

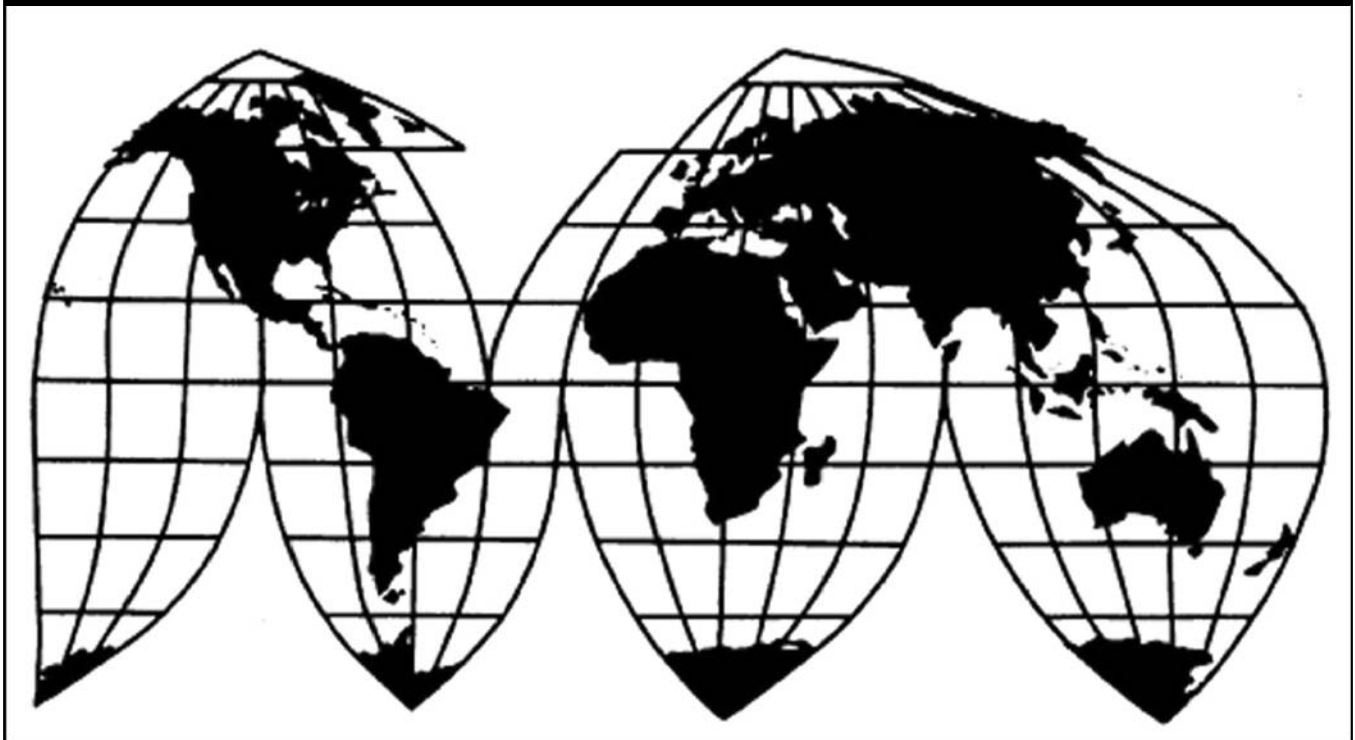
Low Melt Polyester Staple Fiber from Korea and Taiwan

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

Publication 4720

August 2017

U.S. International Trade Commission



Washington, DC 20436

U.S. International Trade Commission

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Janet Freas, Accountant
Onslow Hall, Statistician
Cynthia Payne, Statistician
Carolyn Holmes, Statistical Assistant
Peter Sultan, Attorney
Elizabeth Haines, Supervisory Investigator

Special assistance from

Aimee Larsen, Economist

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

U.S. International Trade Commission

Washington, DC 20436
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UNITED STATES INTERNATIONAL TRADE COMMISSION

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

Low Melt Polyester Staple Fiber from Korea and Taiwan

DETERMINATION

On the basis of the record¹ developed in the subject investigations, the United States International Trade Commission (“Commission”) determines, pursuant to the Tariff Act of 1930 (“the Act”), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of low melt polyester staple fiber from Korea and Taiwan, provided for in subheading 5503.20 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (“LTFV”).

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

BACKGROUND

On June 27, 2017, Nan Ya Plastics Corporation, America, Livingston, New Jersey filed a petition with the Commission and Commerce, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of low melt polyester staple fiber from Korea and Taiwan. Accordingly, on June 27, 2017, the Commission, pursuant to section 733(a) of the Act (19 U.S.C. 1673b(a)), instituted antidumping duty investigation Nos. 731-TA-1378-1379 (Preliminary).

Notice of the institution of the Commission’s investigations and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the *Federal Register* of July 3, 2017 (82 FR 30907). The conference was held in Washington, DC, on July 18, 2017, 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 preliminary phase of these investigations, we determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of low melt polyester staple fiber (“low melt PSF”) from Korea and Taiwan that are allegedly sold in the United States at less than fair value.

I. The Legal Standard for Preliminary Determinations

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

¹ 19 U.S.C. §§ 1671b(a), 1673b(a) (2000); *see also American Lamb Co. v. United States*, 785 F.2d 994, 1001-04 (Fed. Cir. 1986); *Aristech Chem. Corp. v. United States*, 20 CIT 353, 354-55 (1996). No party argues that the establishment of an industry in the United States is materially retarded by the allegedly unfairly traded imports.

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

II. Background

Nan Ya Plastics Corporation, America, a domestic producer of low melt polyester staple fiber (“low melt PSF”) filed the petitions in these investigations on June 27, 2017. Petitioner appeared at the staff conference and submitted a postconference brief.

Several respondent entities participated in these investigations. Counsel and representatives from Bernet International Trading, LLC; Consolidated Fibers, Inc.; Fibertex Corp.; and Stein Fibers, Ltd., importers of subject merchandise (collectively, “Bernet Respondents”), appeared at the conference and submitted a joint postconference brief. Counsel for Milliken & Company (“Milliken”), an importer of subject merchandise, and counsel for Far Eastern New Century Corporation (“FENC”), a producer and exporter of low melt PSF from Taiwan, appeared at the conference and submitted postconference briefs. A representative of Precision Custom Coatings, LLC, an importer of the subject merchandise, appeared at the conference.

U.S. industry data are based on the questionnaire responses of two producers, accounting for 100 percent of U.S. production of low melt PSF in 2016. U.S. import data are based on official import statistics and questionnaire responses from 23 U.S. importers, accounting for the vast majority of total subject imports. The Commission received a response to its questionnaires from one foreign producer of subject merchandise in Taiwan whose exports accounted for *** percent of U.S. imports of low melt PSF from Taiwan in 2016.³

³ Confidential Report (“CR”) at I-5, Public Report (“PR”) at I-3-4. The Commission did not receive a response to its questionnaire from producers or exporters of subject merchandise in Korea. CR at VII-3, PR at VII-3.

III. Domestic Like Product

In determining whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of imports of the subject merchandise, the Commission first defines the “domestic like product” and the “industry.”⁴ 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.”⁵ 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.”⁶

The decision regarding the appropriate domestic like product(s) in an investigation is a factual determination, and the Commission has applied the statutory standard of “like” or “most similar in characteristics and uses” on a case-by-case basis.⁷ No single factor is dispositive, and the Commission may consider other factors it deems relevant based on the

⁴ 19 U.S.C. § 1677(4)(A).

⁵ 19 U.S.C. § 1677(4)(A).

⁶ 19 U.S.C. § 1677(10).

