cooper River facility, however, and that the Cape Fear shutdown had no impact on its overall supply.[16]

Among importers, 3 of 26 firms reported refusing, declining, or being unable to supply fine denier PSF since January 2014. *** reported that an increase in demand resulted in short supply until the spring of 2015; *** reported that it lost 1 million pounds of yarn production due to a plant shutdown in December 2015 followed by an extended period of rationing by DAK; and *** reported that DAK and Nan Ya's fiber shortages and longer lead times from Asia led to an inability to supply some of its customers.

Purchasers were also asked whether domestic suppliers and/or suppliers of imported product firm had refused, declined, or been unable to supply them with fine denier PSF since January 2014. Regarding supply from domestic producers, 9 of 36 purchasers reported being placed on controlled order entry (27 reported that they were not); 8 reported that domestic suppliers declined orders (28 reported that they did not); 6 reported that domestic suppliers accepted orders but delivered less than promised and/or contracted (30 reported that they did not); 8 reported that domestic suppliers had been unable to provide timely order completion or had extended delivery times (28 reported that they were/did not); and 8 reported that domestic suppliers had been unable or unwilling to provide specific types of product/product specifications (28 reported that they were not unable or unwilling). Regarding the supply from importers, two purchasers reported that importers had been unable to provide timely order completion or had extended delivery times; all other responding purchasers (33 firms) responded in the negative for all the other questions related to importer supply shortages.

Purchasers were also asked if the availability of supply among domestic producers, importers of subject product, and importers of nonsubject product had changed since January 2014. Most indicated that the availability of supply had not changed. Fifteen of 35 purchasers reported that the availability of supply from domestic producers had changed, with the majority of them stating that supply from domestic producers was constrained, or that demand exceeded supply. Eight of 32 purchasers also stated that the availability of fine denier PSF from subject countries had changed, with most firms stating that the supply of subject imports increased. Only 2 of 26 purchasers stated that the availability of fine denier PSF from nonsubject countries had changed.

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[14] Petitioners' postconference brief, Responses to staff questions, p. 13, Exhibit 9; Petitioners' prehearing brief, p. 20; Hearing transcript, p. 24 (Ruday).

[15] Conference transcript, p. 66 (Ruday). See also "DAK Americas closing PTA, PET plant in North Carolina," ICIS News, https://www.icis.com/resources/news/2013/06/19/9680171/dak-americas-closing-pta-pet-plant-in-north-carolina/, retrieved December 20, 2017.

[16] Hearing transcript, pp. 23, 79 (Ruday), and petitioners' posthearing brief, p. 11. Chinese respondents argue that imports by DAK suggest that it could not meet demand with its Cooper River facility. Chinese respondents' posthearing brief, pp. 6-7.

Additionally, purchasers were asked if the closure of DAK's Cape Fear facility affected their purchasing decisions. Twenty-six purchasers indicated that it did not, while eleven reported that it did; *** stated that the closure resulted in the Cooper River facility being DAK's single source of supply; *** stated that the closure made it stop using one particular grade; *** reported that the closure reduced DAK's overall capacity and left DAK unable to supply the firm; *** stated that the closure motivated the firm to conduct a strategic review of its supply-chain disruption exposure; *** reported that the closure reduced capacity and drove up prices; *** reported that the closure led it to buy foreign fiber for a period until DAK could increase capacity; *** stated that the closure led it to purchase either from DAK's other facility or from other suppliers; *** reported that it had to find a different fiber; and *** stated that the closure of the Cape Fear facility as well as the internal production problems at the Cooper River facility resulted in reduced supply. *** added that DAK changed over its Cooper River facility from supporting nonwoven products to textile (woven) products, which reduced the available domestic supply of fine denier PSF for nonwoven end uses.

Finally, U.S. producers and importers were asked if they were able to provide the following specialty products, as well as to list their end use application and demand trends since 2014: antimony free PSF, cobalt free PSF, cationic PSF, and atmospherically dyeable PSF.[17] Among U.S. producers, 4 of 5 responding firms reported that they are able to provide antimony free PSF, and 3 each reported that they are able to provide cobalt free PSF, cationic PSF, and atmospherically dyeable PSF. Among importers, 6 firms reported that they are able to provide antimony free PSF (18 reported that they are not), 1 reported that it is able to provide cobalt free PSF (22 are not), 5 are able to provide cationic PSF (19 are not), and 3 are able to provide atmospherically dyeable PSF (20 are not). In terms of end uses, antimony free PSF is reportedly used in hygiene products (such as in diapers), upholstery, and institutional fabrics (such as panel cloth). *** reported that demand for antimony free PSF is anticipated to grow as more U.S. states and some countries' federal regulations require certain products to be antimony free. No firm reported any end uses for cobalt free PSF, though *** again reported that demand for cobalt free PSF is anticipated to grow as more U.S. states and countries call for certain products to be free of cobalt. Cationic PSF is reportedly used in apparel, and is sometimes blended with wool. *** reported that there does not appear to be any demand growth projected for cationic PSF, while *** reported that demand is growing. Atmospherically dyeable PSF is reportedly used in textiles and apparel, and is reportedly blended with wool. ***

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[17] Antimony is a natural metalloid found mainly as the sulfide mineral stibnite (Sb_2S_3). See *Wikipedia*, Antimony, https://en.wikipedia.org/wiki/Antimony. One application of antimony is a stabilizer and catalyst for the production of polyethylene terephthalate, which is the most common thermoplastic polymer resin of the polyester family. See *Wikipedia*, Polyethylene terephthalate, https://en.wikipedia.org/wiki/Polyethylene_terephthalate, accessed December 20, 2017.

Cobalt is also a natural metalloid. Cobalt acetate is used as a catalyst in the conversion of xylene to terephthalic acid, the precursor to the bulk polymer polyethylene terephthalate. See https://en.wikipedia.org/wiki/Cobalt, accessed December 20, 2017.

Cationic PSF refers to product that has undergone a dying process through a cationic initiation and reaction.

reported that the demand for atmospherically dyeable PSF is very small, and *** reported that there does not appear to be any growth in demand projected while *** reported that demand is growing.

New suppliers

Eight of 37 purchasers indicated that new suppliers entered the U.S. market since January 1, 2014. Purchasers named the following firms as new market entrants: Birla, CS Fibers, Fiber Industries, Hua Hong, Innovative Fibers, Polytech Fibers, David Poole, SFX, Sun Fibers, Suzhou Zhengbang Chemical Fiber Co., US Fibers, and Zhejiang Linan Foreign Trade Co.

U.S. demand

Based on available information, the overall demand for fine denier PSF is likely to experience moderate changes in response to changes in price. The main contributing factors to this degree of responsiveness are the limited range and cost effectiveness of substitute products and the wide range of cost shares in most of its end-use applications.

End uses and cost share

U.S. demand for fine denier PSF depends on the demand for U.S.-produced downstream products. Fine denier PSF is used in woven, knit, or spun applications as well as in nonwoven applications. Reported end uses for fine denier PSF include apparel (such as socks, hosiery, liners, and other worn fabrics and textiles), wipes (such as baby wipes, hygiene products, and household cleaning wipes), filters and filter papers (such as water filters, face masks, air filters, and needlepunch filtration), fiberfill and batting (for cushions, pillows, bedding, furniture, and automotive interiors), medical gowns and drapes, sterilization wraps, apparel sewing threads, battery separators, nonwoven fabrics, mop yarn, cluster fiber, spunlace, and insulation.

Fine denier PSF accounts for a very broad range of the share of the cost of the end-use products in which it is used, since most of the time it is blended or used in combination with other fabrics and materials. The broadest range reported was for apparel and textile applications, which ranged from 6 to almost 100 percent, depending on the content of fine denier PSF versus other fabrics. The cost share of fine denier PSF used in most fiberfill applications, such pillows, bedding, automotive interiors and furniture, ranged from 8 to almost 100 percent. In nonwoven applications such as wipes and hygiene products, the reported range tended to be higher; from 28 to almost 100 percent. In industrial applications such as filters and insulation, most cost shares ranged from 15 to 60 percent. Other reported end uses had the following cost shares: other industrial and consumer fabrics, 12-85 percent; mop yarn/heads, 12-65 percent; medical gowns and drapes, 14-50 percent; cluster fiber, 20 percent; wipes 80 percent; geotextiles, 50 percent; other nonwoven applications, 10 percent; apparel sewing thread, 4-6 percent; and battery separators, 5 percent.

Business cycles

All five U.S. producers and most importers and purchasers indicated that the market was not subject to business cycles or distinct conditions of competition. Six importers and 6 purchasers reported that the fine denier PSF market was subject to business cycles, and 4 importers and 3 purchasers reported that it was subject to distinct conditions of competition.

Regarding business cycles, purchaser *** reported that demand follows retail sales cycles; purchasers *** reported that demand is seasonal; importers *** reported that the market experiences slower summer and holiday seasons; and importer *** reported that in the textile market there is more demand for t-shirts in the summer and fleece material in the winter. Purchaser *** added that there is more demand in the winter months because fine denier PSF can be used as a substitute for down and feather products.

Regarding distinct conditions of competition, purchaser *** reported that the market is dependent on market prices and availability of regional feedstocks of MEG and PTA; importer *** reported that there is growing demand for certified, traceable, high-quality recycled PSF; and importer *** reported that DAK, Nan Ya, and Auriga's decisions to specialize in different market fibers (DAK in knit fibers, Nan Ya in woven fibers, and Auriga in nonwoven fibers) has hurt competition. Purchaser *** also reported that there has been a trend in the automotive industry away from white fiber towards black fiber, and purchaser *** reported that consumer fashion has been trending more towards polyester content since 2014.

Demand trends

Most firms (the majority of responding producers, importers, and purchasers) reported an increase in U.S. demand for fine denier PSF since January 1, 2014 (table II-4).

Table II-4
Fine denier 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	3	---	1	1
Importers	18	3	2	3
Purchasers	18	6	7	4
Demand outside the United States				
U.S. producers	2	---	1	1
Importers	13	---	---	4
Purchasers	13	5	2	4

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

In explaining demand increases, firms reported factors associated with general economic trends (such as an increase in GDP and manufacturing), an increase in the use of PSF as a substitute in knit products, lower prices of fine denier PSF compared to substitutes, and an increase in demand for downstream products. In explaining the decrease in demand, firms cited increased global competition in general and increased competition from imported finished goods. Five of 13 responding importers and half (18 of 36) purchasers also reported an increase

in demand for the final products that incorporate fine denier PSF, while 3 importers and 7 purchasers reported that demand for these products had fluctuated, 3 importers and 4 purchasers reported that it did not change, and 2 importers and 7 purchasers reported that it decreased. As to whether any change in demand for the final products had any effect on firms' demand for fine denier PSF, the large majority of responding firms (9 of 12 importers and 29 of 36 purchasers) reported that it did.

While most firms' responses suggest an increase in demand, apparent consumption of fine denier PSF since 2014 decreased. In explaining this discrepancy, some firms testified that while overall demand for fine denier PSF had decreased (primarily in the textile market), demand in certain smaller segments has increased (such as in the nonwoven market).[18]

Substitute products

All five responding U.S. producers and a majority of importers (21 of 26) and purchasers (26 of 31) reported that there are no substitutes for fine denier PSF. Five importers and 5 purchasers did report substitutes that varied depending on end use. *** reported that viscose is a substitute for fine denier PSF in wipes; purchaser/importer *** reported that cotton fiber is a substitute in woven apparel fabric; importer *** reported that non-branded recycled PSF, cotton staple, and rayon staple are substitutes in apparel and socks; purchaser/importer *** reported that other types of PSF are substitutes in pillows; and importer *** reported that feathers are substitutes in bedding and cotton is a substitute in spun yarn. Among purchasers, *** reported that propylene and polypropylene are substitutes in filter media; *** reported that natural fill and non-fine denier PSF are substitutes in pillows and cushions; *** reported that modal[19] and Tencel (lyocell)[20] are substitutes in yarn, and textured polyester is a substitute in fabric; *** reported that rayon, lyocell, and polypropylene fiber are substitutes in spunlace; and *** reported that viscose fiber, larger denier fibers, and other synthetic fibers can be substitutes, albeit with some technical limitations.

A number of these firms indicated that changes in the price of the substitute affected the price of fine denier PSF. *** stated that polyester is less expensive than rayon, lyocell, and polypropylene fiber. *** reported that the price of fine denier PSF generally moves in step with

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[18] Hearing transcript, pp. 49-50 (Sparkman), 146-148, 156 (Nolan, Markshak). Counsel for Petitioners suggested that some firms' responses may have been specific to their individual experiences, and not representative of the aggregate. Hearing transcript, pp. 50-51 (Cannon, Rosenthal).

[19] Modal is "a type of rayon, a semi-synthetic cellulose fiber made by spinning reconstituted cellulose, in this case often from beech trees. Modal is used alone or with other fibers (often cotton or spandex) in household items such as pajamas, towels, bathrobes, underwear and bedsheets." *** email message to USITC staff, December 6, 2017, quoting *Wikipedia,* "Modal (textile)," https://en.wikipedia.org/wiki/Modal_(textile), retrieved December 7, 2017.

[20] "… Tencel {a brand name for lyocell} is a sustainable fabric, regenerated from wood cellulose. It is similar in hand to rayon and bamboo, both regenerated fabrics." *** email message to USITC staff, December 6, 2017, quoting *Ecomall,* "What is tencel?," http://www.ecomall.com/greenshopping/everydaychic.htm, retrieved December 7, 2017.

the prices of substitute types of PSF since they are made from the same raw materials and by the same producers.

In terms of using cotton as a substitute, *** reported that there is a direct correlation between cotton prices and fine denier PSF prices, and *** suggested that when cotton prices change, yarn spinners will increase or decrease the content of PSF in spun yarn. *** also stated that price is one factor that affects the substitutability between cotton and fine denier PSF. *** added that cotton and polyester can be substituted in the apparel market where the customer is looking for the least expensive combination of the two (i.e. if the price of cotton is high, it will be replaced with polyester, and vice versa). In all other markets, it stated, especially for weaving and technical applications, cotton is not a substitute for polyester because polyester is much stronger than cotton.

SUBSTITUTABILITY ISSUES

The degree of substitution between domestic and imported fine denier 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.). Based on available data, staff believes that there is a moderate-to-high degree of substitutability between domestically produced fine denier PSF and fine denier PSF imported from subject sources, depending on the type of subject product. For product types and applications in which both domestic producers and importers of subject product compete, staff believes that there is a high degree of substitutability. To the extent that some products are not available from either domestic or subject import sources, substitutability may be more limited.

Lead times

Fine denier PSF is primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments were from inventory, while importers reported that *** percent of their commercial shipments were sold from inventory, with lead times averaging 1.1 and 6.8 days, respectively. The remaining *** percent of U.S. producers' commercial shipments and *** percent of importers' commercial shipments were produced-to-order, with lead times averaging 13.5 and 47.6 days, respectively. The remaining *** percent of importers' shipments came from foreign manufacturers' inventories, with an average lead time of *** days.

Knowledge of country sources

Thirty-two purchasers indicated they had marketing/pricing knowledge of domestic product, 20 of product from China, 14 of product from India, 15 of product from Korea, and 8 of product from Taiwan. Six purchasers also reporting having marketing/pricing knowledge of product from nonsubject countries, including Germany and Thailand (4 firms each), Indonesia (3 firms), Japan, Mexico, and Vietnam (2 firms each), and Malaysia and Turkey (1 firm each).

As shown in table II-5, most purchasers "never" make purchasing decisions based on the producer, and either "never" or "sometimes" make purchasing decisions based on country of

origin. Most purchasers' customers "never" make purchasing decisions based on either the producer or country of origin.

Table II-5
Fine denier PSF: Purchasing decisions based on producer and country of origin

Purchaser/Customer Decision	Always	Usually	Sometimes	Never
Purchaser makes decision based on producer	1	2	8	12
Purchaser's customers make decision based on producer	---	1	5	14
Purchaser makes decision based on country	1	3	10	10
Purchaser's customers make decision based on country	---	2	6	12

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

Factors affecting purchasing decisions

As shown in table II-6, the most often cited factors firms consider in their purchasing decisions for fine denier PSF were price/total cost (35 firms), quality (31 firms), and availability/supply chain security (16 firms). Quality was the most frequently cited first-most important factor (cited by 20 firms), followed by price/total cost (7 firms), and availability/ supply chain security (4 firms). Price/total cost was the most frequently cited second-most important factor (cited by 11 firms), followed by quality (8 firms); and price/total cost was the most frequently cited third-most important factor (cited by 17 firms), followed by availability/ supply chain security (cited by 5 firms). A large number of purchasers also identified various non-price factors aside from quality or availability. The total number of purchasers (30 firms) that identified other non-price factors exceeded those that identified availability/supply chain security.

Table II-6
Fine denier PSF: Ranking of factors used in purchasing decisions as reported by U.S. purchasers, by factor[1]

Factor	First	Second	Third	Total
Price / total cost	7	11	17	35
Quality	20	8	3	31
Availability / supply chain security	4	7	5	16
Other[2]	7	12	11	30

[1] The sum of responses down may not add up to the total number of responding firms as some firms named more than one factor under each priority.
[2] Other factors include delivery, service, specified or accepted by customer, product line range, lead time, payment and/or credit terms, color and consistency, approved status, philosophy, ability to meet specified material attributes, product characteristics and properties, quality for NAFTA/CAFTA, runnability, capability, continuity, location, manufacturability, the ability to compete in a global marketplace, technical knowledge, regulatory compliance, logistics, innovation, and product development.

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

When asked how often they purchase the fine denier PSF that is offered at the lowest price, the large majority of purchasers reported that they either "usually" (17 of 36 firms) or "sometimes" (14 firms) do. Three purchasers reported that they "never" do, and two reported

that they “always” do. When asked if they purchased fine denier PSF from one particular source although a comparable product was available from another source, most (19 of 35) purchasers reported that they did. Reasons cited for doing so included the following: a preference to deal with domestic suppliers due to NAFTA and/or CAFTA benefits; a requirement to purchase domestic product due to Berry Amendment requirements; a preference for domestic product due to proximity and better technical support; specific customer requirements; a preference for the quality of Korean product over other sources; better capacity and supply from China; a well-established supply chain for product from Taiwan; and a preference for product from Germany due to a combination of price and performance.

Most (21 of 35) purchasers indicated that there were not any types of fine denier PSF that were only available from a single source. However, fourteen reported that certain types of fine denier PSF were only available from a single source. In terms of domestically produced product, *** reported that nylon fiber (nonsubject product) is only available from domestic producers. In terms of imported product, *** stated that post-consumer recycled fiber is only available from Asian suppliers, and *** stated that regenerated (recycled) fiber of 1.5 denier or less is not available from domestic producers. *** reported that black PSF is not available from domestic producers, with *** adding that it is available from Asian suppliers, and *** specifically naming India, Korea, and Taiwan as sources. *** also stated that short cut PSF is only available in limited quantities from domestic sources, so additional quantities must be imported from India and Korea, as well as nonsubject countries Germany, Indonesia, and Thailand. *** stated that it has only one qualified source (Taiwan) for its cobalt free PSF and one qualified source (China) for its antimony free PSF and rPET. In terms specialty fibers, *** reported that low melt 2.0 denier x 51mm fiber (nonsubject product) is only available from Korea, and 1.5 denier x 38mm bleached resistant fiber is only available from Thailand; and *** reported that Coolmax fiber is only available from Taiwan.

Importance of specified purchase factors

Purchasers were asked to rate the importance of 19 factors in their purchasing decisions (table II-7). The factors rated as very important by more than half of responding purchasers were product consistency (35), price and reliability of supply (34 each), availability (33), quality meets industry standards (29), cut length (27), delivery time (25), delivery terms (24), and coloring (21).

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

Factor	Very important	Somewhat important	Not important
Availability	33	3	---
Coating (e.g. silicon)	15	6	15
Coloring	21	9	5
Cut length	27	7	2
Delivery terms	24	11	1
Delivery time	25	10	1
Discounts offered	11	14	11
Extension of credit	14	13	9
Minimum quantity requirements	6	20	10
Packaging	6	17	13
Price	34	2	---
Product consistency	35	1	---
Product range	4	23	8
Quality meets industry standards	29	6	1
Quality exceeds industry standards	15	17	3
Recycled content	5	17	14
Reliability of supply	34	2	---
Technical support/service	13	20	3
U.S. transportation costs	15	19	2

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

Interchangeability of product forms

Purchasers were also asked to indicate the frequency with which different forms of fine denier PSF (including virgin, PCR, short cut, black or other colored, siliconized, and other forms) are used in woven or spun applications, non-woven applications, and other applications (table II-8). For woven or spun applications, the large majority of firms (17 of 19 responding purchasers) reported either “always” or “frequently” using virgin fiber, while 7 of 16 purchasers also reported “sometimes” using PCR fiber. At least a plurality of firms reported “never” using short cut fiber, black or other colored fiber, or siliconized fiber for woven or spun applications, though 6 of 17 firms reported either “always” or “frequently” using short cut fiber and 8 of 16 firms reported either “always” or “frequently” using black or other colored fiber in woven or spun applications.

For nonwoven applications, firm responses were similar, though firms were relatively less likely to use black or other colored fiber and more likely to use PCR fiber and siliconized fiber. A plurality of firms (11 of 25 purchasers) reported “always” using virgin fiber, 9 of 21 reported either “always” or “frequently” using PCR fiber, 6 of 19 reported either “always” or “frequently” using short cut fiber, and 3 of 18 firms reported either “always” or “frequently” using siliconized fiber in nonwoven applications.

For other applications, 4 of 8 purchasers reported that siliconized fiber was at least “sometimes” used and 4 of 9 reported that PCR was at least ““sometimes” used in fiberfill

(stuffing) for pillows, sofa seats, comforters, and cushions. One firm also reported that virgin fiber is “always” used in thread.

Table II-8
Fine denier PSF: Frequency purchasers use or are willing to substitute specific product types for various applications

Product type	Woven or spun applications			
	A	F	S	N
Virgin	12	5	---	2
Post-consumer recycled	---	2	7	7
Short cut	5	1	2	9
Black or other colored	3	5	2	6
Siliconized	---	---	2	11
Other	---	---	---	2
	Nonwoven applications			
	A	F	S	N
Virgin	11	6	3	5
Post-consumer recycled	1	8	2	10
Short cut	4	2	2	11
Black or other colored	---	4	1	16
Siliconized	2	1	2	13
Other	---	---	---	5
	Other applications			
	A	F	S	N
Virgin	1	---	3	5
Post-consumer recycled	1	1	2	5
Short cut	1	---	2	5
Black or other colored	---	---	---	9
Siliconized	2	1	1	4
Other	---	---	---	2

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

Firms were also asked whether these specialty forms of PSF (PCR, short cut, black or other colored, and siliconized) were made from virgin or recycled material. Firm responses indicate that the large majority of these products were made from virgin material, though siliconized fiber was more likely to be made from PCR material than the other specialty forms. Among the responding purchasers, 95.6 percent of their reported short cut fiber was made from virgin material, 91.5 percent of their black or other colored fiber was made from virgin material, 70.8 percent of their siliconized fiber was made from virgin material, and 97.8 percent of their “other” fibers were made from virgin material.

Supplier certification

Most (28 of 37) responding purchasers require their suppliers to become certified or qualified to sell fine denier PSF to their firm. Purchasers reported that the time to qualify a new supplier ranged from 7 to more than 180 days. Eight purchasers reported having had a supplier fail in its attempt to qualify fine denier PSF or that a supplier had lost its approved status since

2014. Firms that reportedly failed in their attempts to qualify included DAK, Nan Ya, and Palmetto (among domestic producers), and Fibertex, Hua Hong, and David Poole (among importers and foreign producers).

Changes in purchasing patterns

Purchasers were also asked about changes in their purchasing patterns from different sources since 2014 (table II-9). Firms' responses were mixed. Overall, reported purchase patterns suggest a fairly even split between purchasers who increased and decreased sourcing from U.S. producers. Most subject countries also saw a fairly even split between the number of purchasers that increased and decreased purchases, with China having a greater number of purchasers reporting an increase in purchases than a decrease. Firms generally reported decreasing purchases of domestic product for reasons having to do with a decrease in demand for fine denier PSF in general, an inability of domestic firms to reliably supply product, the cessation of domestic production of a specific type of fiber, or price concerns. Reasons for increasing domestic purchases mostly related to an increase in demand for a specific domestic product or a general growth in business. Reasons reported for decreasing purchases from subject sources related to quality concerns or price increases, and reasons for increasing purchases related to price, a general growth in demand/business, or concerns about domestic supply.

Table II-9
Fine denier PSF: Changes in purchase patterns from U.S., subject, and nonsubject countries

Source of purchases	Did not purchase	Decreased	Increased	Constant	Fluctuated
United States	7	9	9	8	4
China	8	4	11	1	7
India	17	3	2	4	2
Korea	16	4	5	4	1
Taiwan	22	1	2	1	2
All other sources	15	2	2	1	3
Sources unknown	17	---	1	---	1

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

Eighteen of 37 responding purchasers reported that they had changed suppliers since January 1, 2014. Some firms reported that they periodically drop or add suppliers due to pricing. Specifically, firms dropped or reduced purchases from *** due to price. Firms also reported adding or increasing purchases from ***. More frequently, firms reported dropping or adding firms due to quality concerns, customer requirements, product availability, volume requirements, diversity of supply, or supply reliability/security. Firms named as having been dropped for non-price related reasons included the following: ***. Firms named as having been added for non-price related reasons included ***. Some firms also reported changes due to mill/vendor consolidation.

Importance of purchasing domestic product

Eighteen of 37 purchasers reported that there were no domestic product requirements for any of their purchases. Fourteen purchasers reported that at least some of their purchases had no domestic product requirements (ranging from between 4 and 99 percent of their purchases). Nine firms reported that at least some of their purchases were required to be domestic product by law (for between 10 and 39 percent of their purchases for all but one firm).[21] Nine firms reported that U.S.-produced product was required by their customers (for between 7 and 52 percent of their purchases for all but one firm).[22] Four firms reported preferring domestic product for other reasons (for between 8 and 100 percent of purchases); reasons cited for preferring domestic product included end user requirements, compliance with FTA regulations for content origin requirements, and a general practice of purchasing all fibers from U.S. producers.

Comparisons of domestic products, subject imports, and nonsubject imports

Purchasers were asked a number of questions comparing fine denier PSF produced in the United States, subject countries, and nonsubject countries. First, purchasers were asked for a country-by-country rating on the same 19 factors, for which they were asked to rate the importance. These ratings were then used to compare domestic product to product from import sources (tables II-10a through II-10c). When comparing product from subject sources to one another, as well as domestic and subject product to nonsubject product, most countries were rated as comparable for the majority of factors listed.

[21] *** reported that 96 percent of its purchases were required by law to be domestic product.

[22] *** reported that 90 percent of its purchases were required by its customers to be domestic product.

Table II-10a
Fine denier PSF: Purchasers' comparisons between U.S.-produced and product imported from subject countries

Country pair	U.S. vs. China			U.S. vs. India			U.S. vs. Korea			U.S. vs. Taiwan		
	S	C	I	S	C	I	S	C	I	S	C	I
Availability	2	13	6	2	4	5	1	9	4	3	2	2
Coating (e.g. silicon)	3	6	4	1	1	2	---	5	3	1	3	---
Coloring	4	11	3	1	3	2	1	6	3	---	3	2
Cut length	---	19	1	---	10	---	1	11	1	---	5	1
Delivery terms	7	12	1	6	4	---	4	7	1	1	5	---
Delivery time	12	7	2	6	4	1	6	6	1	3	3	---
Discounts offered	2	8	5	1	3	3	2	5	2	---	3	1
Extension of credit	9	8	2	5	4	1	2	7	---	1	2	1
Minimum quantity requirements	6	10	2	3	6	---	5	5	---	1	4	---
Packaging	2	17	1	2	8	1	1	11	---	---	5	---
Price[1]	1	5	14	1	1	8	1	1	9	3	---	2
Product consistency	6	12	3	3	7	1	2	8	2	---	4	1
Product range	3	9	7	2	5	3	2	6	4	3	1	1
Quality meets industry standards	5	12	3	4	6	1	3	6	2	1	3	---
Quality exceeds industry standards	7	10	2	4	6	---	3	6	1	2	2	---
Recycled content	---	9	4	2	2	1	2	5	2	1	2	1
Reliability of supply	5	11	5	3	4	4	1	9	3	---	4	2
Technical support/service	12	8	---	5	5	---	3	7	1	3	2	---
U.S. transportation costs[1]	6	8	3	3	5	---	3	6	---	1	2	---

[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.

Table II-10b
Fine denier PSF: Purchasers' comparisons of product imported from subject countries

Country pair	China vs. India			China vs. Korea			China vs. Taiwan		
	S	C	I	S	C	I	S	C	I
Availability	1	6	1	1	8	1	3	3	---
Coating (e.g. silicon)	---	3	---	1	3	2	2	1	---
Coloring	---	3	2	1	4	3	---	2	2
Cut length	---	7	---	---	9	---	1	4	---
Delivery terms	---	6	1	---	6	2	---	5	---
Delivery time	1	6	1	1	7	1	---	5	---
Discounts offered	2	3	---	1	5	---	2	2	---
Extension of credit	2	5	---	---	5	1	---	4	---
Minimum quantity requirements	---	6	---	---	6	1	---	4	1
Packaging	1	7	---	---	9	---	---	5	---
Price[1]	4	3	---	5	3	---	5	---	---
Product consistency	1	5	2	1	5	3	---	4	1
Product range	1	5	1	3	5	1	3	2	---
Quality meets industry standards	1	7	---	1	7	---	---	3	1
Quality exceeds industry standards	1	6	---	1	5	1	---	3	1
Recycled content	2	1	---	2	5	---	3	1	---
Reliability of supply	2	4	2	1	7	1	---	4	1
Technical support/service	1	3	3	---	6	2	---	4	1
U.S. transportation costs[1]	1	4	---	---	6	---	---	3	---

Table continued on next page.

Table II-10b--*Continued*
Fine denier PSF: Purchasers' comparisons of product imported from subject countries

Country pair	India vs. Korea			India vs. Taiwan			Korea vs. Taiwan		
	S	C	I	S	C	I	S	C	I
Availability	2	5	1	2	2	---	2	3	---
Coating (e.g. silicon)	---	1	2	1	---	---	2	1	---
Coloring	---	4	---	1	1	---	1	2	1
Cut length	1	6	---	---	3	---	1	3	---
Delivery terms	---	6	---	---	3	---	---	4	---
Delivery time	1	5	1	1	2	---	---	4	---
Discounts offered	1	3	---	2	1	---	---	2	---
Extension of credit	---	4	1	---	3	---	1	1	---
Minimum quantity requirements	1	4	---	---	3	---	---	3	---
Packaging	---	7	---	---	3	---	---	3	---
Price[1]	1	5	---	1	2	---	1	2	---
Product consistency	---	5	2	---	3	---	---	3	---
Product range	1	6	---	1	2	---	2	1	---
Quality meets industry standards	---	7	---	---	2	1	---	2	---
Quality exceeds industry standards	---	5	1	---	2	1	---	2	---
Recycled content	1	2	1	1	1	---	---	3	---
Reliability of supply	2	4	1	---	3	---	---	3	1
Technical support/service	1	5	---	1	2	---	---	3	---
U.S. transportation costs[1]	---	5	---	---	2	---	---	2	---

[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.

Table II-10c
Fine denier PSF: Purchasers' comparisons between domestic product, subject imported product, and nonsubject product

Country pair	U.S. vs. nonsubject			China vs. nonsubject			India vs. nonsubject			Korea vs. nonsubject			Taiwan vs. nonsubject		
	S	C	I	S	C	I	S	C	I	S	C	I	S	C	I
Availability	3	1	3	3	2	---	4	3	---	2	3	---	---	3	---
Coating (e.g. silicon)	1	1	---	1	---	---	1	1	---	1	---	---	---	1	---
Coloring	---	3	1	---	3	---	1	2	---	1	1	---	1	1	---
Cut length	---	6	---	---	4	---	---	5	---	---	4	---	---	2	---
Delivery terms	3	2	---	---	2	1	---	4	1	---	3	---	---	2	---
Delivery time	3	1	1	---	3	---	1	4	---	---	3	---	---	1	---
Discounts offered	---	2	1	---	1	---	---	3	---	---	2	---	---	1	---
Extension of credit	2	2	---	---	1	1	---	3	1	1	1	---	---	1	---
Minimum quantity requirements	2	2	---	1	1	---	1	3	---	1	1	---	1	---	---
Packaging	---	5	1	---	4	---	---	6	---	---	4	---	---	2	---
Price[1]	1	1	2	2	---	---	2	2	---	1	1	---	---	1	---
Product consistency	2	4	---	2	2	---	1	4	1	1	3	---	1	1	---
Product range	1	3	1	1	2	---	1	2	2	1	2	1	---	2	---
Quality meets industry standards	1	5	---	1	3	---	1	4	1	1	3	---	1	1	---
Quality exceeds industry standards	1	5	---	1	3	---	1	4	1	1	3	---	1	1	---
Recycled content	2	2	---	1	1	---	1	2	1	---	2	1	---	2	---
Reliability of supply	2	3	1	2	2	---	1	3	2	1	3	---	1	1	---
Technical support/service	2	3	---	---	2	1	1	1	3	---	2	1	---	1	1
U.S. transportation costs[1]	2	3	---	---	3	---	---	5	---	---	3	---	---	2	---

[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.

Comparison of U.S.-produced and imported fine denier PSF

In order to determine whether U.S.-produced fine denier PSF can generally be used in the same applications as imports from China, India, Korea, and/or 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-11, all of the responding U.S. producers reported fine denier PSF products as being "always" interchangeable, regardless of source. Importers' responses varied, though most reported that U.S. and subject product was either "always" or "frequently" interchangeable when comparing U.S. product to that from India and Taiwan, while half indicated as much when comparing U.S. product to that from China and Korea. Similar to importers, purchasers' perceptions of interchangeability varied, but the large

majority of firms reported fine denier PSF products as either “frequently” or “sometimes” interchangeable for all comparisons.

Table II-11
Fine denier PSF: Interchangeability between fine denier 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. China	5	---	---	---	7	5	11	1	6	7	10	2
U.S. vs. India	5	---	---	---	6	3	5	3	4	5	7	1
U.S. vs. Korea	5	---	---	---	5	3	7	1	3	5	5	4
U.S. vs. Taiwan	5	---	---	---	5	3	5	2	3	4	2	3
Subject country comparisons:												
China vs. India	5	---	---	---	5	5	3	---	1	5	5	---
China vs. Korea	5	---	---	---	5	5	4	---	1	6	4	---
China vs. Taiwan	5	---	---	---	5	4	4	---	1	4	2	1
India vs. Korea	5	---	---	---	4	5	2	---	1	6	3	---
India vs. Taiwan	5	---	---	---	4	4	2	---	1	4	2	---
Korea vs. Taiwan	5	---	---	---	4	4	3	---	1	4	3	1
Nonsubject country comparisons:												
U.S. vs. nonsubject	5	---	---	---	5	1	6	2	3	1	4	1
China vs. nonsubject	5	---	---	---	3	2	5	---	1	3	---	---
India vs. nonsubject	5	---	---	---	5	2	3	---	1	3	2	---
Korea vs. nonsubject	5	---	---	---	4	2	4	---	1	3	2	---
Taiwan vs. nonsubject	5	---	---	---	5	1	5	---	1	2	1	---

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

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

Some importers reported specific source-based limitations to interchangeability: *** reported that certain subject fine denier PSF product was not produced in the United States; *** reported that U.S. and Chinese interchangeability was limited by availability and ability to meet specifications; *** reported that “the U.S. petitioners lack the proper equipment and process lines to manufacture the types of low denier PSF required;” *** stated that a number of the products that it imports for use in nonwoven and fiberfill applications are not available domestically; *** stated that desired quality and some colors are not available from U.S. producers; *** reported differences in recycled content and an absence of U.S. production of fibers shorter than 22m fiber; and Consolidated Fibers stated that short cut PSF is not available from domestic producers.[23]

Others suggested that interchangeability depended on end use application, and that limitations are more a matter of specific producer than country source: *** reported that fiber

[23] Conference transcript, pp. 103, 117-118 (Kunik).

quality and other specifications differ more between producers than between country sources; *** reported that fine denier PSF produced in the United States and in subject countries can be used interchangeably in areas where the specifications (such as color, dye uptake, strength, luster, and aesthetic properties) are the same; *** stated that supply from a particular vendor cannot be mixed with that of another vendor; and *** indicated that while the products are chemically the same regardless of the country of origin, quality requirements prevent it from mixing products from different countries or even from different plants within the same country due to variability issues.

As can be seen from table II-12, most responding purchasers reported that domestically produced product always met minimum quality specifications, while most purchasers reported that product from China, India, and Korea "usually" met minimum quality specifications, and an equal number of firms reported that product from Taiwan "always" as "usually" did. Only one purchaser each reported that product from China and Taiwan "never" met minimum quality specifications.

Table II-12
Fine denier PSF: Ability to meet minimum quality specifications, by source[1]

Source	Always	Usually	Sometimes	Rarely or never
United States	18	14	1	---
China	8	14	2	1
India	2	11	2	---
Korea	5	7	2	---
Taiwan	3	3	1	1

[1] Purchasers were asked how often domestically produced or imported fine denier 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 fine denier PSF from the United States, subject, or nonsubject countries. As seen in table II-13, 4 of 5 U.S. producers reported that differences other than price are "never" significant, while one firm (***) reported that they were "sometimes" significant.[24] When comparing U.S. product to product from subject sources, importers' responses were distributed fairly evenly among "always," "frequently," "sometimes," and "never," though a plurality of importers reported that differences were "sometimes" significant when comparing domestic product to that from China, India, and Korea. Similar to importers, purchasers also reported varied and sometimes contrasting responses as to the significance of differences other than price. Purchasers' comparisons between the United States and China resulted in relatively more agreement, with half observing that differences other than price are "always" significant.

[24] *** did not elaborate on this response.

Table II-13
Fine denier PSF: Significance of differences other than price between fine denier 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. China	---	---	1	4	4	5	9	4	12	4	8	---
U.S. vs. India	---	---	1	4	4	3	5	3	5	6	3	2
U.S. vs. Korea	---	---	1	4	3	3	6	3	5	5	2	2
U.S. vs. Taiwan	---	---	1	4	3	4	3	4	5	2	2	1
Subject countries comparisons:												
China vs. India	---	---	1	4	1	2	5	4	1	3	3	2
China vs. Korea	---	---	1	4	1	2	6	4	1	1	5	3
China vs. Taiwan	---	---	1	4	1	2	5	4	2	---	2	2
India vs. Korea	---	---	1	4	1	1	5	4	2	1	2	4
India vs. Taiwan	---	---	1	4	1	1	4	4	1	---	2	2
Korea vs. Taiwan	---	---	1	4	1	2	4	4	2	---	3	2
Nonsubject countries comparisons:												
U.S. vs. nonsubject	---	---	1	4	3	4	4	2	3	1	2	---
China vs. nonsubject	---	---	1	4	1	3	3	3	1	---	---	2
India vs. nonsubject	---	---	1	4	1	2	4	3	2	1	---	2
Korea vs. nonsubject	---	---	1	4	1	3	3	3	2	---	---	2
Taiwan vs. nonsubject	---	---	1	4	1	3	4	2	1	---	---	1

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

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

In additional comments, *** again stated that certain products are not readily available in necessary quantities from U.S. producers; *** stated that black fine denier fiber is not available domestically and that it can only be sourced in sufficient quantities through foreign imports; *** reported that U.S. producers do not produce a recycled product or short cut fiber; and *** reported that the only U.S. producer of short-cut PSF was already at capacity and therefore unable to adequately supply domestic market needs. Purchasers *** also cited a need for a diversity of suppliers for certain products as reasons for purchasing non domestic products, and *** expressed concern that duties on fine denier PSF imports could make U.S. purchasers less competitive against foreign competitors.