⁷ 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).

facts of a particular investigation.⁸ The Commission looks for clear dividing lines among possible like products and disregards minor variations.⁹ Although the Commission must accept Commerce's determination as to the scope of the imported merchandise that is subsidized and/or sold at less than fair value,¹⁰ the Commission determines what domestic product is like the imported articles Commerce has identified.¹¹

A. Scope Definition

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

synthetic staple fibers, not carded or combed, specifically bi-component polyester fibers having a polyester fiber component that melts at a lower temperature than the other polyester fiber component (low melt PSF). The scope includes bicomponent polyester staple fibers of any denier or cut length.

The subject merchandise may be coated, usually with a finish or dye, or not coated. Low melt PSF is classifiable under the Harmonized Tariff Schedule of the United States (HTSUS) subheading 5503.20.0015. Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of the

⁸ See, e.g., S. Rep. No. 96-249 at 90-91 (1979).

⁹ See, e.g., *Nippon*, 19 CIT at 455; *Torrington*, 747 F. Supp. at 748-49; see also S. Rep. No. 96-249 at 90-91 (Congress has indicated that the like product standard should not be interpreted in "such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other, nor should the definition of 'like product' be interpreted in such a fashion as to prevent consideration of an industry adversely affected by the imports under consideration.").

¹⁰ See, e.g., *USEC, Inc. v. United States*, 34 Fed. App'x 725, 730 (Fed. Cir. 2002) ("The ITC may not modify the class or kind of imported merchandise examined by Commerce."); *Algoma Steel Corp. v. United States*, 688 F. Supp. 639, 644 (Ct. Int'l Trade 1988), *aff'd*, 865 F.3d 240 (Fed. Cir.), *cert. denied*, 492 U.S. 919 (1989).

¹¹ *Hosiden Corp. v. Advanced Display Mfrs.*, 85 F.3d 1561, 1568 (Fed. Cir. 1996) (the Commission may find a single like product corresponding to several different classes or kinds defined by Commerce); *Cleo*, 501 F.3d at 1298 n.1 ("Commerce's {scope} finding does not control the Commission's {like product} determination."); *Torrington*, 747 F. Supp. at 748-52 (affirming the Commission's determination defining six like products in investigations where Commerce found five classes or kinds).

merchandise under the investigations is dispositive.¹²

Low melt PSF is a manmade staple fiber, not carded, combed, or otherwise processed for spinning, made entirely of polyester. Like other types of PSF, low melt PSF is a strong fiber that resists shrinking and stretching. Unlike other types of PSF, low melt PSF has a bi-component structure consisting of two strongly bonded, but separate polymers of different chemical and/or physical construction. It is most commonly comprised of a pure polyester core and outer sheath, but may also be produced in a side-by-side configuration. The sheath, which melts at a lower temperature than the core, provides a stable structure that allows the fiber to be processed smoothly into another form and acts as an agent for thermal-bonding to the core polymer.¹³

B. Arguments of the Parties

Petitioner's Arguments. Petitioner asks the Commission to define one domestic like product coextensive with the scope of the investigations. It argues that this would be consistent with the Commission's decision in its 2000 investigations of polyester staple fiber from Korea and Taiwan to treat low melt PSF as a separate domestic like product from other polyester staple fiber, and Petitioner argues that the factors that distinguished low melt PSF in those earlier investigations continue to be true today.¹⁴

¹² *Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigations*, 82 Fed. Reg. 34277, 34281 (July 24, 2017).

¹³ CR at I-9-10, PR at I-6-7.

¹⁴ Petition at 13. In *Certain Polyester Staple Fiber from Korea and Taiwan*, Inv. Nos. 731-TA-825-826 (Final), USITC Pub. 3300 at 5-7 (May 2000), the Commission found low melt PSF to be a distinct like product from other PSF within the scope. It made negative determinations with respect to low melt PSF, and affirmative determinations with respect to the other domestic like product.

Petitioner takes issue with respondents' arguments that black low melt PSF and crystalline low melt PSF should be treated as separate domestic like products. Petitioner maintains that the only differentiating physical characteristic of black low melt PSF is its color, and argues that the Commission should not find a dividing line based on such a minor difference between products. Petitioner argues that respondents overstate the legal implication of the limited interchangeability of black low melt PSF with other low melt PSF. It argues that limited interchangeability is a recognized attribute of the continuum of products which make up a single like product. Petitioner disputes respondents' assertion that black low melt PSF cannot be made on the same equipment as other low melt PSF; it notes that ***.¹⁵

Petitioner asserts that crystalline low melt PSF is produced from the same basic raw materials as other low melt PSF. Petitioner acknowledges that the chemical structure of crystalline low melt PSF may be different from that of other low melt PSF, but it argues that the Commission has found a single domestic like product to exist in other cases despite differences in chemistries within types of product. Referring to the use of crystalline low melt PSF in particular parts of automobiles, Petitioner argues that a specialized use does not undermine the continuum nature of all low melt PSF as a single domestic like product. Petitioner maintains that customers perceive crystalline low melt PSF to be a low melt PSF, notwithstanding that customers might prefer to use crystalline low melt PSF for certain automotive applications.

¹⁵ Petitioner's Postconference Brief at 7-9.

Finally, Petitioner argues that the fact that foreign producers might use batch manufacturing to produce crystalline low melt PSF has no bearing on the domestic like product analysis.¹⁶

Respondents' Argument. Bernet Respondents argue that black low melt PSF and crystalline low melt PSF should each be defined as distinct domestic like products. They argue that black low melt PSF is different from other low melt PSF because the product is black. It is used in applications where the product is visible. For example, in the automotive industry it is used in places such as under the hood, in carpeting, and for trunk linings. Bernet Respondents argue that black low melt PSF is minimally interchangeable with regular white low melt PSF because customers ordering the black product choose it for aesthetic reasons and will only accept that color. Conversely, in some applications such as wipes and bedding, usually only white low melt PSF is used. Bernet Respondents state that both black and white low melt PSF are sold directly to end users or through distributors. Bernet Respondents state that the additional black dye used to produce black low melt PSF adds an extra step to the production process for that product. Black and regular low melt PSF cannot be produced at the same time on the same equipment because the black colored fibers would contaminate the white fibers. Finally, Bernet Respondents state that black low melt PSF commands a higher price.¹⁷

Bernet Respondents argue that crystalline low melt PSF has distinct physical characteristics because the polymer molecules of the product are in a structured and repeated arrangement. Unlike other low melt PSF, crystalline low melt PSF does not soften until it meets its exact melting point. For this reason, crystalline low melt PSF can withstand a significantly

¹⁶ Petitioner's Postconference Brief at 9-10.

¹⁷ Bernet Respondents' Postconference Brief at 5-7.

larger range of temperatures without changing form. It is used primarily in the automotive industry, typically in the underbody of a vehicle, wheel liners, and components near the engine compartment. Bernet Respondents maintain that crystalline low melt PSF is of limited interchangeability with other low melt PSF because the other low melt product will deform at a different temperature zone. Bernet Respondents state that crystalline low melt PSF is usually made on smaller manufacturing lines called “batch lines,” and that special cutting, packaging and spraying systems are used to make that product. Finally, Bernet Respondents state that customers are willing to pay a higher price for crystalline low melt PSF.¹⁸

Milliken argues that black and colored low melt PSF should be treated as a separate domestic like product.¹⁹ It argues that the black and colored low melt PSF is physically different from natural low melt PSF because it is dyed with a pigment during the manufacturing process. Milliken argues that the black and colored product also is used for different purposes. For example, black low melt PSF is used in the automotive industry and applications where it might be visible, whereas natural PSF is used in the bedding industry or for certain filtering media, where a clean appearance is important. Milliken states that the production of black or colored low melt PSF requires separate facilities or equipment because otherwise the downtime involved in the changeover from making black or colored product to making natural low melt product would be too costly. Milliken further argues that black or colored and natural low melt PSF are not interchangeable because automotive customers require that the product be black

¹⁸ Bernet Respondents’ Postconference Brief at 7-8.