ELASTICITY ESTIMATES[25]

U.S. supply elasticity

The domestic supply elasticity[26] for fine denier PSF measures the sensitivity of the quantity supplied by U.S. producers to changes in the U.S. market price of fine denier 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 fine denier PSF. Analysis of the factors above indicates that the U.S. industry has the ability to increase or decrease shipments to the U.S. market; an estimate in the range of 4 to 8 is suggested.

U.S. demand elasticity

The U.S. demand elasticity for fine denier PSF measures the sensitivity of the overall quantity demanded to a change in the U.S. market price of fine denier 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 fine denier PSF in the production of any downstream products. Based on the available information, the aggregate demand for fine denier PSF is likely to be moderately elastic; a range of -0.25 to -0.75 is suggested.

Substitution elasticity

The elasticity of substitution depends upon the extent of product differentiation between the domestic and imported products.[27] 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 fine denier PSF and imported fine denier PSF is likely to be in the range of 3 to 6. For product types and applications in which both domestic and imported subject product compete, substitution elasticity is likely to be at the higher end of the range. For products or applications in which there is strong preference for one source over another, such as certain specialty products, substitutability may be on the lower end of the range. To the extent that some products are not available domestically, substitutability is more limited.

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[25] No party commented on these estimates in their prehearing or posthearing briefs.

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

[27] 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 subsidies and 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 four firms that accounted for most U.S. production of fine denier PSF during 2016.

U.S. PRODUCERS

The Commission issued a U.S. producer questionnaire to seven firms based on information contained in the petition and petitioners' postconference brief. Five firms provided usable data on their productive operations.[1] Staff believes that these responses represent the vast majority of U.S. production of fine denier PSF.

Table III-1 lists U.S. producers of fine denier PSF, their production locations, positions on the petition, and shares of total production in 2016.

Table III-1
Fine denier PSF: U.S. producers, their position on the petition, location of production, and share of reported production, 2016

Firm	Position on petition	Production location(s)	Share of production (percent)
Auriga	Support (Petitioner)	Spartanburg, SC	***
DAK Americas	Support (Petitioner)	Charlotte, NC Moncks Corner, SC	***
Nan Ya	Support (Petitioner)	Lake City, SC	***
Palmetto	Support	Kingstree, SC	***
William Barnet	***	Kinston, NC	***
Total			***

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

[1] *** certified that it has not produced fine denier PSF since January 1, 2014.

U.S. producer William Barnet & Son, LLC ("William Barnet") filed an Importer's Questionnaire ***, as reported in the prehearing report. However, staff was informed just before the hearing that the firm was a producer of exclusively short cut PSF. The firm filed a U.S. Producer's questionnaire in time for inclusion in this staff report.

Fiber Innovation Technologies ("FIT") was issued a questionnaire, but did not submit a response for use in this staff report. A company representative stated that the firm had the capacity to make *** of fine denier PSF. Staff telephone interview with ***. (***.)

Table III-2 presents information on U.S. producers' ownership and related or affiliated firms. As indicated in table III-2, U.S. producer Nan Ya is owned by, and related to, a foreign producer of the subject merchandise.[2] In addition, as discussed in greater detail below, three U.S. producers directly import the subject merchandise. *** reported purchasing the subject merchandise from U.S. importers.

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

* * * * * * *

Table III-3 presents U.S. producers' reported changes in operations since January 1, 2014.

Table III-3
Fine denier PSF: U.S. producers' reported changes in operations, since January 1, 2014

* * * * * * *

U.S. PRODUCTION, CAPACITY, AND CAPACITY UTILIZATION

Table III-4 and figure III-1 present U.S. producers' production, capacity, and capacity utilization. Production of fine denier PSF decreased by *** percent from 2014 to 2016, and was *** percent lower in January-September ("interim") 2017 than in interim 2016. Capacity increased by *** percent from 2014 to 2016, and was *** percent lower in interim 2017 than in interim 2016. Capacity utilization declined by *** percentage points from 2014 to 2016, and was *** percentage points lower in interim 2017 than in interim 2016 due to the decline in production alongside the increase in production capacity.[3]

Producers primarily reported *** as production constraints.[4] In the preliminary phase of these investigations, DAK Americas also discussed the effects of a power outage at its Cooper River facility in November 2015.[5]

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[2] Nan Ya's parent company, Nan Ya Plastics Corporation, filed a foreign producer's questionnaire in the preliminary phase of these investigations. ***. Staff voice message from ***.

[3] Describing its participation in "niche" fine denier PSF products, DAK Americas noted that it does not produce black, siliconized, short cut, or PCR fine denier PSF. *See* Petitioners' posthearing brief, exh. 4, p. 1. Auriga can produce PCR fine denier PSF (and ***); Nan Ya produces siliconized fine denier PSF; William Barnet produces short cut fine denier PSF; and Palmetto produces the four specified niche fine denier PSF products listed above. For more information, see part IV.

[4] Responses include: "***." See responses of DAK Americas, Auriga, Nan Ya, and Palmetto, respectively, to U.S. Producers' questionnaire, question II-3d.

According to petitioners, the November 2015 electrical outage ***. However, petitioners stated that ***. Petitioners also noted that ***.[6] Petitioners stated that ***.[7] They added that ***.[8] DAK Americas was ***.

Table III-4
Fine denier PSF: U.S. producers' capacity, production, and capacity utilization, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Figure III-1
Fine denier PSF: U.S. producers' capacity, production, and capacity utilization, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Alternative products

As shown in table III-5, *** percent of the product produced using the same equipment as fine denier PSF during 2016 by U.S. producers was fine denier PSF, while *** percent was other product. This share declined *** percentage points from 2014 to 2016, and was *** percentage points lower in interim 2017 than in interim 2016. Four firms reported producing other products on the same equipment used to produce fine denier PSF, including coarse denier PSF (PSF with a denier size greater than or equal to 3).[9]

DAK Americas reported that its ***. Palmetto noted that ***. Auriga reported ***.[10]

(…*continued*)

[5] Petitioners' postconference brief, exh. 1, p. 12, and exh. 9, pp. 1-2. This and other domestic supply factors are discussed in greater detail in part II.

[6] Petitioners' postconference brief, exh. 1, p. 13.

[7] Petitioners' postconference brief, p. 18.

[8] A respondent party argued in the preliminary phase of these investigations, however, that the domestic industry was not able to supply the market during this period as evidenced by five large purchasers reporting that domestic plants were unable or unwilling, for reasons other than price, to meet their requirements for fine denier PSF. See Chinese respondents' postconference brief, p. 11.

In the final phase of these investigations, Chinese respondents continued to argue that domestic fine denier PSF producers "…were unable to meet their customers' needs, and in order to ensure continuity of supply…{fine denier PSF} customers…had no choice but to look offshore for reliable sources of supply." See Chinese respondents' prehearing brief, p. 1.

[9] In regards to these 'other products', Auriga reported producing "***"; Palmetto reported producing "***"; and William Barnet reported producing "***". See U.S. Producers' questionnaire responses, question II-3a.

[10] U.S. Producers' questionnaire responses of DAK Americas, Auriga, and Palmetto, question II-3e(ii).

Table III-5
Fine denier PSF: U.S. producers' overall capacity and production on the same equipment as subject production, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
Overall capacity	712,677	727,677	743,070	557,106	556,714
Production:					
Fine denier PSF	***	***	***	***	***
Course denier PSF	153,634	157,948	158,695	111,536	118,021
Low-melt PSF	***	***	***	***	***
Other products	9,679	7,317	8,529	6,494	6,028
Subtotal, production other than fine denier PSF	163,313	165,265	167,224	118,030	124,049
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
Fine denier PSF	***	***	***	***	***
Course denier PSF	***	***	***	***	***
Low-melt PSF	***	***	***	***	***
Other products	***	***	***	***	***
Subtotal, production other than fine denier PSF	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments. No firm reported internal consumption or transfers to related firms in their questionnaire responses.

U.S. producers' U.S. shipments declined by *** percent by quantity from 2014 to 2016, but were *** percent higher in interim 2017 than in interim 2016. U.S. shipments declined by *** percent by value from 2014 to 2016, but were *** percent higher in interim 2017 than in interim 2016. The unit value of U.S. producers' U.S. shipments (in dollars per pound) declined by *** percent from 2014 to 2016, but was *** percent higher in interim 2017 than in interim 2016.

U.S. producers' export shipments increased by *** percent by quantity from 2014 to 2016, and were *** percent higher in interim 2017 than in interim 2016. Export shipments declined by *** percent by value from 2014 to 2016, but were *** percent higher in interim 2017 than in interim 2016. The unit value of U.S. producers' export shipments (in dollars per pound) decreased by *** percent from 2014 to 2016, and was *** percent higher in interim 2017 than in interim 2016. The unit value of U.S. producers' export shipments was *** than the unit value of U.S. producers' U.S. shipments throughout the period for which data were collected.

Table III-6
Fine denier PSF: U.S. producers' U.S. shipments, export shipments, and total shipments, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

U.S. PRODUCERS' INVENTORIES

Table III-7 presents U.S. producers' end-of-period inventories and the ratio of these inventories to U.S. producers' production, U.S. shipments, and total shipments. U.S. producers' end-of period inventories increased by *** percent from 2014 to 2016, and were *** percent lower in interim 2017 than in interim 2016. Inventories increased as a ratio to U.S. production by *** percentage points from 2014 to 2016, and were *** percentage points lower in interim 2017 than in interim 2016. Inventories increased as a ratio to total shipments by *** percentage points from 2014 to 2016, and were *** percentage points lower in interim 2017 than in interim 2016.

Table III-7
Fine denier PSF: U.S. producers' inventories, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

U.S. PRODUCERS' IMPORTS

U.S. producers' imports of fine denier PSF are presented in table III-8. Three firms reported importing fine denier PSF ***: Auriga, DAK Americas, and William Barnet. ***. No U.S. producer reported purchases of fine denier PSF.

Auriga reported importing fine denier PSF ***. The firm's imports *** by *** percent from 2014 to 2016, and were *** percent *** in interim 2017 than in interim 2016.

William Barnet reported importing from ***. The firm's *** imports *** by *** percent from 2014 to 2016, and were *** percent *** in interim 2017 than in interim 2016. The firm reported importing *** only in 2014.

DAK Americas reported importing from ***. The firm's *** imports *** by *** percent from 2014 to 2016, and were *** percent *** in interim 2017 than in interim 2016. The firm's *** imports were *** in 2014 and 2016, with an increase in 2015, and were *** percent *** in interim 2017 than in interim 2016.[11]

Table III-8
Fine denier PSF: U.S. producers' direct imports, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

[11] DAK Americas ***.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-9 shows U.S. producers' employment-related data. The number of production and related workers ("PRWs") rose 2.7 percent (17 PRWs from 2014 to 2016, and was 5.1 percent (34 PRWs) lower in interim 2017 than in interim 2016. Total hours worked, hours worked per PRW, and wages paid were roughly equivalent in 2016 from 2014, but productivity declined by 21.5 percent from 2014 to 2016. Productivity was 0.9 percent higher in interim 2017 than in interim 2016.

Table III-9
Fine denier PSF: U.S. producers' employment-related data, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
Production and related workers (PRWs) (number)	637	667	654	672	638
Total hours worked (1,000 hours)	1,397	1,490	1,476	1,123	1,095
Hours worked per PRW (hours)	2,193	2,234	2,257	1,671	1,716
Wages paid ($1,000)	35,400	37,667	35,895	27,637	24,493
Hourly wages (dollars per hour)	$25.34	$25.28	$24.32	$24.61	$22.37
Productivity (pounds per hour)	349.7	315.1	274.6	281.9	284.3
Unit labor costs (dollars per pound)	$0.07	$0.08	$0.09	$0.09	$0.08

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

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 76 firms believed to be importers of subject fine denier PSF, as well as to all U.S. producers of fine denier PSF.[1] [2] Usable questionnaire responses were received from 29 companies.[3] Firms responding to the Commission's questionnaire accounted for the following estimated shares of each subject country's imports (as a share of adjusted import statistics, by quantity) during 2016.

- 96.4 percent of subject imports from China;
- 100.0 percent of subject imports from India;
- *** percent of subject imports from Korea; and
- *** percent of subject imports from Taiwan;

Table IV-1 lists all responding U.S. importers of fine denier PSF from China, India, Korea, and Taiwan (as well as nonsubject sources), their locations, and their shares of U.S. imports, in 2016.

[1] The Commission issued questionnaires to those firms identified in the petition for which an email address was provided, responding firms from the preliminary phase, and firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS statistical reporting number 5502.20.0025 in 2016.

[2] *** provided certification that they have not imported fine denier PSF into the U.S. since January 1, 2014.

[3] A representative from *** notified Commission staff that they could not meet the Commission's questionnaire deadline, but import ***. *** email to Commission staff, December 6, 2017.

Table IV-1
Fine denier PSF: U.S. importers, their headquarters, and share of total imports by source, 2016

Firm	Headquarters	Share of imports by source (percent)						
		China	India	Korea subject	Taiwan subject	Subject sources	Non-subject sources	All import sources
Advansa	Hamm / Germany,	***	***	***	***	***	***	***
American Textile	Duquesne, PA	***	***	***	***	***	***	***
Auriga	Charlotte, NC	***	***	***	***	***	***	***
Bernet	Los Angeles,, CA	***	***	***	***	***	***	***
BMT Commodity	New York, NY	***	***	***	***	***	***	***
Burnett Fiber	Statesville, NC	***	***	***	***	***	***	***
Consolidated Fibers	Charlotte, NC	***	***	***	***	***	***	***
DAK Americas	Charlotte, NC	***	***	***	***	***	***	***
David C Poole	Greenville, SC	***	***	***	***	***	***	***
DECA	Memphis, TN	***	***	***	***	***	***	***
Fibertex	Teaneck, NJ	***	***	***	***	***	***	***
Frontier Spinning	Sanford, NC	***	***	***	***	***	***	***
Gildan Yarns	Salisbury, NC	***	***	***	***	***	***	***
Goetz and Sons	Dallas, TX	***	***	***	***	***	***	***
Green Bay Nonwovens	Green Bay, WI	***	***	***	***	***	***	***
Hollander	Boca Raton, FL	***	***	***	***	***	***	***
Inman Mills	Inman, SC	***	***	***	***	***	***	***
Invista	Wichita, KS	***	***	***	***	***	***	***
Jones Family	Humboldt, TN	***	***	***	***	***	***	***
Milliken	Spartanburg, SC	***	***	***	***	***	***	***
Mount Vernon	Mauldin, SC	***	***	***	***	***	***	***
Parkdale	Gastonia, NC	***	***	***	***	***	***	***
RSM	Charlotte, NC	***	***	***	***	***	***	***
Rubbermaid	Winchester, VA	***	***	***	***	***	***	***
Springs Global	Fort Mill, SC	***	***	***	***	***	***	***
Spuntech	Roxboro, NC	***	***	***	***	***	***	***
Stein Fibers	Albany, NY	***	***	***	***	***	***	***
Unifi	Greensboro, NC	***	***	***	***	***	***	***
William Barnet	Spartanburg, SC	***	***	***	***	***	***	***
Total		100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

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

U.S. IMPORTS

Table IV-2 and figure IV-1 present data for U.S. imports of fine denier PSF from subject countries and all other sources. Imports from subject sources increased by *** percent by quantity from 2014 to 2016, and were *** percent lower in interim 2017 than in interim 2016. Imports from subject sources increased by *** percent by value from 2014 to 2016, and were *** percent higher in interim 2017 than in interim 2016. Imports from nonsubject sources decreased by *** percent by quantity from 2014 to 2016, and were *** percent higher in interim 2017 than in interim 2016. Imports from nonsubject sources decreased by *** percent by value from 2014 to 2016, and were *** percent higher in interim 2017 than in interim 2016.

As a ratio to U.S. production, imports from subject sources increased by *** percentage points from 2014 to 2016, and were *** percentage points higher in interim 2017 than in interim 2016. Imports from nonsubject sources as a ratio to U.S. production decreased by *** percentage points from 2014 to 2016, and were *** percentage points higher in interim 2017 than in interim 2016.

Table IV-2
Fine denier PSF: U.S. imports, by source, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
U.S. imports from.--China	76,710	113,253	162,256	119,178	106,183
India	22,377	28,158	27,270	20,470	29,857
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Value (1,000 dollars)				
U.S. imports from.--China	56,977	69,215	90,105	66,412	63,391
India	17,458	19,046	15,825	11,753	18,204
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Unit value (dollars per pound)				
U.S. imports from.--China	0.74	0.61	0.56	0.56	0.60
India	0.78	0.68	0.58	0.57	0.61
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Table continued on next page.

Table IV-2--Continued
Fine denier PSF: U.S. imports, by source, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Figure IV-1
Fine denier PSF: U.S. import quantities and average unit values, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Table IV-3 presents additional data on U.S. imports of fine denier PSF from nonsubject sources, including nonsubject sources from Korea and Taiwan. The leading nonsubject sources of U.S. imports of fine denier PSF in 2016 were Germany, Mexico, and nonsubject Taiwan sources.

Table IV-3
Fine denier PSF: Nonsubject U.S. imports, by source, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
U.S. imports from.--					
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
Germany	19,245	19,698	14,400	11,135	9,444
Mexico	16,146	23,272	10,671	7,769	13,901
Indonesia	6,389	7,378	2,765	2,504	3,316
All other nonsubject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
	Share of total import quantity (percent)				
U.S. imports from.--					
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
Germany	***	***	***	***	***
Mexico	***	***	***	***	***
Indonesia	***	***	***	***	***
All other nonsubject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***

Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0025, accessed November 9, 2017 with adjustments to identify the zero or de minimis rate firms identified by the Department of Commerce and to remove out-of-scope imports imported from *** using proprietary Customs records, accessed December 20, 2017.

NEGLIGIBILITY

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.[4] Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the 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.[5] Subject imports from China, India, Korea, and Taiwan accounted for *** percent, *** percent, *** percent, and *** percent, respectively, of total imports of fine denier PSF by quantity during May 2016 to April 2017.

Table IV-4

Fine denier PSF: U.S. imports in the twelve month period preceding the filing of the petition, May 2016 through April 2017

Item	May 2016 through April 2017	
	Quantity (1,000 pounds)	Share of quantity (percent)
U.S. import from.--		
China	163,004	***
India	29,735	***
Korea subject	***	***
Taiwan subject	***	***
Subject sources	***	***
Korea nonsubject	***	***
Taiwan nonsubject	***	***
Vietnam	***	***
All other sources	***	***
Nonsubject sources	***	***
All import sources	***	***

Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0025, accessed November 9, 2017 with adjustments to identify the zero or de minimis rate firms identified by the Department of Commerce and to remove out-of-scope imports imported from *** using proprietary Customs records, accessed December 20, 2017.

[4] 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)).

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

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

Tables IV-5-IV-9, and figures IV-2-IV-6, present U.S. producers' and U.S. importers' U.S. shipments of fine denier PSF in 2016 by various binary measures: post-consumer recycled fine denier PSF ("PCR PSF" or "PCR") vs. non-PCR; short cut PSF vs. non-short cut PSF; black or other colored PSF vs. non-colored PSF; siliconized PSF vs. non-siliconized PSF; and micro denier PSF vs. other fine denier PSF sizes.[6]

As reported in table IV-5 and figure IV-2, a majority of U.S. shipments from U.S. producers, and from U.S. importers from subject and nonsubject sources, were non-PCR PSF. Non-PCR PSF constituted *** percent of U.S. producers' U.S. shipments; *** percent of U.S. importers' U.S. shipments from subject sources; and *** percent of U.S. importers' U.S. shipments from nonsubject sources.

Among all types of responding firms, U.S. producers were responsible for *** percent of all U.S. shipments of PCR PSF; U.S. shipments from subject sources were responsible for *** percent of U.S. shipments of PCR PSF; and U.S. shipments from nonsubject sources were responsible for *** percent of U.S. shipments of PCR PSF.[7]

Table IV-5
Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by PCR vs. not PCR, 2016

* * * * * * *

[6] In the Commission's U.S. Producers' and U.S. Importers' questionnaires, micro denier PSF was defined as PSF with a size equal or less than 1.0 denier, while 'other' sizes were defined as all sizes between 1.0 denier and 3.0 denier.