¹⁹ Milliken is arguing for a somewhat broader separate like product than Bernet Respondents. While Bernet Respondents seek a separate like product encompassing only black low melt PSF, the separate like product Milliken seeks includes both black and other colored low melt PSF.

or colored when it is used in certain visible applications. Customer perceptions are also impacted by black or colored product. Milliken argues that black or colored low melt PSF moves through different channels of distribution than natural low melt PSF insofar as it is sold to different types of end users. Finally, Milliken states that black low melt PSF is more expensive than natural low melt PSF and that it has paid approximately *** percent more for the black product.²⁰

C. Analysis

In investigations such as these where domestically manufactured merchandise involves niche or specialized products, the Commission does not consider each item of merchandise to be a separate like product that is only “like” its identical counterpart in the scope, but considers the grouping itself to constitute the domestic like product²¹ and “disregards minor variations”²² absent a “clear dividing line” between particular products in the group. Based on the record, we define a single domestic like product consisting of all low melt PSF within the scope of investigation. We address below the merits of defining black or other colored low melt PSF or crystalline low melt PSF to be a separate domestic like product.

²⁰ Milliken’s Postconference Brief at 2-5.

²¹ See, e.g., *Fine Denier Polyester Staple Fiber from China, India, Korea, Taiwan, and Vietnam*, Inv. Nos. 701-TA-579-580 and 731-TA- 1369-1373 (Preliminary), USITC Pub. 4709 at 9 (July 2017); *Certain Corrosion-Resistant Steel Products from China, India, Italy, Korea, and Taiwan*, Inv. Nos. 701-TA-534-538 and 731-TA-1274-1278 (Preliminary), USITC Pub. 4547 at 9 (July 2015); *Carbon and Certain Alloy Steel Wire Rod from China, Germany, and Turkey*, Inv. Nos. 731-TA-1099-1101 (Preliminary), USITC Pub. 3832 (January 2006) at 10 (“a lack of interchangeability among products comprising a continuum is not unexpected and not inconsistent with finding a single like product.”); *Stainless Steel Bar from France, Germany, Italy, Korea, and the United Kingdom*, Inv. Nos. 701-TA-413 (Final) and 731-TA-913-916 and 918 (Final), USITC Pub. 3488 (February 2002) at 6-7.

²² See S. Rep. No. 96-249 at 90-91 (1979).

1. Black and Other Colored Low Melt PSF²³

Physical Characteristics and Uses. Black and other colored low melt PSF is distinguished from other low melt PSF only by pigmentation. Black/colored low melt PSF is used in the same downstream industries as regular low melt PSF, but is used in specialized applications within those industries. For example, black/colored and regular low melt PSF are both used in the automotive industry, but the black/uncolored product is used in applications where it might be visible.²⁴

Manufacturing Facilities, Production Processes, and Employees. ***, including black fiber, on the same equipment and with the same workers.²⁵ Differences between the manufacturing processes for uncolored low melt PSF and those for colored low melt PSF are reportedly minor; the principal additional step required to produce colored low melt PSF is that dye is added to the polymer before the extrusion of the fiber.²⁶

Channels of Distribution. All low melt PSF, including black/colored low melt PSF, is sold to distributors and end users.²⁷ Black/colored low melt PSF is used especially in the automotive industry, which is also an end user of uncolored low melt PSF.²⁸

Interchangeability. The interchangeability between black/colored and uncolored low melt PSF is limited. For aesthetic reasons, the uncolored product is not used in automotive

²³ We are considering the argument by Bernet Respondents concerning black low melt PSF and the argument by Milliken concerning black and colored low melt PSF jointly because both arguments concern differences between colored and uncolored product, rather than the precise color used.

²⁴ CR at I-12, PR at I-8.

²⁵ Petitioner's Postconference Brief, Exh. 3, para. 3.

²⁶ CR at I-15-17, PR at I-9-11.

²⁷ CR/PR at II-1.

²⁸ Conference Tr. at 21 (Sparkman), 30 and 31 (Ringel), Petitioner's Postconference Brief at Exh. 2, para. 11.

applications where it is visible.²⁹ While the black/colored product could be used in certain applications where it is not visible, it would be uneconomical to do so because it is more expensive.³⁰ In certain applications, for example, face masks and wipes, the black/colored product would not be used, again for aesthetic reasons.³¹

Producer and Customer Perceptions. Petitioner maintains that producers and consumers perceive all low melt PSF to be a distinctive product characterized by its bi-component structure and lower melt temperature for specialized bonding purposes.³² Respondents contend that customers perceive the black/colored product and uncolored low melt PSF to have different applications.³³

Price. The record indicates that black low melt PSF is priced approximately *** percent above uncolored low melt PSF.³⁴

Conclusion. Aside from color, black/colored low melt PSF shares all of the other physical characteristics of other low melt PSF. Black/colored low melt PSF product is used in the same downstream industries – most notably the automotive industry – as regular low melt PSF, but is used in specialized applications within those industries. The manufacturing facilities, production processes, and employees used to make black/colored low melt PSF are the same as those used to make other low melt PSF, except that production of the black/colored product involves an additional step of adding dye to the polymer. The channels of distribution are the

²⁹ CR at I-12, PR at I-8.

³⁰ Conference Tr. at 95 (Fee).

³¹ Conference Tr. at 51 (Sparkman)

³² Petitioner's Postconference Brief at 7.

³³ Milliken's Postconference Brief at 3-4, Conference Tr. at 90 (Stein).

³⁴ Milliken's Postconference Brief at 5.

same. Although the interchangeability of black/colored low melt PSF with other low melt PSF is limited, such limited interchangeability is also true for other low melt PSF products that serve a range of applications based upon the product's specific characteristics. Although customers perceive the black/colored product and the uncolored low melt PSF to have different applications, based largely on aesthetic considerations, the basic characteristics of the colored and uncolored products, namely bonding in nonwoven products, are the same.³⁵ Black/colored low melt PSF commands a modest price premium as compared with the uncolored product. Overall, the limited distinctions between black/colored low melt PSF and uncolored low melt PSF do not, in our view, constitute a clear dividing line, and accordingly we do not define black/colored low melt PSF as a separate domestic like product for purposes of these preliminary determinations.

2. Crystalline Low Melt PSF

Physical Characteristics and Uses. Crystalline low melt PSF has a different molecular structure than other low melt PSF in that the polymer molecules are in a structured and repeated arrangement, whereas the other low melt PSF has a random molecular structure.³⁶ Crystalline low melt PSF resists heat and retains its rigidity better than other low melt PSF. Other low melt PSF softens as the temperature gets closer to its melt point. That is not the case with crystalline low melt PSF; it holds its form all the way until the melt point is reached.³⁷ Crystalline low melt PSF is typically used in automotive applications where there are large

³⁵ CR at I-10, PR at I-7.

³⁶ CR at I-11, Conference Tr. at 88 (Edwards).

³⁷ CR at I-12, PR at I-8; Conference Tr. at 70 (Sparkman) and 88 (Edwards).

variations in temperature (for example, the underbody, wheel liners, and near the engine compartment).³⁸

Manufacturing Facilities, Production Processes, and Employees. ***.³⁹ Differences between the manufacturing processes for crystalline low melt PSF and other low melt PSF are reportedly minor; the principal additional step required to produce crystalline low melt PSF is the addition of a chemical to the polymer before the fiber extrusion.⁴⁰

Channels of Distribution. All low melt PSF, including crystalline low melt PSF, is sold to distributors and end users.⁴¹ While crystalline low melt PSF is used especially in the automotive industry, that industry also uses other low melt PSF.⁴²

Interchangeability. The interchangeability between crystalline low melt PSF and other low melt PSF is limited. Other low melt PSF is not used in applications where crystalline low melt PSF is required.⁴³

Producer and Customer Perceptions. Petitioner contends that although customers may prefer crystalline low melt PSF for certain automotive applications, they still perceive the crystalline product to be low melt PSF.⁴⁴ Respondents contend that customers perceive the crystalline low melt PSF and other low melt PSF to have different applications.⁴⁵

³⁸ CR at I-12, PR at I-8.