[7] U.S. producers producing PCR PSF include Palmetto and ***. Hearing transcript, p. 33 (Casstevens) and U.S. Producer questionnaire response of ***, q. II-9. Auriga has the ability to produce PCR PSF, ***. Hearing transcript, p. 68 (Brekovsky).

Figure IV-2
Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by PCR vs. not PCR, 2016

* * * * * * *

As reported in table IV-6 and figure IV-3, a majority of U.S. shipments from U.S. producers, and from U.S. importers from subject and nonsubject sources, were non-short cut PSF. Non-short cut PSF constituted *** percent of U.S. producers' U.S. shipments; *** percent of U.S. importers' U.S. shipments from subject sources; and *** percent of U.S. importers' U.S. shipments from nonsubject sources.

Among all types of responding firms, U.S. producers were responsible for *** percent of all U.S. shipments of short cut PSF; U.S. shipments from subject sources were responsible for *** percent of U.S. shipments of short cut PSF; and U.S. shipments from nonsubject sources were responsible for *** percent of U.S. shipments of short cut PSF.[8] [9]

Table IV-6
Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by short cut PSF vs. not short cut PSF, 2016

* * * * * * *

Figure IV-3
Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by short cut PSF vs. not short cut PSF, 2016

* * * * * * *

As reported in table IV-7 and figure IV-4, a majority of U.S. shipments from U.S. producers, and from U.S. importers from subject and nonsubject sources, were non-colored PSF. Non-colored PSF constituted *** percent of U.S. producers' U.S. shipments; *** percent of U.S. importers' U.S. shipments from subject sources; and *** percent of U.S. importers' U.S. shipments from nonsubject sources.

Among all types of responding firms, U.S. producers were responsible for *** percent of all U.S. shipments of black or other colored PSF; U.S. shipments from subject sources were responsible for *** percent of U.S. shipments of black or other colored PSF; and U.S. shipments

[8] U.S. producers producing short cut PSF include Barnet and Palmetto. Hearing transcript, p. 32 (Casstevens), p. 38 (Cannon).

[9] Three firms--***--clarified that U.S. shipments they reported as short cut were in fact in the 32-38 mm cut length range. Information available to Commission staff indicates that PSF considered "short cut" refers to PSF with cut lengths of less than 10 mm, and so their U.S. shipments were re-categorized as non-short cut.

from nonsubject sources were responsible for *** percent of U.S. shipments of black or other colored PSF.[10]

Table IV-7

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by black or colored vs. not black or colored, 2016

* * * * * * *

Figure IV-4

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by black or colored vs. not black or colored, 2016

* * * * * * *

As reported in table IV-8 and figure IV-5, a majority of U.S. shipments from U.S. producers, and from U.S. importers from subject and nonsubject sources, were non-siliconized PSF. Non-siliconized PSF constituted *** percent of U.S. producers' U.S. shipments; *** percent of U.S. importers' U.S. shipments from subject sources; and *** percent of U.S. importers' U.S. shipments from nonsubject sources.

Among all types of responding firms, U.S. producers were responsible for *** percent of all U.S. shipments of siliconized PSF; U.S. shipments from subject sources were responsible for *** percent of U.S. shipments of siliconized PSF; and U.S. shipments from nonsubject sources were responsible for *** percent of U.S. shipments of siliconized PSF.[11]

Table IV-8

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by siliconized PSF vs. not siliconized PSF, 2016

* * * * * * *

Figure IV-5

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by siliconized PSF vs. not siliconized PSF, 2016

* * * * * * *

[10] U.S. producers producing black or other colored PSF include Palmetto. Hearing transcript, p. 32 (Casstevens).

[11] U.S. producers producing siliconized PSF include Nan Ya and Palmetto. Hearing transcript, p. 19 (Sparkman), p. 33 (Casstevens).

As reported in table IV-9 and figure IV-6, a majority of U.S. shipments from U.S. producers, and from U.S. importers from subject and nonsubject sources, were non-micro denier PSF. Non-micro denier PSF constituted *** percent of U.S. producers' U.S. shipments; *** percent of U.S. importers' U.S. shipments from subject sources; and *** percent of U.S. importers' U.S. shipments from nonsubject sources.

Among all types of responding firms, U.S. producers were responsible for *** percent of all U.S. shipments of micro denier PSF; U.S. shipments from subject sources were responsible for *** percent of U.S. shipments of micro denier PSF; and U.S. shipments from nonsubject sources were responsible for *** percent of U.S. shipments of micro denier PSF.[12]

Table IV-9

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by micro denier PSF or not micro denier PSF, 2016

* * * * * * *

Figure IV-6

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments, by micro denier PSF or not micro denier PSF, 2016

* * * * * * *

Geographical markets

Table IV-10 presents U.S. imports of fine denier PSF by border of entry in 2016. A sizable majority subject imports came in through eastern points of entry (*** percent), followed by western and northern points of entry. Most nonsubject imports were imported through eastern points of entry (*** percent), followed by southern points of entry.[13]

[12] *** reported producing micro denier PSF. See U.S. Producer questionnaire responses, q. II-13.

[13] Eastern points of entry include Baltimore, MD; Boston, MA; Buffalo, NY; Charleston, SC; Charlotte, NC; New York, NY; Norfolk, VA; Ogdensburg, NY; Philadelphia, PA; San Juan, PR; Savannah, GA; St. Albans, VT; and Washington, DC. Northern points of entry include Chicago, IL; Cleveland, OH; Detroit, MI; Great Falls, MT; Milwaukee, WI; Minneapolis, MN; Pembina, ND; and St. Louis, MO. Southern points of entry include Dallas-Fort Worth, TX; Houston-Galveston, TX; Laredo, TX; Miami, FL; Mobile, AL; New Orleans, LA; and Tampa, FL. Western points of entry include Los Angeles, CA; San Francisco, CA; and Seattle, WA.

Table IV-10

Fine denier PSF: U.S. imports by border of entry, 2016

Item	Border of entry				
	East	North	South	West	All borders
	Quantity (1,000 pounds)				
U.S. import from.--China	144,298	6,028	4,868	7,062	162,256
India	25,651	2	---	1,616	27,270
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share across (percent)				
U.S. import from.--China	88.9	3.7	3.0	4.4	100.0
India	94.1	0.0	---	5.9	100.0
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share down (percent)				
U.S. import from.--China	***	***	***	***	***
India	***	***	***	***	***
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

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

Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0025, accessed November 9, 2017 with adjustments to identify the zero or de minimis rate firms identified by the Department of Commerce and to remove out-of-scope imports imported from *** using proprietary Customs records, accessed December 20, 2017.

Presence in the market

Table IV-11 and figures IV-7 and IV-8 present monthly imports of fine denier PSF for January 2014 through September 2017. Imports from all subject sources were present in all 45 months. Imports from nonsubject sources were present in all 45 months as well.

Table IV-11
Fine denier PSF: Monthly U.S. imports, by source, January 2014 through September 2017

Year / month	U.S. imports from.--						
	China	India	Korea Subject	Taiwan Subject	Subject sources	Nonsubject sources	All import sources
	Quantity (1,000 pounds)						
2014:							
January	6,787	1,510	***	***	***	***	***
February	5,224	49	***	***	***	***	***
March	7,699	1,737	***	***	***	***	***
April	7,447	898	***	***	***	***	***
May	5,702	2,311	***	***	***	***	***
June	5,919	1,905	***	***	***	***	***
July	5,688	2,823	***	***	***	***	***
August	5,050	2,750	***	***	***	***	***
September	5,448	1,231	***	***	***	***	***
October	4,990	2,119	***	***	***	***	***
November	7,244	2,664	***	***	***	***	***
December	9,514	2,382	***	***	***	***	***
2015:							
January	7,160	2,324	***	***	***	***	***
February	6,910	2,273	***	***	***	***	***
March	8,828	2,102	***	***	***	***	***
April	12,075	1,144	***	***	***	***	***
May	11,049	3,127	***	***	***	***	***
June	11,951	3,066	***	***	***	***	***
July	9,571	2,517	***	***	***	***	***
August	11,608	1,888	***	***	***	***	***
September	10,445	4,476	***	***	***	***	***
October	8,740	2,083	***	***	***	***	***
November	6,933	1,295	***	***	***	***	***
December	7,982	1,862	***	***	***	***	***

Table continued on next page.

Table IV-11--Continued

Fine denier PSF: Monthly U.S. imports, by source, January 2014 through September 2017

Year / month	U.S. imports from.--						
	China	India	Korea Subject	Taiwan Subject	Subject sources	Nonsubject sources	All import sources
	Quantity (1,000 pounds)						
2016:							
January	15,951	720	***	***	***	***	***
February	15,070	1,998	***	***	***	***	***
March	10,943	4,497	***	***	***	***	***
April	11,198	1,422	***	***	***	***	***
May	15,191	1,420	***	***	***	***	***
June	14,397	1,009	***	***	***	***	***
July	12,504	2,859	***	***	***	***	***
August	14,943	2,335	***	***	***	***	***
September	8,981	4,210	***	***	***	***	***
October	14,235	1,781	***	***	***	***	***
November	14,875	2,906	***	***	***	***	***
December	13,968	2,113	***	***	***	***	***
2017:							
January	17,302	1,510	***	***	***	***	***
February	12,895	2,041	***	***	***	***	***
March	8,815	5,572	***	***	***	***	***
April	14,898	1,981	***	***	***	***	***
May	10,323	4,398	***	***	***	***	***
June	11,945	4,743	***	***	***	***	***
July	19,210	3,201	***	***	***	***	***
August	3,151	4,926	***	***	***	***	***
September	7,644	1,486	***	***	***	***	***

Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0025, accessed November 9, 2017 with adjustments to identify the zero or de minimis rate firms identified by the Department of Commerce and to remove out-of-scope imports imported from *** using proprietary Customs records, accessed December 20, 2017.

Figure IV-7

Fine denier PSF: Monthly U.S. imports, by individual subject source, January 2014 through September 2017

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Figure IV-8

Fine denier PSF: Monthly U.S. imports, by aggregated sources, January 2014 through September 2017

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APPARENT U.S. CONSUMPTION

Table IV-12 presents data on apparent U.S. consumption for fine denier PSF. Apparent U.S. consumption decreased by *** percent from 2014 to 2016, and was *** percent higher in interim 2017 than in interim 2016.

Table IV-12

Fine denier PSF: Apparent U.S. consumption, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. import from.--					
China	76,710	113,253	162,256	119,178	106,183
India	22,377	28,158	27,270	20,470	29,857
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. import from.--					
China	56,977	69,215	90,105	66,412	63,391
India	17,458	19,046	15,825	11,753	18,204
Korea subject	***	***	***	***	***
Taiwan subject	***	***	***	***	***
Subject sources	***	***	***	***	***
Korea nonsubject	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***
Vietnam	***	***	***	***	***
All other sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and official U.S. import statistics for HTS statistical reporting number 5503.20.0025, accessed November 9, 2017 with adjustments to identify the zero or de minimis rate firms identified by the Department of Commerce and to remove out-of-scope imports imported from *** using proprietary Customs records, accessed December 20, 2017.

U.S. MARKET SHARES

U.S. market share data are presented in table IV-13 and figure IV-9. The market share of U.S. producers by quantity decreased *** percentage points from 2014 to 2016, and *** from interim 2016 to interim 2017. The market share of U.S. producers by value decreased *** percentage points from 2014 to 2016, and was *** percentage points higher in interim 2017 than in interim 2016.

The market share held by subject imports increased *** percentage points by quantity from 2014 to 2016, but was *** percentage points lower in interim 2017 than in interim 2016. The market share held by subject imports increased *** percentage points by value from 2014 to 2016, but was *** percentage points lower in interim 2017 than in interim 2016.

The market share held by nonsubject imports decreased by *** percentage points by quantity from 2014 to 2016, but was *** percentage points higher in interim 2017 than in interim 2016. The market share held by nonsubject imports decreased *** percentage points by value from 2014 to 2016 and was *** percentage point lower in interim 2017 than in interim 2016.

Table IV-13

Fine denier PSF: Market shares, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Figure IV-9

Fine denier PSF: Apparent U.S. consumption, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Input costs

The primary raw material inputs used to produce fine denier PSF are monoethylene glycol ("MEG") and purified terephthalic acid ("PTA"). Some fine denier PSF is also manufactured from recycled material, though the inputs are chemically the same.[1] The primary difference between fine denier PSF made from virgin raw materials and product made from post-consumer recycled inputs is the existence of a consumer-driven market that favors recycled inputs.[2] Because of additional costs associated with the collection, transportation, and processing of post-consumer recycled material, fine denier PSF made from recycled inputs typically commands a higher price.[3] A mineral- or phosphate-based oil finish can also be applied to the product to serve as a lubricant and anti-static agent, though these oils make up a relatively small share of the total production cost.[4] Between 2014 and 2016, U.S. producers' raw material costs as a share of the cost of goods sold ("COGS") decreased from *** percent to *** percent. During January-September 2017, U.S. producers' raw material costs as a share of COGS was *** percent.

Overall, the prices of MEG and PTA both decreased from December 2014 to September 2017 (figure V-1). Between January 2014 and December 2016, the price of MEG decreased by *** percent and the price of PTA decreased by *** percent. Between December 2016 and September 2017, the prices of MEG and PTA increased by *** percent and *** percent, respectively.

Figure V-1
Raw materials: Monoethylene glycol ("MEG") and purified terephthalic acid ("PTA"), cents per pound, monthly, January 2014-September 2017

* * * * * * *

[1] Conference transcript, pp. 47-49 (Ruday), 78-79 (Casstevens). For more on the production processes using virgin versus recycled raw material inputs, please refer to Part I, "Manufacturing processes."

[2] Conference transcript, pp. 49, 56, 68, 79 (Casstevens), 93, 96, 98, 111-113, 119 (Poole).

[3] Conference transcript, p. 69 (Casstevens).

[4] Petitioners estimated the cost share of these oils to range from *** percent of the total production cost. Petitioners' postconference brief, Responses to staff questions, p. 11; Conference transcript, p. 62 (Sparkman).

U.S. producers and importers were also asked whether raw material prices for MEG, PTA, PCR flake, and/or clean bottle flake[5] had increased, not changed, decreased, or fluctuated since January 2014. Most firms reported that the prices of each of these raw materials had fluctuated with no clear trend. Regarding MEG prices, 2 U.S. producers and 5 importers reported that they had decreased, while 2 U.S. producers and 16 importers reported that they fluctuated. Regarding PTA prices, 2 U.S. producers and 8 importers reported that they had decreased, while 2 U.S. producers and 13 importers reported that they fluctuated. One U.S. producer and 4 importers reported that PCR flake prices had decreased since January 2014, while 1 U.S. producer and 13 importers reported that they fluctuated. One U.S. producer and 2 importers reported that clean bottle flake prices had decreased since January 2014, while 1 U.S. producer and 12 importers reported that they fluctuated. Some importers stated that decreases in the prices of MEG and PTA were due to a large drop in oil and gas costs (***) as well as global freight costs (***). One importer (***) reported that PTA prices had decreased by 20 percent due to increased PTA capacity in China. Importer *** stated that while MEG and PTA prices have decreased in North America by 15.5 percent and 20.0 percent, respectively, they have decreased in Asia by 16.7 percent and 26.7 percent, respectively. No firms reported that any of these raw material prices had increased or not changed.

Regarding the influence of changes in the prices raw materials on the price of fine denier PSF, firm responses were mixed. While some importers reported that the prices of clean bottle flake (3 firms) and PCR flake (2 firms) do not have a direct impact on fine denier PSF prices, four importers reported that the prices of these inputs do influence the price of fine denier PSF. A number of importers also reported that changes in the cost of MEG and PTA affect the price of fine denier PSF: *** reported that MEG and PTA prices influence its suppliers prices immediately; *** reported that it needs to adjust its fiber prices to compensate for larger MEG price increases; *** reported that increases in the price of PTA usually mean an increase in the selling price of fine denier PSF; *** stated that fine denier PSF pricing trends are based on indexes in both the North American and Asian markets; *** reported that its purchase cost for fine denier PSF is a function of the average MEG and PTA spot price(s) plus a conversion cost, and that a reduction in its supplier ***'s price normally results from a reduction in MEG and/or PTA spot prices; *** reported that there is a direct correlation between raw material prices and selling prices for fine denier PSF, and that the drop in MEG and PTA prices have caused a significant drop in the selling prices for fine denier PSF; and *** reported that its finished products generally follow the same trend as MEG and PTA prices. One firm, ***, indicated that due to the length of its contracts, increases and decreases in raw material costs affect its margins more than the selling price of its finished products.

DAK testified that there is a close relationship between raw material prices and the pricing of fine denier PSF, and that PSF pricing is typically based on movements in raw material prices to published indexes, plus "an adder" or "conversion fee."[6] Indian respondents also

[5] "Flake" refers to recycled material. See Part I.

[6] Hearing transcript, p. 54 (Ruday).

stated that fine denier PSF pricing is based on a "cost plus formula purely."[7] Petitioners described their adders as having declined since 2014 because of competition with low-priced imports.[8] Chinese respondents, however, stated that prices of fine denier PSF had followed MGA and PTA price declines.[9]

U.S. producers and importers were also asked whether there had been any disruptions in the supply of raw materials since January 2014. None of the five responding U.S. producers reported raw material supply disruptions, though *** noted that BP, a supplier of PTA, declared a force majeure at the end of 2015/beginning of 2016, but stated that it was unaffected. Six importers reported experiencing raw material supply disruptions, while 19 reported that they had not. *** reported that there had been some disruptions in the supply of MEG; *** reported that power outages and gas lines of PTA and MEG in Asia have resulted in minor disruptions since 2014; *** reported that BP's Cooper River facility experienced a disruption in its supply of PTA that lasted from August 2014 until the second quarter of 2015; *** reported that China banned recycled imports in the third quarter of 2016; *** reported that the raw material supply for regenerated fiber in China has been severely disrupted in 2017; and *** stated that BP's disruption may have affected PTA supplies for Nan Ya, but that there were no raw material supply disruptions outside the United States.[10]

As noted above, a number of firms pointed to a decrease in oil and gas prices as a primary driver for the decrease in the price of MEG and PTA.[11] As shown in figure V-2, the prices of crude oil and natural gas both decreased between January 2014 and September 2017. Between January 2014 and December 2016, crude oil and natural gas prices decreased by 45.1 and 24.1 percent, respectively. Between December 2016 and September 2017, the prices of crude oil and natural gas decreased by 4.1 and 10.0 percent, respectively.

[7] Hearing transcript, p. 152 (Nolan); posthearing brief of Reliance Industries, p.3.

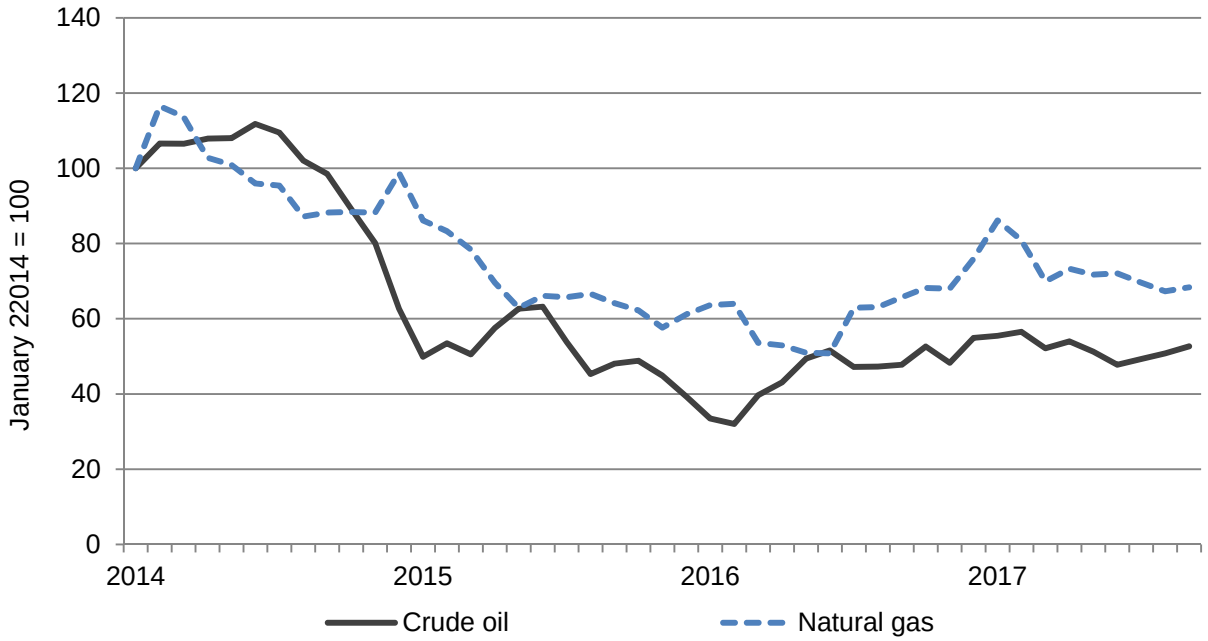
[8] Petitioners' posthearing briefs, answers to questions, pp. 4-8.

[9] Chinese respondents' posthearing brief, pp. 10-11.

[10] Petitioners also stated that *** was affected by the BP disruption. Petitioners' posthearing brief, p. 11.

[11] See also *Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan, Inv. Nos. 701-TA-579-580 and 731-TA-1369-1372 (Prelim)*, USITC Publication 4709, July 2017, p. V-2.

Figure V-2
Crude oil and natural gas: Indexed prices of crude oil (dollars per barrel, Cushing, OK WTI spot price FOB) and natural gas (dollars per thousand cubic feet, industrial price), monthly, January 2014-September 2017



Source: U.S. Energy Information Administration, retrieved December 18, 2017.

U.S. producers and importers were asked about the role of raw material prices in their pricing of fine denier PSF, as well the use of any indexes to set prices. DAK and Auriga stated that there are two or three major indexes that the industry uses to set prices, including PCI, ICIS, and Chem Data.[12] *** reported that its contracts are generally tied to a formula that reflects raw material price changes, ***. Auriga stated that its price negotiations often take into account raw material cost fluctuations through mechanisms that can be adjusted monthly, but that it is not locked into a sales price independent of cost changes.[13] Among importers, *** reported that there is a direct correlation between raw material prices and the price of fine denier PSF.

Purchasers were asked a series of questions regarding the role of raw material costs in their purchases of fine denier PSF. First purchasers were asked whether their purchases were

[12] Conference transcript, p. 65 (Ruday, Brekovsky). ICIS, PCI, and Chemical Data conduct market research and analysis related to the plastics, petrochemical and/or petroleum industries, including supply and demand analyses and price trend data in the U.S. and Asian markets for ethylene glycol, PTA, and/or synthetic (polyester) fibers. See ICIS website, https://www.icis.com/chemicals/ethylene-glycol/ and https://www.icis.com/chemicals/terephthalic-acid/; PCI website, https://www.pciwoodmac.com/pci-wood-mackenzie/fibres/synthetic-fibres-index/; and Chemical Data website, http://www.chemicaldata.com/petrocoverage.html, retrieved December 19, 2017.

[13] Conference transcript, p. 29 (Brekovsky).

indexed to raw material costs or indices; 15 firms reported that they were, while 23 reported that they were not. Among the firms responding in the affirmative, most indicated that prices were based on average MEG and PTA prices, with three firms mentioning PCI as the index used by domestic producers. A number of firms also noted that the price for the fine denier PSF they purchase is based on the raw material cost plus a conversion cost.

Several firms also commented on the role of raw materials in fine denier PSF price changes. As noted above, a number of these firms stated that DAK and Nan Ya often cite raw material cost increases as justifications for fine denier PSF price increases. Two firms also stated that fine denier PSF price changes generally are based on raw material prices.

Transportation costs to the U.S. market

Transportation costs for fine denier PSF shipped from each of the subject countries to the United States during 2016 averaged 8.7 percent for China, 2.9 percent for India, 7.2 percent for Korea, and 9.6 percent for Taiwan. These estimates were derived from official import data and represent the transportation and other charges on imports.[14]

U.S. inland transportation costs

Most responding U.S. producers (4 of 5) and importers (12 of 15) reported that they typically arrange transportation to their customers. U.S. producers reported that their U.S. inland transportation costs ranged from 1.9 to 3.5 percent, while importers reported costs of 0.3 to 6.0 percent. U.S. importers reporting purchases for internal consumption estimated U.S. inland transportation costs for such products ranging from 1.7 to 6.6 percent.

PRICING PRACTICES

Pricing methods

As presented in table V-1, most U.S. producers sell via transaction-by-transaction negotiations and contracts. The vast majority of importers also sell via transaction-by-transaction negotiations, while just under half (8 of 17) reported selling through contracts.

[14] The estimated transportation costs were obtained by subtracting the customs value from the c.i.f. value of the imports for 2016 and then dividing by the customs value based on the HTS subheading 5503.20.0025.

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

Method	U.S. producers	Importers
Transaction-by-transaction	4	15
Contract	3	8
Set price list	---	---
Other	2	4
Responding firms	5	17

[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.

Some firms also reported using other methods to set prices. U.S. producer *** reported using a raw material price formula to set its fine denier PSF prices, and *** reported that its pricing is product dependent and is adjusted based on raw material prices and market conditions. Among importers, *** reported setting prices based on "margin over replacement cost;" *** reported using quarterly or biannual price agreements; and *** reported using PET bottle flake prices to help negotiate its fine denier PSF prices.

U.S. producers and importers reported selling similar amounts (just under half) in the spot market in 2016 (table V-2). The majority of U.S. producers' contract sales were through annual contracts in 2016, while over a third of subject imports sold via short-term contract, with about half as much being sold via long-term contract. *** U.S. producers reported selling via long-term contract and *** importers reported selling via annual contract in 2016.

Table V-2
Fine denier PSF: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2016

Type of sale	U.S. producers	Importers
Long-term contracts	***	***
Annual contracts	***	***
Short-term contracts	***	***
Spot sales	***	***
Total	100.0	100.0

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

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

Three purchasers reported that they purchase product daily, 10 purchase weekly, 19 purchase monthly, and 5 purchase quarterly. Most responding purchasers (29 of 36) reported that their purchasing frequency had not changed since 2014. Among firms reporting a change in frequency, three reported increasing their frequency and the others reported either decreasing or varying their purchase frequencies. Two purchasers also contact only one supplier before making a purchase, 9 purchasers contact up to two suppliers, 11 contact up to three suppliers, 6 contact up to four, and 6 contact up to five. One purchaser reported contacting up to eight suppliers before making a purchase, and one reported contacting up to thirteen suppliers.

Contracts

Two of four responding U.S. producers reported that their annual contracts include price renegotiation and all three responding U.S. producers reported that contracts do not include meet-or-release provisions, one producer fixes quantity in its annual contracts, and one fixes both price and quantity. Three U.S. producers reported selling via short-term contract at some point since 2014; ***. U.S. producers reported average short-term contract durations of 30-90 days.

Most responding importers reported that their short-term contracts do not contain price renegotiation or meet-or-release provisions, and they fix both quantity and price. Most importers reported that their average short-term contract durations are between 45 and 90 days. The sole firm that reported contract provisions for its long-term contracts reported that ***.

U.S. producers and importers were also asked if their contracts set prices based on a comparison to raw material costs or price indexes. Three of four responding U.S. producers reported that they do, while 4 of 17 importers reported that they do and 14 reported that they do not.[15] *** reported basing its contract prices on raw material prices published by ***, and *** reported basing them on *** PTA and MEG plus a conversion cost, ***. *** reported basing its contract prices on movements in PET feed stock prices; *** reported basing them on the cost to the firm plus a profit margin; and *** reported basing ***.

Additionally, purchasers were asked whether they have contracts with any of their customers that set prices for post-consumer recycled PSF, short cut PSF, siliconized PSF, black or other colored PSF and/or certain other fine denier PSF, in whole or in part, based on raw material costs. Four (of 36) responding purchasers reported that they did, while the other 32 reported that they did not. Among the four firms responding in the affirmative, *** reported that only its short cut fine denier PSF references the PCI index for PET 1.2/1.5 denier and natural gas through Nymex or Henry Hub; *** reported that it follows the index price for baled bottles; *** reported that "fine denier PSF is predominantly tied to the CDI index;" and *** reported that it uses the "PPI for MEG."

Negotiations

Firms were also asked a series of questions regarding the role of negotiations in their sales and purchases of fine denier PSF. First, U.S. producers and importers were asked if their sales usually involve negotiations with the purchaser; all five producers and the majority (13 of 17) importers reported that they do. Among purchasers, the large majority (30 of 37 firms) reported that their purchases usually involve negotiations. Next, U.S. producers and importers were asked if purchasers sometimes quote competing prices during negotiations; a majority of

[15] One firm, ***, responded both 'yes' and 'no.'

responding firms (4 of 5 producers and 9 of 15 importers) reported that they do.[16] Among purchasers, however, most firms (20 of 32) reported that they do not quote competing prices during negotiations. Finally, purchasers were asked whether changes in raw material costs affect price negotiations with their suppliers. Twenty-eight purchasers reported that they do, and 9 reported that they do not.[17] Among the firms reporting in the affirmative, a number of firms indicated that when raw material prices drop, they will either negotiate lower fine denier PSF prices or expect their supplier to lower prices. Some firms also reported that suppliers sometimes cite raw material cost increases as justifications for increasing the price of their fine denier PSF.

Sales terms and discounts

Most firms reported typically quoting prices on a delivered basis. Three of 5 U.S. producers and 10 of 15 importers reported quoting prices on a delivered basis, while 2 U.S. producers and 7 importers reported quoting prices on an f.o.b. basis. All five U.S. producers reported sales terms of net 30 days, and one also reported sales terms of net 45 days due net 38 days end of the month. Most responding importers (13 of 17) reported sales terms of net 30 days, while six reported sales terms of net 60 days. One importer also reported sales terms of 30 percent prepayment with the balance due on presentation of shipping documents, and another reported sales terms of an average of 45 days.

Most U.S. producers (3 of 5) reported offering discounts of some kind, while most importers (14 of 17) reported no specific discount policy. Specifically, 3 U.S. producers offer quantity discounts and 3 offer total volume discounts, while 2 importers offer quantity discounts and 2 offer total volume discounts. One importer also reported offering trial discounts to new customers and for new products, and one reported offering discounts on customer or program level pricing as well as distributor discounts.

Price leadership

Twenty-two purchasers identified specific supplier firms as price leaders in the fine denier PSF market. Twelve firms named DAK; the most common explanation for DAK's price leadership was that it offers competitive pricing and often announces prices increases first. Six purchasers named Nan Ya as a price leader; several of these firms stated that Nan Ya (along with DAK) is among the first to announce price increases, and when one of these firms announces increases, the rest of the industry follows. Two purchasers named William Barnet as

[16] Auriga testified that its customers use offers of lower-priced imports as leverage in sales and contract negotiations. Hearing transcript, p. 29 (Brekovsky).

[17] Auriga testified that its price negotiations generally take into account raw material cost fluctuations that can be adjusted on a monthly basis. Hearing transcript, p. 31 (Brekovsky). DAK stated that most negotiations involve its "adder" or "conversion cost" above the raw material prices. Hearing transcript, p. 54 (Ruday).

a price leader, and one purchaser each named the following firms: Auriga, David Poole, Fiberquest, Indorama, Palmetto, RSM, and Stein Fibers. One firm also named four Chinese producers (Hua Hong, Huaxi, Sanfangxiang, and Sinopec) as price leaders, stating that they benefit from economies of scale. Another firm stated that "far eastern manufacturers" generally are price leaders.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. or landed duty paid value for the following fine denier PSF products shipped to unrelated U.S. customers or internally consumed during January 2014-September 2017:

Product 1.--Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 0.85 denier to less than 1.15 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier.

Product 2.--Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 1.15 denier through and including 1.8 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier.

Product 3.--Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring 1.15 denier through and including 1.8 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring 3.0-5.0 grams per denier.

Product 4.--Virgin polyester staple fiber, excluding siliconized and black or other colored fiber, measuring greater than 1.8 denier and less than 3.0 denier, solid and round cross section, dry, 32-38mm cut length, with tenacity measuring above 5.0 grams per denier.

Three of the 5 responding U.S. producers and 12 of the 29 responding importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.[18] [19] Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' shipments of fine denier PSF in 2016, as well as

[18] 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.

[19] ***. Accordingly, these data have not been included in this pricing analysis.

*** percent of shipments of subject imports from China, *** percent of shipments of subject imports from India, and *** percent of shipments of subject imports from Korea. No importer reported price data for their commercial sales of imports from Taiwan.

Price data for products 1-4 are presented in tables V-3 to V-6 and figures V-3 to V-6.

Table V-3
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarter, January 2014-September 2017

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Table V-4
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarter, January 2014-September 2017

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Table V-5
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarter, January 2014-September 2017

* * * * * * *

Table V-6
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 4 and margins of underselling/(overselling), by quarter, January 2014-September 2017

* * * * * * *

Figure V-3
Fine denier PSF: Weighted-average prices and quantities of domestic and imported product 1, by quarter, January 2014-September 2017

* * * * * * *

Figure V-4
Fine denier PSF: Weighted-average prices and quantities of domestic and imported product 2, by quarter, January 2014-September 2017

* * * * * * *

Figure V-5
Fine denier PSF: Weighted-average prices and quantities of domestic and imported product 3, by quarter, January 2014-September 2017

* * * * * * *

Figure V-6
Fine denier PSF: Weighted-average prices and quantities of domestic and imported product 4, by quarter, January 2014-September 2017

* * * * * * *

Import purchase cost data

Ten importers provided usable import purchase cost data for their internal use of products 1, 2, and 3 imported from China and products 2 and 3 imported from Taiwan, although not all firms report cost data for all quarters.[20] [21] Import purchase cost data reported by these firms accounted for approximately *** percent of reported imports from China and *** percent of reported imports from Taiwan in 2016.[22] Import purchase cost data is presented in tables V-7 to V-9 and figures V-7 to V-9.

In addition to the import purchase cost data, firms were asked to estimate a variety of costs associated with their imports for internal use, including inland transportation costs and a variety of other additional costs.[23] Firms reported the following estimates (as a share of landed duty-paid value) for the following factors: logistical or supply chain costs, 0.3 to 8.0 percent; warehousing costs, 0.5 to 1.9 percent; and additional non freight-related insurance costs, less than 0.1 to 0.5 percent.[24] Two firms reported other additional costs: *** reported a cost of 0.5 percent for "harbor mtc/broker/processing fee{s}," and *** reported a cost of 3.0 percent for "buying commissions."

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[20] No firm reported import purchase cost data for product from India or Korea; nor did any firm report internally consuming fine denier PSF imported from India or Korea. No firm reported import purchase cost data for product 1 from Taiwan, and no firm reported import purchase cost data for product 4 from any of the subject countries.

[21] Importer *** initially reported import purchase cost data for products 1 and 2 from China but indicated that 100 percent of this material was siliconized. Accordingly, these data have not been included in this analysis.

[22] As a share of total reported imports, internally consumed and/or transferred fine denier PSF represented approximately *** percent of total imports from China and *** percent of total imports from Taiwan in 2016.

[23] Petitioners argue that "landed duty-paid values at U.S. imports that the importers reported are at the exact same level {of trade} as the U.S. f.o.b. plant prices reported by U.S. producers," but that adjusting the direct import costs to include the additional reported costs still results in underselling by importers. Hearing transcript, pp. 40, 52-53 (Cannon). Petitioners' prehearing brief, pp. 24-25, 28-30.

[24] Firms were also asked to report on any additional currency conversion costs and additional non-brokerage-related fees, but no firm reported incurring such costs.

Two importers reported that they compare import purchase costs to U.S. producers' prices, two reported that they compare these costs to other importers' prices, and seven reported that they compare these costs to both U.S. producers' and other importers' prices. Two firms also reported that they do not compare import purchase costs to either U.S. producers' or other importers' prices. When these firms were asked whether they also purchase fine denier PSF from a U.S. producer, 12 of 17 reported that they do.

In general, firms stated that the benefits of importing fine denier PSF for their own internal use included the following: cost savings (***); risk mitigation against domestic supply shortages/disruptions (***); quality control (***); lack of domestic supply (***); availability (***); direct control over shipping and warehousing (***); planning for specific product demand (***); and efficiency of service, timely price quotes, and innovation (***). Firms estimated that the margin saved by directly importing fine denier PSF for their own use ranged from 2.0 percent to 24.7 percent, with variations since January 1, 2014 due to fluctuations in the price of the feedstock (notably PTA), as well as changes in freight costs, handling costs, and fuel costs.

Table V-7
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 1,[1] by quarter, January 2014-September 2017

* * * * * * *

Table V-8
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 2,[1] by quarter, January 2014-September 2017

* * * * * * *

Table V-9
Fine denier PSF: Weighted-average f.o.b. prices and quantities of domestic and landed duty paid costs of imported product 3,[1] by quarter, January 2014-September 2017

* * * * * * *

Figure V-7
Fine denier PSF: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 1,[1] by quarter, January 2014-September 2017

* * * * * * *

Figure V-8
Fine denier PSF: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 2,[1] by quarter, January 2014-September 2017

* * * * * * *

Figure V-9
Fine denier PSF: Weighted-average prices and quantities of domestic and landed duty paid costs of imported product 3,[1] by quarter, January 2014-September 2017

* * * * * * *

Price trends

Prices decreased during January 2014-September 2017. Table V-10 summarizes the price trends, by product and by country. As shown in the table, domestic price decreases ranged from *** percent (for product ***) to *** percent (for product ***) between January 2014 and September 2017. Import price decreases during this time ranged from *** percent (for product *** from ***) to *** percent (for product *** from ***).

Import purchase costs decreased as well, with decreases ranging from *** percent (for product *** from ***) to *** percent (for product *** from ***).

Table V-10
Fine denier PSF: Summary of weighted-average f.o.b. prices and landed duty paid costs for products 1-4 from the United States and each subject country

* * * * * * *

Price comparisons

As shown in table V-11, prices for fine denier PSF imported from all subject countries combined were below those for U.S.-produced product in 22 instances (*** pounds); margins of underselling ranged from 0.7 to 18.2 percent. In the remaining 55 instances (*** pounds), prices for fine denier PSF imported from subject countries were between 0.1 and 216.1 percent above prices for the domestic product.

On an individual country basis, China, India, and Korea all had more quarterly instances of overselling than underselling. There was no pricing data reported for imports from Taiwan.

Table V-11
Fine denier PSF: Instances of underselling/overselling and the range and average of margins, by country, January 2014-September 2017

Country Source	Underselling				
	Number of quarters	Quantity[1] (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
China	16	***	***	***	***
India	5	***	***	***	***
Korea	1	***	***	***	***
Taiwan	---	---	---	---	---
Total, underselling	22	***	***	0.7	18.2
Country Source	**(Overselling)**				
	Number of quarters	**Quantity[1] (pounds)**	**Average margin (percent)**	**Margin range (percent)**	
				Min	**Max**
China	44	***	***	***	***
India	8	***	***	***	***
Korea	3	***	***	***	***
Taiwan	---	---	---	---	---
Total, overselling	55	***	***	(0.1)	(216.1)

[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.

On a pricing product basis, all four pricing products oversold U.S.-produced product in a majority of instances (table V-12).

Table V-12
Fine denier PSF: Instances of underselling/overselling and the range and average of margins, by pricing product, January 2014-September 2017

Product	Underselling				
	Number of quarters	Quantity[1] (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Product 1	---	---	---	---	---
Product 2	12	***	***	***	***
Product 3	2	***	***	***	***
Product 4	8	***	***	***	***
Total, underselling	22	***	***	0.7	18.2
Product	**(Overselling)**				
	Number of quarters	**Quantity[1] (pounds)**	**Average margin (percent)**	**Margin range (percent)**	
				Min	**Max**
Product 1	15	***	***	***	***
Product 2	18	***	***	***	***
Product 3	13	***	***	***	***
Product 4	9	***	***	***	***
Total, overselling	55	***	***	(0.1)	(216.1)

[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.

When comparing direct import purchase costs with domestic prices, the cost of imports from China were lower than domestic prices in ***, and the cost of imports from Taiwan were lower than domestic prices in ***. In the remaining ***.