³⁹ Petitioner's Postconference Brief, Exh. 3, para. 3.

⁴⁰ CR at I-15-16, PR at I-10-11.

⁴¹ CR/PR at II-1.

⁴² Conference Tr. at 21 (Sparkman), 30 and 31 (Ringel), Petitioner's Postconference Brief at Exh. 2, para. 11.

⁴³ Conference Tr. at 89 (Edwards).

⁴⁴ Petitioner's Postconference Brief at 10.

⁴⁵ Conference Tr. at 89 (Edwards).

Price. The record indicates that crystalline low melt PSF is priced higher than other low melt PSF, but that difference has not been quantified.⁴⁶

Conclusion. Crystalline low melt PSF and other low melt PSF share certain basic physical characteristics, most notably their bi-component structure, in which one component melts at a lower temperature than the other, giving the fiber thermal bonding qualities.⁴⁷ However, the molecular structure of crystalline low melt PSF is different from that of other low melt PSF, and the crystalline product is more rigid. Crystalline low melt PSF is used in the same downstream industry – the automotive industry – as other low melt PSF, but is used in specialized applications in that industry. The manufacturing facilities, production processes, and employees used to make crystalline low melt PSF are the same as those used to make other low melt PSF, except that production of the crystalline product involves adding an additional chemical to the polymer. The channels of distribution are the same. Although the interchangeability of crystalline low melt with other low melt PSF is limited, such limited interchangeability is also true for other low melt PSF products that serve a range of applications based upon the product’s specific characteristics. For example, different end uses for low melt PSF require different melt points.⁴⁸ Although customers perceive the crystalline low melt PSF and other low melt PSF to have different applications, the basic characteristics of the products are the same, namely bonding in nonwoven products.⁴⁹ Crystalline low melt PSF is priced higher than other low melt PSF. Overall, the limited distinctions between crystalline low melt

⁴⁶ Conference Tr. at 89 (Edwards). The Commission did not seek pricing data for a crystalline low melt PSF product.

⁴⁷ CR at I-10, PR at I-7.

⁴⁸ CR at I-10-11, PR at I-7-8.

⁴⁹ CR at I-10, PR at I-7.

PSF and other low melt PSF do not, in our view, constitute a clear dividing line, and accordingly we do not define crystalline low melt PSF as a separate domestic like product for purposes of these preliminary determinations.⁵⁰

D. Conclusion

For purposes of the preliminary phase of these investigations, we define one like product coextensive with Commerce's scope definition.

IV. Domestic Industry

The domestic industry is defined as the domestic "producers as a whole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."⁵¹ In defining the domestic industry, the Commission's general practice has been to include in the industry producers of all domestic production of the like product, whether toll-produced, captively consumed, or sold in the domestic merchant market.

There are no related party issues in these investigations. Although Nan Ya is owned by a producer of polyester staple fiber products in Taiwan,⁵² because that firm did not export the subject merchandise to the United States during the January 2014-March 2017 period of

⁵⁰ If respondents wish to pursue their argument in any final phase of these investigations that the Commission define crystalline low melt PSF as a separate domestic like product, they should provide in their comments on the Commission's draft questionnaires a particularized discussion of why they perceive a clear dividing line between domestically produced crystalline low melt PSF, on the one hand, and other domestically produced low melt PSF products, on the other.

⁵¹ 19 U.S.C. § 1677(4)(A).

⁵² CR at III-2-3, PR at III-2.

investigation (“POI”),⁵³ Nan Ya does not meet the definition of a related party.⁵⁴ Furthermore, neither domestic producer imported the subject merchandise.⁵⁵

Accordingly, we define the domestic industry to include all domestic producers of low melt PSF.

V. Negligible Imports

Pursuant to Section 771(24) of the Tariff Act, imports from a subject country of merchandise corresponding to a domestic like product that account for less than 3 percent of all such merchandise imported into the United States during the most recent 12 months for which data are available preceding the filing of an antidumping petition shall generally be deemed negligible.⁵⁶

Subject imports from Korea and Taiwan accounted for 67.7 percent and 30.6 percent, respectively, of total U.S. imports of low melt PSF in the 12-month period preceding the filing of the petition (June 2016 through May 2017).⁵⁷ Because these percentages exceed the statutory negligibility threshold, we find that subject imports from Korea and Taiwan are not negligible.

VI. Cumulation

For purposes of evaluating the volume and effects for a determination of reasonable indication 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

⁵³ Conference Tr. at 48 (Freeman).

⁵⁴ See 19 U.S.C. § 1677(4)(B).

⁵⁵ CR at III-10, PR at III-5.

⁵⁶ 19 U.S.C. §1673b(a). There are exceptions to this general rule not pertinent here. See 19 U.S.C. §§1677(24)(A) and 1677(24)(B).

⁵⁷ CR at IV-6, PR at IV-5.

were filed and/or investigations self-initiated by Commerce on the same day, if such imports compete with each other and with the domestic like product in the U.S. market. In assessing whether subject imports compete with each other and with the domestic like product, the Commission generally has considered four factors:

- (1) the degree of fungibility between subject imports from different countries and between subject imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
- (2) the presence of sales or offers to sell in the same geographic markets of subject imports from different countries and the domestic like product;
- (3) the existence of common or similar channels of distribution for subject imports from different countries and the domestic like product; and
- (4) whether the subject imports are simultaneously present in the market.⁵⁸

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.⁵⁹ Only a “reasonable overlap” of competition is required.⁶⁰

Petitioner argues that subject imports should be cumulated because low melt PSF from all subject sources is fungible, sold through the same channels of distribution, and

⁵⁸ See *Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan*, Inv. Nos. 731-TA-278-80 (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).

⁵⁹ See, e.g., *Wieland Werke, AG v. United States*, 718 F. Supp. 50 (Ct. Int’l Trade 1989).

⁶⁰ 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*, 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.”).

simultaneously present throughout the U.S. market.⁶¹ Respondents did not address cumulation.

The threshold requirement for cumulation is satisfied because the antidumping duty petitions with respect to both countries were filed on the same day, June 27, 2017.⁶² As discussed below, we find a reasonable overlap of competition between subject imports from Korea and Taiwan, and between subject imports from each source and the domestic like product.

Fungibility. The record in the preliminary phase of these investigations indicates that low melt PSF is at least moderately fungible regardless of source. *** U.S. producers reported that product from all sources was “always” interchangeable.⁶³ The majority of importers reported that low melt PSF from different sources was “frequently” or “sometimes” interchangeable.⁶⁴ There were pricing observations for domestically produced product and subject imports from both Korea and Taiwan for all three pricing products for nearly all quarters in the POI,⁶⁵ which suggests sales of competing products. Furthermore, multiple purchasers responding to the lost sales/lost revenue survey indicated that they purchased low melt PSF from one or both subject countries and the domestic like product.⁶⁶

In view of the foregoing, the record indicates that there is sufficient fungibility between and among subject imports from Korea and Taiwan and the domestic like product to satisfy the

⁶¹ Petitioner’s Postconference Brief at 14-17.

⁶² None of the statutory exceptions to cumulation applies.

⁶³ CR/PR at Table II-4.

⁶⁴ CR/PR at Table II-4.

⁶⁵ CR/PR at Table V-3-5.