LOST SALES AND LOST REVENUE

In the preliminary phase of these investigations, the Commission requested that U.S. producers of fine denier PSF report purchasers where they experienced instances of lost sales or revenue due to competition from imports of fine denier PSF from China, India, Korea, and/or Taiwan during January 2014-June 2017. Two U.S. producers submitted lost sales and lost revenue allegations. The two responding U.S. producers identified 12 firms where they lost sales or revenue (6 consisting lost sales allegations, 1 consisting of a lost revenue allegation, and 5 consisting of both types of allegations). The majority of the allegations were with respect to China, with relatively few regarding India, Korea, or Taiwan. The allegations were primarily for sales and/or revenue lost during 2016 and early 2017, and the specific products listed were 0.9 denier, 1.2 denier, 1.5 denier, and 2.35 denier fabric.

In the final phase of these investigations, all of the five responding firms reported that they had lost sales. All five firms also reported that they had to reduce prices, and four reported that they had to roll back announced price increases.

Staff sent questionnaires to 91 purchasers and received questionnaire responses from 37 purchasers. Responding purchasers reported purchasing and/or importing for their own

internal use approximately 542 million pounds of fine denier PSF during 2016 (tables V-13 and V-14).

Of the responding purchasers, 23 of 36 firms reported that they had purchased imported fine denier PSF from China, India, Korea, and/or Taiwan instead of U.S.-produced product since 2014, while 13 reported that they had not. On a country-by-country basis, 15 firms reported that they purchased product imported from China instead of U.S.-produced product (20 reported that they had not); 7 purchased product imported from India instead of U.S.-produced product (26 did not); 9 purchased product imported from Korea instead of U.S.-produced product (24 did not); and 2 purchased product imported from Taiwan instead of U.S.-produced product (29 did not).[25]

Fifteen of 22 responding purchasers identified at least one country for which subject import prices were lower than U.S.-produced product (tables V-15 and V-16). On a country-by-country basis, 10 of 15 purchasers reported that prices of product from China were lower than U.S.-produced product, 4 of 7 reported that product from India was lower-priced than U.S.-produced product, half (5 of 10) reported that product from Korea was lower-priced, and no firms (out of 4 responding) reported that product from Taiwan was lower-priced. As to whether price was a primary reason for purchasing fine denier PSF imported from subject sources instead of U.S.-produced product, 7 of 15 firms reported that price was a primary reason with regard to product from China (10 reported that it was not);[26] 2 of 7 reported that it was with regard to product from India (5 reported that it was not); 3 of 9 reported that it was with regard to product from Korea (6 reported that it was not); and 1 of 4 reported that it was with regard to product from Taiwan (3 reported that it was not).

Eleven purchasers estimated the quantity of fine denier PSF from subject countries purchased instead of domestic product; quantities ranged from 50 thousand pounds (for product from ***) to 14.3 million pounds (for product from ***), for a total of 36.7 million pounds (table V-15). A number of purchasers also identified non-price reasons for purchasing fine denier PSF imported from subject countries rather than U.S.-produced product. A number of firms cited a lack of availability of some niche products or general supply issues: *** stated that there is a lack of availability of short-cut PSF from domestic producers; *** stated that product offered by Korea is not available from domestic producers; *** stated that it was not aware of product made from recycled inputs being available from domestic producers; *** stated that it did not believe there to be domestic availability for the product it purchases from overseas; *** indicated that the availability of black product is inadequate from domestic

[25] In their posthearing briefs, parties offered differing explanations for why purchasers purchased subject imports instead of domestic product. Petitioners attributed such purchasing decisions to price, whereas Chinese respondents attributed such purchasing decisions to availability. Petitioners' posthearing brief, answers to questions, pp. 26-30; Chinese respondents' posthearing brief, p. 7 and attachments C, D, and E.

[26] Two firms responded both 'yes' and 'no' to this question. *** stated that rPET from China is the only known material meeting supply chain attributes, and *** reported that in addition to price being a primary reason, quality/performance was a criteria on a few fine denier sewing threads.

sources, and that natural colored product experienced supply shortfalls; *** identified increasing prices and supply issues from domestic producers (i.e. being put on allocation) that drove it to purchase imported product from China in 2015; and *** stated that supply rationing and subsequent product homogeneity issues from DAK in 2015 led it to source from China. Other non-price reasons related to product characteristics or quality differences: *** stated that there were some quality/performance criteria on some fine denier sewing threads that were more suitable from subject sources; *** stated that there was better supply and innovation from subject countries; *** indicated that the subject imported product simply met its specifications and worked in its equipment; *** stated that it purchased subject imported product instead of domestically produced product due to product characteristics; and *** stated that "rPET from China is the only known material meeting supply chain attributes," and that its purchases from Taiwan of cobalt-free product were specified by a customer.

Of the 37 responding purchasers, 5 reported that U.S. producers had reduced prices in order to compete with lower-priced imports from China, India, Korea, and/or Taiwan; 9 purchasers reported that U.S. producers had not reduced prices in order to compete with subject imports, and 23 reported that they did not know (table V-17). The reported estimated price reductions ranged from 3.0 to 10.0 percent, *** (tables V-17 and V-18). In describing the price reductions, *** reported that oil prices have declined and the market for textiles is weak and so there is not much demand for fiber, and *** reported that it was able to secure domestic price reductions in return for long term, minimum volume purchase commitments.

Table V-13
Fine denier PSF: Purchasers' responses regarding purchasing patterns, by firm

Purchaser	Purchases and imports in 2016 (pounds)			Change in domestic share[2] (pp, 2014-16)	Change in subject country share[2] (pp, 2014-16)
	Domestic	Subject	All other[1]		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	323,761,343	187,313,030	30,879,019	(19.2)	17.0

[1] Includes all other sources and unknown sources.
[2] Percentage points (pp) change: Change in the share of the firm's total purchases of domestic and/or subject country imports between first and last years.

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

Table V-14
Fine denier PSF: Purchasers' responses regarding purchasing patterns, by country

Source	Number of firms reporting data	Purchases and imports					
		2014	2015	2016	2014-16	2014-15	2015-16
		Quantity (pounds)			Percentage change (percent)		
U.S. purchases and/or imports.-- United States	31	422,144,135	389,925,111	323,761,343	(23.3)	(7.6)	(17.0)
China	***	***	***	***	***	***	***
India	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***
Subject sources	32	93,707,858	142,649,102	187,313,030	99.9	52.2	31.3
All other sources	***	***	***	***	***	***	***
Known import sources	***	***	***	***	***	***	***
Unknown sources	***	***	***	***	***	***	***
All sources	37	534,840,817	567,563,016	541,953,392	1.3	6.1	(4.5)

Source	Number of firms reporting data	Purchases and imports					
		2014	2015	2016	2014-16	2014-15	2015-16
		Share of total (percent)			Percentage point change (percentage points)		
U.S. purchases and/or imports.-- United States	31	78.9	68.7	59.7	(19.2)	(10.2)	(9.0)
China	***	***	***	***	***	***	***
India	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***
Subject sources	32	17.5	25.1	34.6	17.0	7.6	9.4
All other sources	***	***	***	***	***	***	***
Known import sources	***	***	***	***	***	***	***
Unknown sources	***	***	***	***	***	***	***
All sources	37	100.0	100.0	100.0	---	---	---

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

Table V-15
Fine denier PSF: Purchasers' responses to purchasing subject imports instead of domestic product, by firm

Purchaser	Purchased imports instead of domestic (Y/N)	Imported product priced lower (Y/N)	If purchased imports instead of domestic, was price a primary reason		
			Y/N	If Yes, quantity purchased instead of domestic (pounds)	If No, non-price reason
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
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***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Total	Yes--23; No--13	Yes--15; No--7	Yes--11; No--9	36,668,940	---

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

Table V-16
Fine denier PSF: Purchasers' responses to purchasing subject imports instead of domestic product, by subject country

Source	Count of purchasers reporting subject instead of domestic	Count of purchasers reporting that imports were priced lower	Count of purchasers reporting that price was a primary reason for subject instead of domestic	Quantity (pounds)
China	15	10	7	***
India	7	4	2	***
Korea	9	5	3	***
Taiwan	2	---	1	***
Any subject source	23	15	11	36,668,940

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

Table V-17
Fine denier PSF: Purchasers' responses to U.S. producers' price reductions, by firm

Purchaser	U.S. producers reduced priced to compete with subject imports (Y/N)	If U.S. producers reduced prices	
		Estimated U.S. price reduction (percent)	Additional information, if available
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
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***	***	***	***
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***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***

Table continued on next page.

Table V-17--Continued
Fine denier PSF: Purchasers' responses to U.S. producers' price reductions, by firm

***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
***	***	***	***
Total / average	Yes--5; No—9; Don't Know-–23	7.0	---

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

Table V-18
Fine denier PSF: Purchasers' responses to U.S. producers' price reductions, by subject country

Source	Count of purchasers reporting U.S. producers reduced prices	Simple average of estimated U.S. price reduction (*percent*)	Range of estimated U.S. price reductions (*percent*)
China	***	***	***
India	***	***	***
Korea	***	***	***
Taiwan	***	***	***
All subject sources	5	7.0	3.0 – 10.0

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

Some purchasers also provided additional comments: *** stated that it has never been offered domestic product for the *** that it purchases from wholesalers; *** stated that it did not purchase from one source "instead of" another source, but maintains multiple supply sources (whether domestic or foreign) in order to avoid supply disruptions; *** reported that due to constraints in capacity and fiber grades among domestic producers, particularly in the nonwoven segment of the market, imports are needed to meet the demand of its customer; *** stated that black, short cut, and siliconized fine denier PSF products are not readily available from domestic producers; *** reported that black fiber is largely unavailable domestically; and *** reported that the domestic market has not adequately served the U.S. market due to shut-downs and quality issues.

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Four U.S. producers (Auriga, DAK Americas, Nan Ya, and Palmetto) provided financial data on their operations on fine denier PSF.[1] *** accounted for the majority of total net sales value in 2016 (*** percent), followed by *** (*** percent), *** (*** percent), and *** (*** percent). No firm reported sales other than commercial sales, and all firms reported a fiscal year end of December 31. Three U.S producers (***) reported their financial data based on U.S. generally accepted accounting principles (GAAP) whereas *** used international financial reporting standards (IFRS) as its accounting basis.

Staff verified the financial data reported in ***' U.S. producers' questionnaire with its accounting records. The verification adjustments were incorporated into this report. ***.

OPERATIONS ON FINE DENIER POLYESTER STAPLE FIBER

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

Net sales

Based on table VI-1, the quantity and value of net sales decreased from 2014 to 2016 and were higher in January-September 2017 compared to January-September 2016.[2] As shown in table VI-3, ***.

From 2014 to 2016, the average unit net sales value decreased by *** percent from $*** per pound in 2014 to $*** pound unit in 2016 but was higher by *** percent from $*** per pound in January-September 2016 to $*** per pound in January-September 2017. As shown in table VI-3, ***. Between the comparable interim periods, *** reported lower unit net sales values while *** reported higher unit net sales values.[3] ***.[4]

[1] *** did not provide any financial data for these investigations. Based on reported total shipment data, the firm would represent approximately *** percent of total net sales quantity and *** percent of total net sales value in 2016.

[2] As a result of verification, ***.

[3] ***. Email from ***, December 19, 2017. *** Email from ***, June 30, 2017.

[4] ***. Emails from ***, July 6, 2017.

Table VI-1
Fine denier PSF: Results of operations of U.S. producers, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

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

* * * * * * *

Table VI-3
Fine denier PSF: Select results of operations of U.S. producers, by company, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Cost of goods sold and gross profit or (loss)

As shown in table VI-1, the average COGS to net sales ratio ranged from *** percent in 2015 to *** percent in 2016. On a company-specific basis, ***.[5]

Raw material costs represented the largest component of COGS, accounting for between *** percent in January-September 2016 and *** percent in 2014 of total COGS. As shown in table VI-3, the average unit raw material cost decreased by *** percent from $*** in 2014 to $*** in 2016 and was higher by *** percent from January-September 2016 to January-September 2017.[6] [7] *** reported decreasing unit raw material costs from 2014 to 2016 and higher unit raw material costs in January-September 2017 compared to January-September 2016. ***.[8]

Other factory costs ("OFC") were the second largest component of COGS, accounting for between *** percent (in 2014) and *** percent (in January-September 2017) of total COGS, while direct labor accounted for between *** percent (in 2014) and *** percent (in 2016) of

[5] ***. Email from ***, June 29, 2017.

[6] DAK Americas testified that "Our primary raw materials are monoethylene glycol or MEG and purified terephthalic acid or PTA which are both petrochemical base products. It's no secret that the bottom dropped out of the energy sector in 2015 leading to a significant decline in cost for us and other fine denier producers. But we could not take advantage of those lower costs instead our prices fell even faster than cost because we had to compete with the low price of surging subject imports." Conference transcript, p. 19 (Ruday).

[7] Raw material costs include MEG, PTA, and other raw materials. PTA, MEG, and other raw materials accounted for ***, respectively, of total raw material costs in 2016. From 2014 to 2016, per-unit PTA *** percent, per-unit MEG *** percent, and per-unit other raw material costs *** percent. Between the comparable interim periods, PTA was *** percent, MEG was *** percent, and other raw materials were *** percent. See also footnote 1 of table VI-1 in this section on page VI-4.

[8] U.S. producers' questionnaire responses of ***, question III-7.

total COGS.[9] As shown in table VI-3, the average unit OFC moved within a relatively narrow range from $*** (in 2016 and January-September 2016) to $*** (in 2014, 2015, and January-September 2017). *** reported the *** unit OFC and unit direct labor costs among U.S. producers throughout the period of investigation, as well as the highest unit net sales value.[10]

The industry's gross profit increased from $*** in 2014 to $*** in 2015 and decreased to $*** in 2016. The decline in total net sales value was greater than the decline in COGS from 2014 to 2016. Gross profit improved from $*** in January-September 2016 to $*** in January-September 2017 as total net sales value increased more than COGS. On a company-specific basis, ***. From 2015 to 2016, all U.S. producers reported ***. ***.[11]

SG&A expenses and operating income or (loss)

As shown in table VI-1, the industry's SG&A expense ratio (i.e., total SG&A expenses divided by total net sales value) ranged from *** percent in 2014 to *** percent in January-September 2016.

Operating income followed the same trend as gross profit. The industry's operating income increased from $*** in 2014 to $*** in 2015 and decreased to $*** in 2016. Operating income improved from $*** in January-September 2016 to $*** in January-September 2017. On a company-specific basis, ***.

Other expenses and net income or (loss)

Classified below the operating income levels are interest expense, all other expense, and all other income, which are usually allocated to the product line from high levels in the corporation.[12] Interest expenses accounted for the majority of other expenses and decreased from $*** in 2014 to $*** in 2015, before increasing to $*** in 2016. Interest expenses were higher in January-September 2017 compared to January-September 2016. ***.

By definition, items classified at this level in the income statement only affect net income or (loss). Net income increased from $*** in 2014 to $*** in 2015 before decreasing to $*** in 2016. Net income improved from $*** in January-September 2016 to $*** in January-September 2017.

[9] As a result of verification, ***.
[10] According to ***. Emails from ***, July 6, 2017.
[11] ***. Email from ***, December 19, 2017.
[12] ***. Email from ***, December 14, 2017.

Variance analysis

The variance analysis presented in table VI-4 is based on the data in table VI-1.[13] The analysis shows that the decline in operating income from 2014 to 2016 is primarily attributable to ***. Between the comparable interim periods, the higher operating income in January-September 2017 is primarily attributable to ***.

Table VI-4
Fine denier PSF: Variance analysis for U.S. producers, between fiscal years and between partial year periods

* * * * * * *

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-5 presents capital expenditures and research and development ("R&D") expenses by firm. Capital expenditures increased by *** percent from 2014 to 2016 and were lower in January-September 2017 compared to January-September 2016. As shown in table VI-5, ***.[14] ***.[15] ***.[16] ***.[17]

R&D expenses decreased by *** percent from 2014 to 2016 and were lower in January-September 2017 compared to January-September 2017. As shown in table VI-5, ***.[18]

Table VI-5
Fine denier PSF: Capital expenditures and research and development expenses for U.S. producers, by firm, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

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

[14] U.S. producers' questionnaire response of ***, question III-15.

[15] U.S. producers' questionnaire response of ***, question III-15.

[16] U.S. producers' questionnaire response of ***, question III-15.

[17] Emails from ***, July 6, 2017.

[18] Ibid.

ASSETS AND RETURN ON ASSETS

Table VI-6 presents data on the U.S. producers' total assets and their operating return on assets.[19] Total assets decreased irregularly from $*** in 2014 to $*** in 2016.[20] The return on assets also decreased irregularly from *** percent in 2014 to *** percent in 2016.

Table VI-6
Fine denier PSF: Value of assets used in production, warehousing, and sales, and return on assets for U.S. producers by firm, 2014-16

* * * * * * *

CAPITAL AND INVESTMENT

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

Table VI-7
Fine denier PSF: Actual and anticipated negative effects of imports on investment and growth and development

* * * * * * *

Table VI-8
Fine denier PSF: Narratives relating to actual and anticipated negative effects of imports on investment and growth and development, since January 1, 2014

* * * * * * *

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

[20] As a result of verification, ***.

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

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

THE INDUSTRY IN CHINA

The Commission issued foreign producers' or exporters' questionnaires to 60 firms believed to produce and/or export fine denier PSF from China.[3] Usable responses to the Commission's questionnaire were received from four firms: Hailun Chemical, Huahong Chemical, Jiangsu Huaxicun Co., Ltd. ("Huaxicun"), and Jiangyin Jinyan Chemical Fiber Co., Ltd. ("Jinyan Chemical"). These firms' exports to the United States accounted for approximately *** percent of U.S. imports of fine denier PSF from China in 2016. According to estimates requested of the responding Chinese producers, the production of fine denier PSF in China reported in questionnaires accounts for approximately all production of fine denier PSF in China. Table VII-1 presents information on the fine denier PSF operations of the responding producers and exporters in China.

Table VII-1
Fine denier PSF: Summary data on firms in China, 2016

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)
Hailun Chemical	***	***	***	***	***	***
Huahong Chemical	***	***	***	***	***	***
Huaxicun	***	***	***	***	***	***
Jinyan Chemical	***	***	***	***	***	***
Total	3,069,101	100.0	***	100.0	3,148,686	***

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

Changes in operations

As presented in table VII-2, one producer in China reported changes in operations since January 1, 2014.

Table VII-2
Fine denier PSF: Reported changes in operations by producers in China, since January 1, 2014

* * * * * * *

[3] These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records. Staff issued questionnaires to all Chinese producers for which an email address or a fax number was provided.

Operations on fine denier PSF

Table VII-3 presents information on the fine denier PSF operations of the responding producers and exporters in China. Chinese producers' production capacity stayed roughly steady at 3.2 billion pounds from 2014 to 2016, with no projected changes in 2017 or 2018. Chinese producers' total production increased from 2.7 billion pounds in 2014 to 3.1 billion pounds in 2016, an increase of 14.2 percent. Total production was 1.2 percent higher in interim 2017 than in interim 2016. Production is projected to increase by 2.2 percent in 2017, but decrease by 0.7 percent from 2017 to 2018.

Chinese producers' home market shipments increased from 2.0 billion pounds in 2014 to 2.3 billion pounds in 2016, an increase of 20.0 percent. Home market shipments were 1.3 percent higher in interim 2017 than in interim 2016. Home market shipments are projected to decrease by 3.0 percent in 2017 and remain mostly unchanged from 2017 to 2018. Home market shipments accounted for 73.2 percent to 74.5 percent of total shipments during 2014-2016.

From 2014 to 2016, Chinese producers' export shipments to the United States increased from *** pounds to *** pounds, an increase of *** percent. They were *** percent less in interim 2017 than in interim 2016. Overall, Chinese export shipments were largely destined for non-U.S. markets, which accounted for *** percent to *** percent of total exports.

Export shipments to non-U.S. markets fluctuated from year to year, increasing from *** pounds in 2014 to *** pounds in 2016 for an overall increase of *** percent. They were *** percent lower in interim 2016 than in interim 2017. Export shipments to non-U.S. markets are projected to increase by *** percent in 2017 and decrease by *** percent from 2017 to 2018.

Chinese respondents China Chamber of Commerce for Import and Export of Textile and Apparel, Jiangsu Huaxicun Co., Ltd., Jiangyin Yangxi International Trade Co, Ltd., Jiangyin Hailun Chemical Fiber Co., Limited and Jiangyin Huahong Chemical Fiber Co., Limited ("Chinese Respondents") note that overall Chinese capacity to make polyester staple fiber products has declined in recent years, due to Chinese government policies which aim to use strict environmental regulations to force out dated companies and excess capacity.[4] Further, Chinese respondents note that demand is increasing for domestic virgin PSF in China due to various reasons, including government bans on the importation of recycled PET, and that Chinese PSF producers are focused on supplying the Chinese home market over export markets (which they note are primarily focused on Asia).[5]

[4] Chinese respondents posthearing brief, p. 12.

[5] Chinese respondents posthearing brief, pp. 13-14.

Table VII-3
Fine denier PSF: Data on industry in China, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

Item	Actual experience					Projections	
	Calendar year			January to September		Calendar year	
	2014	2015	2016	2016	2017	2017	2018
	Quantity (1,000 pounds)						
Capacity	3,180,022	3,180,022	3,172,091	2,375,180	2,375,180	3,172,091	3,172,091
Production	2,686,432	3,036,047	3,069,101	2,220,998	2,247,434	3,136,892	3,114,920
End-of-period inventories	114,737	144,508	64,923	126,156	93,590	91,519	107,701
Shipments:							
Home market shipments:							
Internal consumption/ transfers	497,428	604,546	545,001	502,444	544,297	500,000	500,000
Commercial home market shipments	1,457,425	1,635,151	1,799,877	1,103,525	1,082,550	1,773,547	1,771,989
Total home market shipments	1,954,853	2,239,697	2,344,878	1,605,969	1,626,847	2,273,547	2,271,989
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	717,139	766,579	803,808	633,382	591,920	841,852	832,200
Total shipments	2,671,992	3,006,276	3,148,686	2,239,351	2,218,767	3,115,399	3,104,189
	Ratios and shares (percent)						
Capacity utilization	84.5	95.5	96.8	93.5	94.6	98.9	98.2
Inventories/production	4.3	4.8	2.1	4.3	3.1	2.9	3.5
Inventories/total shipments	4.3	4.8	2.1	4.2	3.2	2.9	3.5
Share of shipments:							
Home market shipments:							
Internal consumption/ transfers	18.6	20.1	17.3	22.4	24.5	16.0	16.1
Commercial home market shipments	54.5	54.4	57.2	49.3	48.8	56.9	57.1
Total home market shipments	73.2	74.5	74.5	71.7	73.3	73.0	73.2
Export shipments to:							
United States	***	***	***	***	***	***	***
All other markets	***	***	***	***	***	***	***
Total exports	26.8	25.5	25.5	28.3	26.7	27.0	26.8
Total shipments	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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

Alternative products

As shown in table VII-4, responding Chinese firms produced a limited quantity of other products on the same equipment and machinery used to produce fine denier PSF. Chinese producers' overall production capacity remained steady from 2014 to in 2016, and also held steady between interim 2016 and interim 2017. *** out-of-scope production was reported for 2014 and 2015. Out-of-scope production on the same machinery was *** percent higher in interim 2017 than in interim 2016. Fine denier PSF accounted for *** percent to *** percent of total production on the same equipment and machinery during 2014-16.

Jiangyin Huahong noted that ***. Jiangsu Huaxicun and Jiangyin Hailun reported that ***.

Table VII-4
Fine denier PSF: Overall capacity and production on the same equipment as in-scope production by producers in China, 2014-16, January to September 2016, and January to September 2017

Item	Calendar year			January to September	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
Overall capacity	***	***	***	***	***
Production:					
Fine denier PSF	2,686,432	3,036,047	3,069,101	2,220,998	2,247,434
Coarse denier PSF	***	***	***	***	***
Low-melt PSF	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope products	***	***	***	***	***
Total production on same machinery	***	***	***	***	***
	Ratios and shares (percent)				
Overall capacity utilization	***	***	***	***	***
Share of production:					
Fine denier PSF	***	***	***	***	***
Coarse denier PSF	***	***	***	***	***
Low-melt PSF	***	***	***	***	***
Other products	***	***	***	***	***
Out-of-scope products	***	***	***	***	***
Total production on same machinery	***	***	***	***	***

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

Exports[6]

As presented in table VII-5, the leading export markets for polyester synthetic staple fibers from China are the United States, Indonesia, and Pakistan. During 2016, the United States was the top export market for polyester synthetic staple fibers from China, accounting for 20.5 percent of China's exports that year, followed by the Indonesia, accounting for 10.0 percent.

Table VII-5
Polyester staple fibers: Exports from China by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
Exports from China to the United States	364,582	458,892	454,410
Exports from China to other major destination markets.--			
Indonesia	133,618	115,607	222,397
Pakistan	264,252	265,321	182,707
India	127,134	154,467	151,154
Vietnam	79,945	87,637	146,834
Mexico	79,307	104,639	114,314
Israel	94,199	88,494	94,900
Russia	88,603	69,852	69,120
Brazil	81,065	69,614	68,684
All other destination markets	612,207	665,161	715,043
Total exports from China	1,924,913	2,079,684	2,219,563
	Value (1,000 dollars)		
Exports from China to the United States	180,685	199,613	179,561
Exports from China to other major destination markets.--			
Indonesia	77,558	53,853	90,559
Pakistan	147,072	116,988	72,897
India	72,274	70,040	61,671
Vietnam	49,713	43,841	64,471
Mexico	46,854	52,339	49,896
Israel	56,100	42,815	39,435
Russia	54,759	35,751	31,193
Brazil	48,089	35,500	29,345
All other destination markets	372,301	337,160	321,938
Total exports from China	1,105,404	987,901	940,967

Table continued on next page.

[6] Export data from Global Trade Atlas ("GTA") cited throughout this part are based on export data for HS subheading 5503.20, "Synthetic Staple Fibers, Not Carded, Combed Or Otherwise Processed For Spinning, Of Polyesters." As such, this data may encompass out-of-scope polyester staple fiber.

Table VII-5--Continued
Polyester staple fibers: Exports from China by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
Exports from China to the United States	0.50	0.43	0.40
Exports from China to other major destination markets.--			
Indonesia	0.58	0.47	0.41
Pakistan	0.56	0.44	0.40
India	0.57	0.45	0.41
Vietnam	0.62	0.50	0.44
Mexico	0.59	0.50	0.44
Israel	0.60	0.48	0.42
Russia	0.62	0.51	0.45
Brazil	0.59	0.51	0.43
All other destination markets	0.61	0.51	0.45
Total exports from China	0.57	0.48	0.42
	Share of quantity (percent)		
Exports from China to the United States	18.9	22.1	20.5
Exports from China to other major destination markets.--			
Indonesia	6.9	5.6	10.0
Pakistan	13.7	12.8	8.2
India	6.6	7.4	6.8
Vietnam	4.2	4.2	6.6
Mexico	4.1	5.0	5.2
Israel	4.9	4.3	4.3
Russia	4.6	3.4	3.1
Brazil	4.2	3.3	3.1
All other destination markets	31.8	32.0	32.2
Total exports from China	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 5503.20 as reported by China Customs in the IHS/GTA database, accessed December 14, 2017.

THE INDUSTRY IN INDIA

The Commission issued foreign producers' or exporters' questionnaires to 12 firms believed to produce and/or export fine denier PSF from India.[7] Usable responses to the Commission's questionnaire were received from three firms: Alok Industries Limited ("Alok Industries"), Bombay Dyeing, and Reliance. These firms' reported exports to the United States accounted for approximately *** percent of U.S. imports of fine denier PSF from India in 2016. According to estimates requested of the responding Indian producers, the production of fine denier PSF in India reported in questionnaires accounts for approximately *** percent of overall production of fine denier PSF in India. Table VII-6 presents information on the fine denier PSF operations of the responding producers and exporters in India.

Table VII-6
Fine denier PSF: Summary data on firms in India, 2016

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)
Alok Industries	***	***	***	***	***	***
Bombay Dyeing	***	***	***	***	***	***
Reliance	***	***	***	***	***	***
Total	***	***	***	***	***	***

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

Changes in operations

As presented in table VII-7, one producer in India reported operational changes since January 1, 2014.

Table VII-7
Fine denier PSF: Reported changes in operations by producers in India, since January 1, 2014

* * * * * * *

[7] These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records. Staff issued questionnaires to all Indian producers for which an email address or a fax number was provided.

Operations on fine denier PSF

Table VII-8 presents information on the fine denier PSF operations of the responding producers and exporters in India. Indian producers' production capacity increased slightly from 2014 to 2016, from *** pounds in 2014 to *** pounds in 2016, an overall increase of *** percent. It was *** percent lower in interim 2017 than in interim 2016. Production capacity is projected to be roughly equivalent to 2016 figures in 2017 and 2018.

Indian producers' total production increased from *** pounds in 2014 to *** pounds in 2016, an increase of *** percent. Total production is projected to increase by *** percent from 2016 to 2017 and hold about equal from 2017 to 2018.

Indian producers' home market shipments held steady at *** pounds from 2014 to 2016. Home market shipments were *** percent lower in interim 2017 than in interim 2016. Home market shipments are projected to decrease by *** percent in 2017 and increase by *** percent from 2017 to 2018. Home market shipments accounted for *** percent to *** percent of total shipments during 2014-2016.

Export shipments to the United States increased from *** pounds in 2014 to *** pounds in 2016, an increase of *** percent. They were *** percent higher in interim 2017 than in interim 2016. Exports to the United States are projected to increase by *** percent from 2016 to 2017 before decreasing by *** percent from 2017 to 2018.

From 2014 to 2016, Indian export shipments were largely destined for non-U.S. markets, which accounted for *** percent to *** percent of total exports from 2014 to 2016. Export shipments to non-U.S. markets increased from *** pounds in 2014 to *** pounds in 2016, an increase of *** percent. They were *** percent higher in interim 2017 than in interim 2016. Exports to non-U.S. markets are projected to increase by *** percent from 2016 to 2017 and decrease by *** percent from 2017 to 2018.

Respondent party Reliance noted that Indian PSF producers are operating at or near *** capacity, and that much of the focus of Indian producers is on the home market or on non-U.S. exports, including Nepal, Bangladesh, Belgium, and Indonesia.[8]

Table VII-8
Fine denier PSF: Data on industry in India, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

* * * * * * *

[8] Reliance's posthearing brief, pp. 13-14.

Alternative products

As shown in table VII-9, responding Indian firms produced other products on the same equipment and machinery used to produce fine denier PSF. Indian producers' overall production capacity held steady at around *** pounds from 2014 to 2016. Out-of-scope production on the same machinery fluctuated from year to year, increasing overall from *** pounds in 2014 to *** pounds in 2016 for an overall increase of *** percent. It was *** percent lower in interim 2017 than in interim 2016.

Fine denier PSF accounted for *** percent to *** percent of total production on the same equipment and machinery during 2014-16. Reliance noted that ***. Bombay Dyeing reported ***.[9]

Table VII-9
Fine denier PSF: Overall capacity and production on the same equipment as in-scope production by producers in India, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Exports

As presented in table VII-10, the leading export markets for polyester synthetic staple fibers from India are the United States, Nepal, and Belgium. During 2016, the United States was the top export market for polyester synthetic staple fibers from India, accounting for 20.1 percent, followed by Nepal, accounting for 11.4 percent.

[9] See responses of Reliance and Bombay Dyeing to Foreign Producers' questionnaire, question II-4e(ii).

Table VII-10
Polyester staple fibers: Exports from India by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
Exports from India to the United States	66,110	79,717	92,048
Exports from India to other major destination markets.--			
Nepal	47,018	35,328	52,322
Belgium	41,013	36,915	36,448
Germany	28,810	15,000	13,020
Bangladesh	26,959	22,687	38,094
Spain	22,676	11,788	18,056
Iran	18,395	10,906	17,891
Indonesia	17,143	20,596	21,783
Italy	12,567	13,677	13,935
All other destination markets	151,443	143,367	154,697
Total exports from India	432,133	389,980	458,294
	Value (1,000 dollars)		
Exports from India to the United States	44,510	45,632	48,223
Exports from India to other major destination markets.--			
Nepal	29,539	16,943	22,943
Belgium	25,183	17,988	15,586
Germany	19,787	7,856	6,533
Bangladesh	16,379	10,329	16,327
Spain	14,198	6,056	8,332
Iran	12,419	5,092	7,838
Indonesia	10,750	9,856	9,292
Italy	7,801	6,566	6,267
All other destination markets	96,625	74,749	70,679
Total exports from India	277,192	201,068	212,020

Table continued on next page.

Table VII-10--Continued
Polyester staple fibers: Exports from India by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
Exports from India to the United States	0.67	0.57	0.52
Exports from India to other major destination markets.--			
Nepal	0.63	0.48	0.44
Belgium	0.61	0.49	0.43
Germany	0.69	0.52	0.50
Bangladesh	0.61	0.46	0.43
Spain	0.63	0.51	0.46
Iran	0.68	0.47	0.44
Indonesia	0.63	0.48	0.43
Italy	0.62	0.48	0.45
All other destination markets	0.64	0.52	0.46
Total exports from India	0.64	0.52	0.46
	Share of quantity (percent)		
Exports from India to the United States	15.3	20.4	20.1
Exports from India to other major destination markets.--			
Nepal	10.9	9.1	11.4
Belgium	9.5	9.5	8.0
Germany	6.7	3.8	2.8
Bangladesh	6.2	5.8	8.3
Spain	5.2	3.0	3.9
Iran	4.3	2.8	3.9
Indonesia	4.0	5.3	4.8
Italy	2.9	3.5	3.0
All other destination markets	35.0	36.8	33.8
Total exports from India	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 5503.20 as reported by India's Ministry of Commerce in the IHS/GTA database, accessed December 14, 2017.

THE INDUSTRY IN KOREA

The Commission issued foreign producers' or exporters' questionnaires to 24 firms believed to produce and/or export fine denier PSF from Korea.[10] As in the preliminary phase of these investigations, the Commission did not receive a response from any Korean producers. According to petitioners, the two major producers of fine denier PSF from Korea are Huvis and Toray. Petitioners noted that Huvis claims a total polyester staple fiber production capacity of 1.1 billion tons per year. They also stated that Toray announced a plan in January 2015 to expand its production capacity of bio-component staple fibers that is used to manufacture nonwoven fabric for personal hygiene products.[11] [12]

Exports

As presented in table VII-11, the leading export markets for polyester synthetic staple fibers from Korea are the United States, China, and Germany. During 2016, the United States was the top export market for polyester synthetic staple fibers from Korea, accounting for 18.4 percent, followed by the China, accounting for 9.1 percent.

[10] These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records. Staff issued questionnaires to all Korean producers for which an email address or a fax number was provided.

[11] Petitioners' postconference brief, pp. 41-42.

[12] In its preliminary antidumping duty investigation, Commerce calculated a dumping rate of zero percent for Toray. See *Fine Denier Polyester Staple Fiber From the Republic of Korea: Preliminary Affirmative Determination of Sales at Less Than Fair Value, Postponement of Final Determination, and Extension of Provisional Measures,* 83 FR 660, January 5, 2018.

Table VII-11
Polyester staple fibers: Exports from Korea by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
Exports from Korea to the United States	247,078	272,174	289,033
Exports from Korea to other major destination markets.--			
China	154,148	143,494	143,050
Germany	108,405	102,577	101,294
Vietnam	99,071	101,461	99,584
Italy	68,359	78,396	93,810
Poland	63,084	75,675	75,934
Japan	52,310	60,806	72,272
United Kingdom	80,618	73,127	69,261
Belgium	37,461	40,610	44,904
All other destination markets	511,687	547,798	585,811
Total exports from Korea	1,422,221	1,496,118	1,574,954
	Value (1,000 dollars)		
Exports from Korea to the United States	168,801	153,283	143,008
Exports from Korea to other major destination markets.--			
China	118,099	82,589	73,176
Germany	78,374	60,082	52,467
Vietnam	73,159	64,162	57,364
Italy	46,261	41,581	43,723
Poland	39,533	38,048	33,504
Japan	32,681	35,258	39,114
United Kingdom	49,972	36,802	30,655
Belgium	24,732	22,211	20,730
All other destination markets	360,934	314,092	295,981
Total exports from Korea	992,546	848,107	789,722

Table continued on next page.

Table VII-11--Continued
Polyester staple fibers: Exports from Korea by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
Exports from Korea to the United States	0.68	0.56	0.49
Exports from Korea to other major destination markets.--			
China	0.77	0.58	0.51
Germany	0.72	0.59	0.52
Vietnam	0.74	0.63	0.58
Italy	0.68	0.53	0.47
Poland	0.63	0.50	0.44
Japan	0.62	0.58	0.54
United Kingdom	0.62	0.50	0.44
Belgium	0.66	0.55	0.46
All other destination markets	0.71	0.57	0.51
Total exports from Korea	0.70	0.57	0.50
	Share of quantity (percent)		
Exports from Korea to the United States	17.4	18.2	18.4
Exports from Korea to other major destination markets.--			
China	10.8	9.6	9.1
Germany	7.6	6.9	6.4
Vietnam	7.0	6.8	6.3
Italy	4.8	5.2	6.0
Poland	4.4	5.1	4.8
Japan	3.7	4.1	4.6
United Kingdom	5.7	4.9	4.4
Belgium	2.6	2.7	2.9
All other destination markets	36.0	36.6	37.2
Total exports from Korea	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 5503.20 as reported by Korea's Customs and Trade Development Institution in the IHS/GTA database, accessed December 14, 2017.

THE INDUSTRY IN TAIWAN

The Commission issued foreign producers' or exporters' questionnaires to six firms believed to produce and/or export fine denier PSF from Taiwan.[13] One firm, Tainan Spinning,

[13] These firms were identified through a review of information submitted in the petition and contained in proprietary Customs records. Staff issued questionnaires to all Taiwanese producers for which an email address or a fax number was provided.

submitted a usable response to the Commission's questionnaire.[14] In the preliminary phase of these investigations, three other firms--Far Eastern New Century Corporation, Nan Ya Plastics Corporation, and Chung Shing Textile Marketing Co., Ltd--submitted questionnaire responses.[15] These firms reported producing *** pounds of fine denier PSF in 2016, with exports to the United States of *** pounds in 2016. Table VII-12 presents individual data on these three firms obtained in the preliminary phase of these investigations.

Table VII-12
Fine denier PSF: Summary data for producers in Taiwan, 2016

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)
Chung Shing	***	***	***	***	***	***
Far Eastern	***	***	***	***	***	***
Nan Ya	***	***	***	***	***	***
Total	***	***	***	***	***	***

Source: *Investigation Nos. 701-TA-579-580 and 731-TA-1369-1372 (Preliminary): Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan--Staff Report,* INV-PP-087, July 10, 2017, table VII-13. Data for Tainan Spinning removed. Original data compiled from data submitted in response to Commission preliminary phase questionnaires.

Exports

As reported in table VII-13, the leading export markets for polyester synthetic staple fibers from Taiwan are the United States, the United Kingdom, and China. During 2016, the United States was the top export market for polyester synthetic staple fibers from Taiwan, accounting for 10.4 percent, followed by the United Kingdom, accounting for 5.3 percent.

[14] In its preliminary antidumping duty investigation, Commerce calculated a dumping rate of zero percent for this firm. Therefore, this firm's data is not reported in this section. See *Fine Denier 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 668, January 5, 2018.

[15] Commission staff mailed questionnaires to these firms and sent out notices of the questionnaire due date, yet submissions have still not been received as of the time of this report's completion.