⁶⁶ CR/PR at Tables V-8-9.

reasonable overlap standard. As stated above, market participants generally perceive products from different sources to be at least somewhat interchangeable. Information in the record also reflects substantial overlap between the domestic like product and subject imports in terms of denier size and melt point of the product.⁶⁷ The purchaser data from the lost sales/lost revenue survey discussed above also indicates some degree of competition between the domestic like product and subject imports from each of these sources.

Channels of Distribution. U.S. producers sold mostly to distributors, but a substantial portion of their shipments went to end users.⁶⁸ Importers of subject merchandise from Korea and Taiwan sold almost entirely to end users.⁶⁹

Geographic Overlap. U.S. producers and importers reported selling low melt PSF to all regions of the contiguous United States.⁷⁰

Simultaneous Presence in Market. Subject imports from Korea and Taiwan were present in the U.S. market in each month of the POI.⁷¹

⁶⁷ CR/PR at Tables IV-6 and IV-7. Most of the shipments from the domestic producers and from each subject country consisted of medium denier low melt PSF with a melt point of 120°C or below. See CR/PR at Table IV-4. Although the domestic industry makes very little black or crystalline low melt PSF, the record indicates that these products account for relatively small shares of the domestic market. Petitioner's Postconference Brief at Exh. 2, para. 9 (black and crystalline low melt PSF estimated to account for 10 percent and four percent of the U.S. market, respectively).

⁶⁸ The proportion of U.S. producers' U.S. commercial shipments that went to distributors ranged from *** to *** percent over the POI, while the proportion of their shipments that went to end users ranged from *** to *** percent. CR/PR at Table II-1.

⁶⁹ CR/PR at Table II-1.

⁷⁰ CR/PR at Table II-2. Imports from each subject country entered predominantly at East Coast ports. CR/PR at Table IV-6.

⁷¹ CR at IV-11, PR at IV-9 & CR/PR at Table IV-5.

Conclusion. Because the antidumping duty petitions with respect to subject imports from Korea and Taiwan 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 Korea and Taiwan on a cumulated basis for our analysis of whether there is a reasonable indication of material injury by reason of subject imports.

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

A. Legal Standard

In the preliminary phase of antidumping and countervailing duty investigations, the Commission determines whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of the imports under investigation.⁷² 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.⁷³ The statute defines “material injury” as “harm which is not inconsequential, immaterial, or unimportant.”⁷⁴ In assessing whether there is a reasonable indication that the domestic industry is materially injured by reason of subject imports, we consider all relevant

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

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

⁷⁴ 19 U.S.C. § 1677(7)(A).

economic factors that bear on the state of the industry in the United States.⁷⁵ 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.”⁷⁶

Although the statute requires the Commission to determine whether there is a reasonable indication that the domestic industry is “materially injured by reason of” unfairly traded imports,⁷⁷ 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.⁷⁸ 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.⁷⁹

⁷⁵ 19 U.S.C. § 1677(7)(C)(iii).

⁷⁶ 19 U.S.C. § 1677(7)(C)(iii).

⁷⁷ 19 U.S.C. §§ 1671b(a), 1673b(a).

⁷⁸ *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).

⁷⁹ The Federal Circuit, in addressing the causation standard of the statute, has observed that “{a}s long as its effects are not merely incidental, tangential, or trivial, the foreign product sold at less than fair value meets the causation requirement.” *Nippon Steel Corp. v. USITC*, 345 F.3d 1379, 1384 (Fed. Cir. 2003). This was re-affirmed in *Mittal Steel Point Lisas Ltd. v. United States*, 542 F.3d 867, 873 (Fed. Cir. 2008), in which the Federal Circuit, quoting *Gerald Metals, Inc. v. United States*, 132 F.3d 716, 722 (Fed. Cir. 1997), stated that “this court requires evidence in the record ‘to show that the harm occurred “by reason of” the LTFV imports, not by reason of a minimal or tangential contribution to material harm caused by LTFV goods.’” See also *Nippon Steel Corp. v. United States*, 458 F.3d 1345, 1357 (Fed. Cir. 2006); *Taiwan Semiconductor Industry Ass’n v. USITC*, 266 F.3d 1339, 1345 (Fed. Cir. 2001).

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.⁸⁰ In performing its examination, however, the Commission need not isolate the injury caused by other factors from injury caused by unfairly traded imports.⁸¹ Nor does the

⁸⁰ SAA, H.R. Rep. 103-316, Vol. I at 851-52 (1994) (“{T}he Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.”); S. Rep. 96-249 at 75 (1979) (the Commission “will consider information which indicates that harm is caused by factors other than less-than-fair-value imports.”); H.R. Rep. 96-317 at 47 (1979) (“in examining the overall injury being experienced by a domestic industry, the ITC will take into account evidence presented to it which demonstrates that the harm attributed by the petitioner to the subsidized or dumped imports is attributable to such other factors;” those factors include “the volume and prices of nonsubsidized imports or imports sold at fair value, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology and the export performance and productivity of the domestic industry”); *accord Mittal Steel*, 542 F.3d at 877.

⁸¹ SAA at 851-52 (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports.”); *Taiwan Semiconductor Industry Ass’n*, 266 F.3d at 1345. (“{T}he Commission need not isolate the injury caused by other factors from injury caused by unfair imports Rather, the Commission must examine other factors to ensure that it is not attributing injury from other sources to the subject imports.” (emphasis in original)); *Asociacion de Productores de Salmon y Trucha de Chile AG v. United States*, 180 F. Supp. 2d 1360, 1375 (Ct. Int’l Trade 2002) (“{t}he Commission is not required to isolate the effects of subject imports from other factors contributing to injury” or make “bright-line distinctions” between the effects of subject imports and other causes.); *see also Softwood Lumber from Canada*, Inv. Nos. 701-TA-414 and 731-TA-928 (Remand), USITC Pub. 3658 at 100-01 (Dec. 2003) (Commission recognized that “{i}f an alleged other factor is found not to have or threaten to have injurious effects to the domestic industry, *i.e.*, it is not an ‘other causal factor,’ then there is nothing to further examine regarding attribution to injury”), *citing Gerald Metals*, 132 F.3d at 722 (the statute “does not suggest that an importer of LTFV goods can escape countervailing duties by finding some tangential or minor cause unrelated to the LTFV goods that contributed to the harmful effects on domestic market prices.”).

“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.⁸² It is clear that the existence of injury caused by other factors does not compel a negative determination.⁸³

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.”⁸⁴ Indeed, the Federal Circuit has examined and affirmed various Commission methodologies and has disavowed “rigid adherence to a specific formula.”⁸⁵

The Federal Circuit’s decisions in *Gerald Metals*, *Bratsk*, and *Mittal Steel* all involved cases in which the relevant “other factor” was the presence in the market of significant volumes of price-competitive nonsubject imports. The Commission interpreted the Federal

⁸² S. Rep. 96-249 at 74-75; H.R. Rep. 96-317 at 47.

⁸³ See *Nippon*, 345 F.3d at 1381 (“an affirmative material-injury determination under the statute requires no more than a substantial-factor showing. That is, the ‘dumping’ need not be the sole or principal cause of injury.”).

⁸⁴ *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 *Swift-Train v. United States*, 793 F.3d 1355 (Fed. Cir. 2015), the Federal Circuit affirmed the Commission’s causation analysis as comports with the Court’s guidance in *Mittal*.

⁸⁵ *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.”).

Circuit’s guidance in *Bratsk* as requiring it to apply a particular additional methodology following its finding of material injury in cases involving commodity products and a significant market presence of price-competitive nonsubject imports.⁸⁶ 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.⁸⁷ 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

⁸⁶ *Mittal Steel*, 542 F.3d at 875-79.

⁸⁷ *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).

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.⁸⁸

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.⁸⁹ Congress has delegated this factual finding to the Commission because of the agency's institutional expertise in resolving injury issues.⁹⁰

B. Conditions of Competition and the Business Cycle

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

1. Demand Conditions

Demand for low melt PSF depends on demand for the downstream products in which it is used. These include antibacterial wipes and diapers, soundproofing, batting, furniture,

⁸⁸ 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.

⁸⁹ We provide in our discussion below a full analysis of other factors alleged to have caused any material injury experienced by the domestic industry.

⁹⁰ *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.").

padding and insulation in the trunks of cars and in engine hoods, car floors, and the headliners of cars.⁹¹

Apparent U.S. consumption rose throughout the POI; it was *** pounds in 2014, *** pounds in 2015, and *** pounds in 2016.⁹² *** U.S. producers and 12 of 22 importers reported that demand in the United States for low melt PSF increased since the beginning of the POI.⁹³

2. Supply Conditions

Subject imports were the largest supplier of low melt PSF to the United States throughout the POI. The market share of subject imports rose from *** percent in 2014 to *** percent in 2015, and to *** percent in 2016.⁹⁴

The domestic industry was the second largest source of supply to the U.S. market after subject imports. The domestic industry's market share declined from *** percent in 2014 to *** percent in 2015, and to *** percent in 2016.⁹⁵ The domestic industry's production capacity remained constant throughout the POI.⁹⁶ *** domestic producer reported producing products other than low melt PSF on the same equipment and machinery used to make low melt PSF. Low melt PSF accounted for between *** percent of U.S. producers' production on this shared equipment from 2014 to 2016.⁹⁷ Respondents assert that the domestic industry was impacted

⁹¹ CR at II-7, PR at II-4-5.

⁹² CR/PR at Table IV-17. Apparent U.S. consumption was *** pounds in the first quarter of 2016 ("interim 2016") and *** pounds in the first quarter of 2017 ("interim 2017"). *Id.*

⁹³ CR at II-8, PR at II-5, and CR/PR at Table II-3.

⁹⁴ CR/PR at Table IV-7. Subject imports accounted for *** percent of the U.S. market in interim 2016 and *** percent in interim 2017. *Id.*

⁹⁵ CR/PR at Table IV-7. The domestic industry's market share was *** percent in interim 2016 and *** percent in interim 2017. *Id.*

⁹⁶ The industry's capacity was *** pounds in each full year of the POI and *** pounds in both interim periods. CR/PR at Table III-5.

⁹⁷ CR at III-7, PR at III-4, and CR/PR at Table III-5.

by shortages of the raw material purified terephthalic acid (“PTA”), following a fire at the plant of the sole or principal supplier of this product in late 2014.⁹⁸ Petitioner disputes respondents’ assertion that the domestic industry’s ability to supply its customers was affected during the POI by a raw material shortage.⁹⁹

The market share of nonsubject imports was very small throughout the POI. It was *** percent in 2014, *** percent in 2015, and *** percent in 2016.¹⁰⁰

3. Substitutability and Other Conditions

As discussed above, *** U.S. producers reported that product from all sources was “always” interchangeable,¹⁰¹ and the majority of importers reported that low melt PSF from different sources was “frequently” or “sometimes” interchangeable.¹⁰² Respondents have reported that they cannot obtain black or colored low melt PSF, or crystalline low melt PSF from domestic producers, or that they cannot obtain these products from domestic producers in sufficient quantities.¹⁰³ The record indicates that these products account for relatively small shares of the domestic market.¹⁰⁴ Overall, the record indicates that there is a moderate degree of substitutability between domestically produced low melt PSF and subject imports from Korea and Taiwan.

⁹⁸ Bernet Respondents’ Postconference Brief at Exh. 1, p. 5; Conference Tr. at 17 (Menegaz).

⁹⁹ Petitioner’s Postconference Brief at 20-21.

¹⁰⁰ CR/PR at Table IV-7. Nonsubject imports’ market share was *** percent in interim 2016 and *** percent in interim 2017. *Id.*

¹⁰¹ CR/PR at Table II-4.

¹⁰² CR/PR at Table II-4.

¹⁰³ Bernet Respondents’ Postconference Brief at 8-9 and Exh. 1, p. 1; Milliken Postconference Brief at 6-8.

¹⁰⁴ Black and crystalline low melt PSF are estimated to account for 10 percent and four percent of the U.S. market, respectively. Petitioner’s Postconference Brief at Exh. 2, para. 9.

Purchasers have indicated that price is one of several factors that are important in purchasing decisions. Purchasers responding to the Commission’s lost sales/lost revenue survey most frequently cited price, quality, and availability as the factors affecting their purchasing decisions.¹⁰⁵ Six of eight purchasers reported price as a major factor.¹⁰⁶ In light of this, we find that price is an important factor in purchasing decisions.

The primary raw materials used to produce low melt PSF are monoethylene glycol (“MEG”), PTA, and purified isophthalic acid (“PIA”). The prices of MEG and PTA fell overall during 2014 to 2016, declining by *** percent and *** percent, respectively.¹⁰⁷ Raw material costs accounted for *** percent of the cost of goods sold (“COGS”) in 2014 and *** percent in 2016.¹⁰⁸

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.”¹⁰⁹

Cumulated subject imports increased during the POI. The quantity of cumulated subject imports rose from 151.4 million pounds in 2014 to 170.8 million pounds in 2015, and then to 199.1 million pounds in 2016, an increase of 30.4 percent.¹¹⁰ Subject imports gained significant

¹⁰⁵ CR at II-10, PR at II-6.

¹⁰⁶ CR at II-10, PR at II-6.

¹⁰⁷ CR/PR at V-1 and Fig. V-1. Between December 2016 and March 2017, the costs of these inputs increased by *** percent and *** percent, respectively. *Id.*

¹⁰⁸ CR/PR at V-1.

¹⁰⁹ 19 U.S.C. § 1677(7)(C)(i).

¹¹⁰ CR/PR at Tables IV-2 and C-1. Subject imports were 47.4 million pounds in interim 2016 and 50.4 million pounds in interim 2017. *Id.*

market share directly at the expense of the domestic industry. Cumulated subject import market share rose from *** percent in 2014 to *** percent in 2015 and *** percent in 2016, a gain of *** percentage points.¹¹¹ By contrast, the domestic industry's market share declined by *** percentage points from 2014 to 2016.¹¹²

For purposes of these preliminary determinations, 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.¹¹³

D. Price Effects of the Subject Imports

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

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

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.¹¹⁴

¹¹¹ CR/PR at Table IV-7. Their market share was *** percent in interim 2016 and *** percent in interim 2017. *Id.*

¹¹² The domestic industry's market share, as measured by quantity, was *** percent in 2014, *** percent in 2015, and *** percent in 2016. CR/PR at Table IV-7. Its share was *** percent in interim 2016 and *** percent in interim 2017. *Id.*

¹¹³ Respondents argue that much of the growth in low melt PSF demand has occurred in certain specialized products that the domestic industry does not make in sufficient quantities, including black low melt PSF and crystalline low melt PSF. Conference Tr. at 75-76 (Bernet) and 97 (Longo). In any final phase of these investigations, we will seek data on U.S. shipments of domestically produced and imported black and colored low melt PSF and crystalline low melt PSF.

¹¹⁴ 19 U.S.C. § 1677(7)(C)(ii).

We found in section VII.B.3. above that there is a moderate degree of substitutability between subject imports and the domestic like product and that price is an important factor in purchasing decisions.

The Commission collected quarterly pricing data from U.S. producers and importers for three low melt PSF products.¹¹⁵ Both U.S. producers and nine importers provided usable pricing data for sales of the requested products, although not all firms reported prices for all products for all quarters.¹¹⁶ Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' commercial shipments of low melt PSF, *** percent of U.S. commercial shipments of subject imports from Korea, and *** percent of shipments of U.S. commercial shipments of subject imports from Taiwan in 2016.¹¹⁷

The pricing comparison data show predominant overselling. Prices of cumulated subject imports were below those for U.S.-produced product in 31 of 77 quarterly comparisons (40.3 percent of all comparisons) from January 2014 to March 2017.¹¹⁸ The quantity of subject imports in underselling comparisons was 81.3 million pounds, or 18.2 percent of the total quantity, while the quantity that oversold the domestic product totaled 365.7 million pounds,

¹¹⁵ The three pricing products are:

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

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

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

CR at V-4-5, PR at V-3.