Table VII-13
Polyester staple fibers: Exports from Taiwan by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
Exports from Taiwan to the United States	66,862	73,306	88,759
Exports from Taiwan to other major destination markets.--			
Vietnam	204,017	190,971	187,461
United Kingdom	38,700	52,072	45,418
China	31,336	28,889	35,485
Thailand	25,386	25,084	32,935
Pakistan	17,285	16,123	30,881
Germany	40,598	33,160	30,365
Mexico	20,934	22,480	27,692
Italy	32,429	24,025	25,998
All other destination markets	339,458	330,383	352,556
Total exports from Taiwan	817,008	796,495	857,550
	Value (1,000 dollars)		
Exports from Taiwan to the United States	47,960	41,431	42,922
Exports from Taiwan to other major destination markets.--			
Vietnam	130,911	94,980	85,479
United Kingdom	27,044	30,060	22,546
China	23,255	18,482	21,048
Thailand	18,724	14,558	16,726
Pakistan	12,744	9,386	14,929
Germany	29,141	18,822	15,243
Mexico	15,558	13,094	13,808
Italy	22,155	12,633	12,247
All other destination markets	245,954	197,547	181,961
Total exports from Taiwan	573,445	450,993	426,910

Table continued on next page.

Table VII-13--Continued
Polyester staple fibers: Exports from Taiwan by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
Exports from Taiwan to the United States	0.72	0.57	0.48
Exports from Taiwan to other major destination markets.--			
Vietnam	0.64	0.50	0.46
United Kingdom	0.70	0.58	0.50
China	0.74	0.64	0.59
Thailand	0.74	0.58	0.51
Pakistan	0.74	0.58	0.48
Germany	0.72	0.57	0.50
Mexico	0.74	0.58	0.50
Italy	0.68	0.53	0.47
All other destination markets	0.72	0.60	0.52
Total exports from Taiwan	0.70	0.57	0.50
	Share of quantity (percent)		
Exports from Taiwan to the United States	8.2	9.2	10.4
Exports from Taiwan to other major destination markets.--			
Vietnam	25.0	24.0	21.9
United Kingdom	4.7	6.5	5.3
China	3.8	3.6	4.1
Thailand	3.1	3.1	3.8
Pakistan	2.1	2.0	3.6
Germany	5.0	4.2	3.5
Mexico	2.6	2.8	3.2
Italy	4.0	3.0	3.0
All other destination markets	41.5	41.5	41.1
Total exports from Taiwan	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 5503.20 as reported by Taiwan Directorate General of Customs in the IHS/GTA database, accessed December 14, 2017.

SUBJECT COUNTRIES COMBINED

Table VII-14 presents summary data on fine denier PSF operations of the reporting producers from subject sources and table VII-15 presents summary data on overall operations of the reporting producers from subject countries.

Table VII-14

Fine denier PSF: Data on industry in subject sources, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

* * * * * * *

Table VII-14--Continued

Fine denier PSF: Data on industry in subject sources, 2014-16, January to September 2016, and January to September 2017 and projection calendar years 2017 and 2018

* * * * * * *

Table VII-15

Fine denier PSF: Overall capacity and production on the same equipment as in-scope production by producers in subject sources, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-16 presents data on U.S. importers' reported inventories of fine denier PSF. Inventories from subject sources increased *** percent from 2014 to 2016, and were *** percent lower in interim 2017 than in interim 2016.

Table VII-16

Fine denier PSF: U.S. importers' end-of-period inventories of imports by source, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of fine denier PSF from all sources after September 30, 2017. These data are reported in table VII-17.

Table VII-17
Fine denier PSF: Arranged imports, October 2017 through September 2018

* * * * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS[16]

According to petitioners, several other countries maintain antidumping duty orders on imports of PSF from China, India, Korea, and Taiwan that included fine denier PSF. In 1993, Mexico issued an antidumping duty order on all forms of PSF from China, India, Korea, and Taiwan, which was extended in 2013. Turkey issued an antidumping duty order on all forms of PSF from Korea in 2000, which was extended in 2012. In 2003, Turkey issued the same antidumping duty order on PSF from China, India, and Taiwan, which was extended in 2014. In 2011, Indonesia enacted an antidumping duty order on all forms of PSF from China, India, and Taiwan, which was extended in 2016. Pakistan issued an antidumping duty order on imports of fine denier PSF (2.0 denier or less) from China in 2016. Israel levied import tariffs of 30 percent ad valorem on all forms of PSF from China, India, Korea, and Taiwan. Petitioners also note that India initiated an antidumping duty investigation on polyester staple fiber, including fine denier PSF, from China in 2017.

[16] Unless otherwise noted, information in this section is based on petitioners' prehearing brief, exh. 8 and p. 52.

INFORMATION ON NONSUBJECT COUNTRIES

In addition to the subject countries (China, India, Korea, and Taiwan), U.S. importers also source fine denier PSF from a handful of other countries, including Germany, Mexico, Thailand, Indonesia, and Honduras. Fine denier PSF produced in Germany and sold to U.S. importers is reported to be of specialty varieties that sell at higher average unit values than subject imports.[17]

Nearly all of the exports to the United States from Mexico during the period for which data were collected are from ***.[18] DAK Americas notes that ***.[19] Exports to the U.S. account for more than half of Mexico's shipments of this product. Other destinations for fine denier polyester staple fiber manufactured in Mexico include Ecuador, El Salvador, and Guatemala.

According to GTA data, other destinations for fine denier PSF manufactured in Thailand and Indonesia include Vietnam and Bangladesh (and there is considerable trade between the two countries as well).

Global exports

Table VII-18 reports global exports by exporter for 2014-16. The leading exporters of polyester synthetic staple fibers in 2016 were China, Korea, and Taiwan. These countries' shares of global exports in 2016 were 29.8 percent, 21.1 percent, and 11.5 percent, respectively. In 2016, the United States exported 96.2 million pounds of polyester synthetic staple fibers, or 1.3 percent of the global share.

[17] Petitioners' postconference brief, exh. 10, p. 1.
[18] Proprietary Customs data. Please see part III for discussion on U.S. producers' imports.
[19] Petitioners' postconference brief, exh. 9, p. 1.

Table VII-18
Polyester staple fibers: Global exports by exporter, 2014-16

Exporter	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
United States	129,279	97,775	96,151
China	1,924,913	2,079,684	2,219,563
India	432,133	389,980	458,294
Korea	1,422,221	1,496,118	1,574,954
Taiwan	817,008	796,495	857,550
Subject exporters	4,596,275	4,762,277	5,110,360
All other major reporting exporters.--Thailand	448,486	555,955	575,526
Indonesia	306,451	336,397	320,521
Malaysia	218,924	231,630	236,965
Ireland	175,897	181,710	180,364
Belarus	77,827	103,506	124,512
Romania	106,809	110,768	116,410
Turkey	79,907	99,452	101,300
Belgium	107,196	108,571	100,628
Czech Republic	62,764	64,110	66,283
Netherlands	43,501	49,535	61,163
All other exporters	459,378	438,999	357,290
Total global exports	6,812,692	7,140,685	7,447,475
	Value (1,000 dollars)		
United States	103,349	83,847	78,925
China	1,105,404	987,901	940,967
India	277,192	201,068	212,020
Korea	992,546	848,107	789,722
Taiwan	573,445	450,993	426,910
Subject exporters	2,948,587	2,488,069	2,369,618
All other major reporting exporters.--Thailand	285,377	273,617	258,917
Indonesia	185,604	164,908	150,449
Malaysia	140,423	115,358	113,266
Ireland	144,095	128,301	118,592
Belarus	57,238	51,611	56,692
Romania	78,396	64,482	65,459
Turkey	59,710	57,146	51,927
Belgium	88,050	71,232	62,153
Czech Republic	53,565	43,293	43,010
Netherlands	40,292	39,357	37,607
All other exporters	395,739	325,253	234,893
Total global exports	4,580,426	3,906,474	3,641,508

Table continued on next page.

Table VII-18--Continued
Polyester staple fibers: Global exports by exporter, 2014-16

Exporter	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
United States	0.80	0.86	0.82
China	0.57	0.48	0.42
India	0.64	0.52	0.46
Korea	0.70	0.57	0.50
Taiwan	0.70	0.57	0.50
Subject exporters	0.64	0.52	0.46
All other major reporting exporters.--Thailand	0.64	0.49	0.45
Indonesia	0.61	0.49	0.47
Malaysia	0.64	0.50	0.48
Ireland	0.82	0.71	0.66
Belarus	0.74	0.50	0.46
Romania	0.73	0.58	0.56
Turkey	0.75	0.57	0.51
Belgium	0.82	0.66	0.62
Czech Republic	0.85	0.68	0.65
Netherlands	0.93	0.79	0.61
All other exporters	0.86	0.74	0.66
Total global exports	0.67	0.55	0.49
	Share of quantity (percent)		
United States	1.9	1.4	1.3
China	28.3	29.1	29.8
India	6.3	5.5	6.2
Korea	20.9	21.0	21.1
Taiwan	12.0	11.2	11.5
Subject exporters	67.5	66.7	68.6
All other major reporting exporters.--Thailand	6.6	7.8	7.7
Indonesia	4.5	4.7	4.3
Malaysia	3.2	3.2	3.2
Ireland	2.6	2.5	2.4
Belarus	1.1	1.4	1.7
Romania	1.6	1.6	1.6
Turkey	1.2	1.4	1.4
Belgium	1.6	1.5	1.4
Czech Republic	0.9	0.9	0.9
Netherlands	0.6	0.7	0.8
All other exporters	6.7	6.1	4.8
Total global exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 5503.20 as reported by various national statistical authorities in the IHS/GTA database, accessed December 14, 2017.

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 26512, June 6, 2017	*Fine Denier Polyester Staple Fiber from China, India, Korea, Taiwan, and Vietnam; Institution of Antidumping and Countervailing Duty Investigations and Scheduling of Preliminary Phase Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-06-07/pdf/2017-11755.pdf
82 FR 29023, June 27, 2017	*Fine Denier Polyester Staple Fiber from the People's Republic of China, India, the Republic of Korea, Taiwan, and the Socialist Republic of Vietnam: Initiation of Less-Than-Fair-Value Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-06-27/pdf/2017-13380.pdf
82 FR 29029 June 27, 2017	*Fine Denier Polyester Staple Fiber from India and the People's Republic of China: Initiation of Countervailing Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-06-27/pdf/2017-13381.pdf
82 FR 33480 July 20, 2017	*Fine Denier Polyester Staple Fiber From the Socialist Republic of Vietnam: Termination of Less-Than-Fair-Value Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2017-07-20/pdf/2017-15141.pdf
82 FR 33926 July 21, 2017	*Fine Denier Polyester Staple Fiber From Vietnam; Termination of Investigation*	https://www.gpo.gov/fdsys/pkg/FR-2017-07-21/pdf/2017-15301.pdf
82 FR 33925 July 21, 2017	*Fine Denier Polyester Staple Fiber From China, India, Korea, and Taiwan*	https://www.gpo.gov/fdsys/pkg/FR-2017-07-21/pdf/2017-15299.pdf
82 FR 37048 August 8, 2017	*Fine Denier Polyester Staple Fiber From the People's Republic of China and India: Postponement of Preliminary Determinations in the Countervailing Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-08-08/pdf/2017-16688.pdf

Citation	Title	Link
82 FR 49178 October 24, 2017	*Fine Denier Polyester Staple Fiber From the People's Republic of China, India, the Republic of Korea, and Taiwan: Postponement of Preliminary Determinations in Less-Than-Fair-Value Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-10-24/pdf/2017-23021.pdf
82 FR 51387 November 6, 2017	*Fine Denier Polyester Staple Fiber From India: Preliminary Affirmative Countervailing Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-06/pdf/2017-24078.pdf
82 FR 51396 November 6, 2017	*Fine Denier Polyester Staple Fiber From the People's Republic of China: Preliminary Affirmative Countervailing Duty Determination*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-06/pdf/2017-24079.pdf
82 FR 56050 November 27, 2017	*Fine Denier Polyester Staple Fiber From China, India, Korea, and Taiwan; Scheduling of the Final Phase of Countervailing Duty and Antidumping Duty Investigations*	https://www.gpo.gov/fdsys/pkg/FR-2017-11-27/pdf/2017-25546.pdf
83 FR 660 January 5, 2018	*Fine Denier Polyester Staple Fiber From the Republic of Korea: 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-2018-01-05/pdf/2017-28257.pdf
83 FR 662 January 5, 2018	*Fine Denier Polyester Staple Fiber From India: 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-2018-01-05/pdf/2017-27752.pdf
83 FR 665 January 5, 2018	*Fine Denier Polyester Staple Fiber From the People's Republic of China: 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-2018-01-05/pdf/2017-27749.pdf

Citation	Title	Link
83 FR 668 January 5, 2018	*Fine Denier 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-2018-01-05/pdf/2017-27751.pdf
83 FR 3120 January 23, 2018	*Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber From the People's Republic of China: Final Affirmative Determination*	https://www.gpo.gov/fdsys/pkg/FR-2018-01-23/pdf/2018-01152.pdf
83 FR 3122 January 23, 2018	*Countervailing Duty Investigation of Fine Denier Polyester Staple Fiber From India: Final Affirmative Determination*	https://www.gpo.gov/fdsys/pkg/FR-2018-01-23/pdf/2018-01151.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: Fine Denier Polyester Staple Fiber from China, India, Korea, and Taiwan

Inv. Nos.: 701-TA-579-580 and 731-TA-1369-1372 (Final)

Date and Time: January 17, 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:

Petitioners (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)
Respondents (**Ned H. Marshak**, Grunfeld Desiderio Lebowitz Silverman and Klestadt LLP)

In Support of the Imposition of Antidumping and Countervailing Duty Orders:

Kelley Drye & Warren LLP
Washington, DC
on behalf of

DAK Americas LLC
Nan Ya Plastics Corporation, America
Auriga Polymers Inc.

Mark Ruday, Senior Vice President, Fibers Business Unit, DAK Americas LLC

Richard Lane, Senior Manager of Public Affairs, Trade Relations and Corporate Communications, DAK Americas LLC

Michael Sparkman, Senior Business Manager, Nan Ya Plastics Corporation, America

John Freeman, Assistant Director of Sales, Nan Ya Plastics Corporation, America

Thomas Brekovsky, Vice President, Polymers and Fibers, Auriga Polymers Inc.

Nik Casstevens, Vice President, Palmetto Synthetics LLC

In Support of the Imposition of
Antidumping and Countervailing Duty Orders (continued):

Alejandro Sanchez, Director of PSF Sales and Marketing,
DAK Americas

Gina E. Beck, Economist, Georgetown Economic Services LLC

Paul C. Rosenthal)
Kathleen W. Cannon)
) – OF COUNSEL
David C. Smith)
Brooke M. Ringel)

In Opposition to the Imposition of **TIME**
Antidumping and Countervailing Duty Orders: **ALLOCATION:**

60 minutes total

Grunfeld Desiderio Lebowitz Silverman and Klestadt LLP
Washington, DC
on behalf of

The China Chamber of Commerce for Import and Export of Textile and Apparel
Jiangsu Huaxicum Co., Ltd.
Jiangyin Yangxi International Trade Co., Ltd.
Jiangyin Hailun Chemical Fiber Co., Limited
Jiangyin Huahong Chemical Fiber Co., Limited
(collectively "Chinese Respondents")

Cara Groden, Economist, Economic Consulting Services, LLC

Ned H. Marshak)
) – OF COUNSEL
Jordan C. Kahn)

Arent Fox LLP
Washington, DC
on behalf of

Reliance Industries, Ltd. ("RIL")

Anil Rajvanshi, Senior Executive Vice President, RIL

Matthew M. Nolan)
) – OF COUNSEL
Andrew Jaxa-Debicki)

REBUTTAL/CLOSING REMARKS:

Petitioners (**Paul C. Rosenthal** *and* **Kathleen W. Cannon**, Kelley Drye & Warren LLP)
Respondents (**Ned H. Marshak**, Grunfeld Desiderio Lebowitz Silverman
and Klestadt LLP *and* **Matthew M. Nolan** Arent Fox LLP)

-END-

APPENDIX C

SUMMARY DATA

Table C-1
Fine denier PSF: Summary data concerning the U.S. market, 2014-16, January to September 2016, and January to September 2017
(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			January to September		Calendar year			Jan-Sep
	2014	2015	2016	2016	2017	2014-16	2014-15	2015-16	2016-17
U.S. consumption quantity:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China	***	***	***	***	***	***	***	***	***
India	***	***	***	***	***	***	***	***	***
Korea subject	***	***	***	***	***	***	***	***	***
Taiwan subject	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Korea nonsubject	***	***	***	***	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount	***	***	***	***	***	***	***	***	***
Producers' share (fn1)	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
China	***	***	***	***	***	***	***	***	***
India	***	***	***	***	***	***	***	***	***
Korea	***	***	***	***	***	***	***	***	***
Taiwan	***	***	***	***	***	***	***	***	***
Subject sources	***	***	***	***	***	***	***	***	***
Korea nonsubject	***	***	***	***	***	***	***	***	***
Taiwan nonsubject	***	***	***	***	***	***	***	***	***
Vietnam	***	***	***	***	***	***	***	***	***
All other sources	***	***	***	***	***	***	***	***	***
Nonsubject sources	***	***	***	***	***	***	***	***	***
All import sources	***	***	***	***	***	***	***	***	***
U.S. imports from:									
China:									
Quantity	76,710	113,253	162,256	119,178	106,183	111.5	47.6	43.3	(10.9)
Value	56,977	69,215	90,105	66,412	63,391	58.1	21.5	30.2	(4.5)
Unit value	$0.74	$0.61	$0.56	$0.56	$0.60	(25.2)	(17.7)	(9.1)	7.1
Ending inventory quantity	***	***	***	***	***	***	***	***	***
India:									
Quantity	22,377	28,158	27,270	20,470	29,857	21.9	25.8	(3.2)	45.9
Value	17,458	19,046	15,825	11,753	18,204	(9.4)	9.1	(16.9)	54.9
Unit value	$0.78	$0.68	$0.58	$0.57	$0.61	(25.6)	(13.3)	(14.2)	6.2
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Korea subject:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Taiwan subject:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
Korea nonsubject:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Taiwan nonsubject:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Vietnam:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
All other sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Nonsubject sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity	***	***	***	***	***	***	***	***	***
Value	***	***	***	***	***	***	***	***	***
Unit value	***	***	***	***	***	***	***	***	***
Ending inventory quantity	***	***	***	***	***	***	***	***	***

Table continued on next page.

Table C-1--Continued
Fine denier PSF: Summary data concerning the U.S. market, 2014-16, January to September 2016, and January to September 2017
(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			January to September		Calendar year			Jan-Sep
	2014	2015	2016	2016	2017	2014-16	2014-15	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	637	667	654	672	638	2.7	4.7	(1.9)	(5.1)
Hours worked (1,000s)	1,397	1,490	1,476	1,123	1,095	5.7	6.7	(0.9)	(2.5)
Wages paid ($1,000)	35,400	37,667	35,895	27,637	24,493	1.4	6.4	(4.7)	(11.4)
Hourly wages (dollars)	$25.34	$25.28	$24.32	$24.61	$22.37	(4.0)	(0.2)	(3.8)	(9.1)
Productivity (pounds per hour)	349.7	315.1	274.6	281.9	284.3	(21.5)	(9.9)	(12.9)	0.9
Unit labor costs	$0.07	$0.08	$0.09	$0.09	$0.08	22.2	10.7	10.4	(9.9)
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:

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

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 for HTS statistical reporting number 5503.20.0025, accessed November 9, 2017 with adjustments to identify the zero or de minimis rate firms identified by the Department of Commerce and to remove out-of-scope imports imported from *** using proprietary Customs records, accessed December 20, 2017.

APPENDIX D

U.S. PRODUCERS AND U.S. IMPORTERS: DETAILED U.S. SHIPMENT BY FINE DENIER PSF TYPE AND SIZE DATA

Table D-1

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments by PCR vs not PCR, 2014-16, January to September 2016, and January to September 2017

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Table D-2

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments by short cut vs not short cut, 2014-16, January to September 2016, and January to September 2017

* * * * * * *

Table D-3

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments by black or colored vs not black or colored, 2014-16, January to September 2016, and January to September 2017

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Table D-4

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments by siliconized vs not siliconized, 2014-16, January to September 2016, and January to September 2017

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Table D-5

Fine denier PSF: U.S. producers' and U.S. importers' U.S. shipments by micro denier vs not mirco denier, 2014-16, January to September 2016, and January to September 2017

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