¹¹⁶ CR at V-5, PR at V-3.

¹¹⁷ CR at V-5, PR at V-3.

¹¹⁸ CR/PR at Table V-7.

or 81.8 percent of total quantity.¹¹⁹ The average margins of underselling and overselling were 29.5 percent and 9.6 percent, respectively.¹²⁰ A majority of purchasers that responded to the lost sales/lost revenue survey reported that the subject imports were priced lower than the domestic like product, but only a minority of purchasers that purchased subject imports instead of the domestic like product stated that they did so for price reasons.¹²¹ Based on the record of these preliminary phase investigations, we do not find that there is significant underselling by the subject imports as compared with the domestic like product.¹²²

We also consider whether the subject imports had significant price-depressing effects. Prices for domestically produced fine low melt PSF declined for Products 1 and 2, which accounted for the largest volume of sales during the POI, declined by *** percent and *** percent, respectively, from January 2014 to March 2017.¹²³ Prices fell during 2014 to 2016

¹¹⁹ CR/PR at Table V-7.

¹²⁰ CR/PR at Table V-7.

¹²¹ CR/PR at Table V-9. Of the eight purchasers responding to the lost sales/lost revenue survey, three reported decreasing purchases from domestic producers, one reported increasing purchases, one reported no change, one reported fluctuating purchases, and one did not purchase any domestic product. Explanations for increasing purchases of domestic product included an increase in demand from the U.S. bedding industry. Explanations for decreasing purchases of domestic product included quality issues and availability. All eight purchasers reported that they had purchased imported low melt PSF from Korea instead of U.S.-produced product since 2014. Five purchasers reported that they had purchased imported low melt PSF from Taiwan instead of U.S.-produced product. Two purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. Purchasers identified performance, quality, and availability as non-price reasons for purchasing imported rather than U.S.-produced product. CR at V-15-18, PR at V-7, and CR/PR at Tables V-8 and V-9.

¹²² In any final phase investigations we will consider collecting quarterly pricing data distinguished by channels of distribution (*i.e.*, sales to distributors, sales to end users). Furthermore, we request that parties in their questionnaire comments address the best way to collect data so that pigmentation and form of products are equivalent.

¹²³ CR/PR at Table V-6.

before recovering slightly during interim 2017.¹²⁴ Prices for domestically produced Product 3 increased by *** percent in the same period.¹²⁵ The cost for the principal raw materials used to make low melt PSF also fell during the POI.¹²⁶ Nonetheless, the industry's average unit value of net sales declined more rapidly than unit COGS from 2014 to 2016, and increased less rapidly than unit COGS did in interim 2017.¹²⁷ In light of this, and the large and increasing volumes of subject imports during the POI and their moderate substitutability with the domestic like product, we cannot conclude on the record of the preliminary phase of these investigations that subject imports did not have significant price-depressing effects on the domestic like product.

In addition, given that price is an important factor in purchasing decisions, and that subject imports and the domestic like product are moderately substitutable, we cannot conclude that the shifts in market share from the domestic industry to subject imports were not the result of subject import pricing.

¹²⁴ CR/PR at Tables V-3 and V-4 and Figs. V-2 and V-3.

¹²⁵ CR/PR at Table V-4.

¹²⁶ In any final phase investigations we intend to examine the extent to which raw material costs impact the prices of the domestic like product and subject imports.

¹²⁷ In the 2014-2016 period, when unit COGS decreased by 22.7 percent, the average unit value of net sales decreased by 27.7 percent. CR/PR at Table C-1. In interim 2017, when unit COGS were 11.3 percent higher than in interim 2016, the average unit value of net sales only increased by 2.8 percent. *Id.* We note, however, that unit COGS may have decreased less rapidly than the average unit value of net sales between full years due to the decline in the quantity of net sales between 2014 and 2016.

E. Impact of the Subject Imports¹²⁸

Section 771(7)(C)(iii) of the Tariff Act provides that the Commission, in examining the impact of the subject imports on the domestic industry, “shall evaluate all relevant economic factors which have a bearing on the state of the industry.” These factors include output, sales, inventories, capacity utilization, market share, employment, wages, productivity, gross profits, net profits, operating profits, cash flow, return on investment, return on capital, ability to raise capital, ability to service debt, research and development, and factors affecting domestic prices. No single factor is dispositive and all relevant factors are considered “within the context of the business cycle and conditions of competition that are distinctive to the affected industry.”¹²⁹

The domestic industry’s performance deteriorated over the POI. Most indicators of the domestic industry’s performance declined from 2014 to 2016. There were improvements in some of these indicators over the interim periods.¹³⁰

Even as apparent U.S. consumption grew,¹³¹ the domestic industry’s production, U.S. shipments, and total sales all declined, as subject imports took market share from the domestic

¹²⁸ In its notice initiating the antidumping duty investigations, Commerce reported estimated dumping margins of 39.24 to 52.23 percent for imports of low melt PSF from Korea, and 28.47 to 73.21 percent for imports of low melt PSF from Taiwan. *Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigations*, 82 Fed Reg. 34277, 34280 (July 24, 2017).

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

¹³⁰ See CR/PR at Table C-1.

¹³¹ Apparent U.S. consumption rose from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016. CR/PR at Table IV-7.

industry.¹³² The domestic industry's capacity remained constant throughout the POI,¹³³ and its capacity utilization fell.¹³⁴ The domestic industry's inventories declined throughout the POI.¹³⁵

The domestic industry's production-related workers, wages paid, total hours worked, and average hours worked per worker declined from 2014 to 2016.¹³⁶ The industry's productivity declined from 2014 to 2015, but then improved in 2016 to a level that was better than in 2014.¹³⁷

¹³² The industry's production totaled *** pounds in 2014, and *** pounds in both 2015 and 2016. CR/PR at Table III-5. Its production totaled *** pounds in interim 2016 and *** pounds in interim 2017. *Id.* The industry's U.S. shipments were *** pounds in 2014, *** pounds in 2015, and *** pounds in 2016. CR/PR at Table III-6. The industry's U.S. shipments were *** pounds in interim 2016 and *** pounds in interim 2017. *Id.* The industry's total net sales were *** pounds in 2014, *** pounds in 2015, and *** pounds in 2016. CR/PR at Table VI-1. Total net sales were *** pounds in interim 2016 and *** pounds in interim 2017. *Id.*

¹³³ The industry's capacity was *** pounds in each full year of the POI and *** pounds in both interim periods. CR/PR at Table III-5.

¹³⁴ The industry's capacity utilization declined from *** percent in 2014 to *** percent in 2015 and *** percent in 2016. The industry's capacity utilization was *** percent in interim 2016 and *** percent in interim 2017. CR/PR at Table III-5.

¹³⁵ U.S. producers' end-of-period inventories declined from *** pounds in 2014 to *** pounds in 2015 and *** pounds in 2016. CR/PR at Table III-7. End-of-period inventories were *** pounds in interim 2016 and *** pounds in interim 2017. *Id.*

¹³⁶ The industry's number of production-related workers fell from *** in 2014 to *** in 2015 and to *** in 2016. CR/PR at Table III-8. There were *** production-related workers in interim 2016 and *** workers in interim 2017. *Id.* Total hours worked declined from *** in 2014 to *** in 2015 and to *** in 2016. CR/PR at Table III-8. Hours worked were *** in interim 2016 and *** in interim 2017. *Id.* The wages the industry paid to its workers declined from \$*** in 2014 to \$*** in 2015, and then rose to \$*** in 2016. *Id.* Wages paid totaled \$*** in interim 2016 and \$*** in interim 2017. *Id.* Average hours worked per worker declined from *** in 2014 to *** in 2015, and to *** in 2016. *Id.* Average hours worked per worker was *** in interim 2016 and *** in interim 2017. *Id.*

¹³⁷ The industry's productivity measured in pounds per hour declined from *** in 2014 to *** in 2015, and then increased to *** in 2016. CR/PR at Table III-8. Productivity was *** pounds per hour in interim 2016 and *** pounds per hour in interim 2017. *Id.*

Average unit sales values fell and sales revenues declined.¹³⁸ The ratio of COGS to net sales was high and increased between 2014 and 2016 and was higher in interim 2017 than in interim 2016.¹³⁹ Gross profits declined from 2014 to 2016 and were lower in interim 2017 than in interim 2016.¹⁴⁰

Operating income declined from \$*** in 2014 to \$*** in 2015, and *** in 2016.¹⁴¹ The domestic industry's operating income margins likewise declined from *** percent in 2014 to *** percent in 2015 to *** percent in 2016.¹⁴² Similarly, net income declined from \$*** in 2014 to \$*** in 2015, and turned to a *** in 2016.¹⁴³

Subject import volume increased significantly in absolute terms from 2014 to 2016, and the subject imports increased their share of the U.S. market at the expense of the domestic industry. As previously discussed, we cannot conclude on the present record that the market

¹³⁸ The domestic industry's sales revenues fell from \$*** in 2014 to \$*** in 2015 and \$*** in 2016. CR/PR at Table VI-1. They were \$*** in interim 2016 and \$*** in interim 2017. *Id.* The industry's average sales values declined from \$*** per pound in 2014 to \$*** per pound in 2015 and \$*** per pound in 2016. *Id.* Its average sales values were \$*** per pound in interim 2016 and \$*** per pound in interim 2017. *Id.*

¹³⁹ The domestic industry's COGS as a ratio to net sales increased from *** percent in 2014 to *** percent in 2015, and to *** percent in 2016. CR/PR at Table VI-1. The ratio was *** percent in interim 2016 and *** percent in interim 2017. *Id.*

¹⁴⁰ The domestic industry's gross profits declined from \$*** in 2014 to \$*** in 2015 and *** in 2016. CR/PR at Table VI-1. Gross profits were \$*** in interim 2016 and *** in interim 2017. *Id.*

¹⁴¹ CR/PR at Table VI-1. Operating income was \$*** in interim 2016 and *** in interim 2017. *Id.*

¹⁴² CR/PR at Table VI-1. The industry's operating income margins were *** percent in interim 2016 and *** percent in interim 2017. *Id.*

The industry's return on investment expressed as a ratio of operating income to net assets declined from *** percent in 2014 to *** percent in 2015 and to *** percent in 2016. CR/PR at Table VI-4.

¹⁴³ CR/PR at Table VI-1. Net income was \$*** in interim 2016 and a loss of \$*** in interim 2017. *Id.* The industry's capital expenditures were \$*** in 2014, \$*** in 2015, and \$*** in 2016. CR/PR at Table VI-3. There were *** and there were \$*** in interim 2017. *Id.* The industry's research and development expenses were \$*** in 2014, \$*** in 2015, \$*** in 2016, \$*** in interim 2016, and \$*** in interim 2017. *Id.*

share shifts were not the result of subject import pricing; this is a matter we will examine further in any final phase investigations. In addition to lower market share, the industry reported lower production, shipments, and sales. These declines were inconsistent with other conditions of competition, particularly rising demand for low melt PSF and the industry's available capacity. Consequently, the industry also lost revenues that it ordinarily would have obtained under these conditions.¹⁴⁴ This lost revenue was reflected in its poor and declining financial performance. For purposes of these preliminary determinations, we find that the significant volume of cumulated subject imports, which gained market share at the expense of the domestic industry, had a significant impact on the domestic industry.

We have considered whether there are other factors that may have had an impact on the domestic industry during the POI to ensure that we are not attributing injury from such other factors to subject imports. Nonsubject imports had only a small presence in the U.S. market throughout the POI,¹⁴⁵ and thus their presence cannot explain the observed declines in the domestic industry's market share and performance.

Accordingly, for purposes of these preliminary determinations, we conclude that subject imports have had a significant impact on the domestic industry.

¹⁴⁴ The industry operated with ample unused capacity and declining capacity utilization rates from 2014 to 2016, indicating it had the ability to increase production. See CR/PR at Table III-4.

¹⁴⁵ As measured by quantity, nonsubject import market share was 2.5 percent in 2014, 3.1 percent in 2015, and 1.8 percent in 2016. CR/PR at Table IV-2.

VIII. Conclusion

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

PART I: INTRODUCTION

BACKGROUND

These investigations result from a petition filed with the U.S. Department of Commerce (“Commerce”) and the U.S. International Trade Commission (“USITC” or “Commission”) by Nan Ya Plastics Corporation, America, Livingston, New Jersey, on June 27, 2017, alleging that an industry in the United States is materially injured and threatened with material injury by reason of less-than-fair-value (“LTFV”) imports of low melt polyester staple fiber (“low melt PSF”)¹ from Korea and Taiwan. The following tabulation provides information relating to the background of these investigations.^{2 3}

Effective date	Action
June 27, 2017	Petition filed with Commerce and the Commission; institution of Commission investigation (82 FR 30907, July 3, 2017)
July 17, 2017	Commerce’s notice of initiation (82 FR 34277, July 24, 2017)
July 18, 2017	Commission’s conference
August 10, 2017	Commission’s vote
August 11, 2017	Commission’s determination
August 18, 2017	Commission’s views

STATUTORY CRITERIA AND ORGANIZATION OF THE REPORT

Statutory criteria

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

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

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

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

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

determination regarding whether there is material injury by reason of imports.

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

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

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

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

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

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

Organization of report

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

MARKET SUMMARY

Low melt PSF is generally used as a bonding fiber in nonwoven applications including automotive lining, soundproofing, insulation and batting. There are two U.S. producers of low melt PSF: Nan Ya Plastics Corporation, America ("Nan Ya") and Fiber Innovation Technology ("FIT Fibers").⁶ Leading producers of low melt PSF outside the United States include Huvis Corporation ("Huvis"), Toray Chemical Korea, Inc. ("Toray Chemical"), and Taekwang Industrial Co., Ltd. ("Taekwang") of Korea and Far Eastern New Century Corporation ("Far Eastern") of Taiwan. The leading U.S. importers of product from Korea are ***, while the leading importers of product from Taiwan are ***. Leading importers of product from nonsubject countries (China and Japan) include ***. U.S. purchasers of product are firms that produce batting for quilts, filtration, lining for automotive headliners, truck liners, and soundproofing; leading U.S. purchasers include ***.

Apparent U.S. consumption of low melt PSF totaled approximately *** pounds (\$***) in 2016. U.S. producers' U.S. shipments of low melt 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 199.1 million pounds (\$114.2 million) in 2016 and accounted for *** percent of apparent U.S. consumption by quantity and *** percent by value. U.S. imports from nonsubject sources totaled 3.6 million pounds (\$2.8 million) 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 two firms that accounted for 100 percent of U.S. production of low melt PSF during 2016. U.S. imports are based on official Commerce statistics and questionnaire responses of 23 firms that accounted for the vast majority of subject low melt PSF in 2016. Foreign industry data are based on the

⁶ Petition, p. 1.

questionnaire data of one producer in Taiwan whose exports accounted for *** percent of U.S. imports of low melt PSF from Taiwan in 2016. The Commission did not receive any foreign producers' questionnaire responses from Korean firms.

PREVIOUS AND RELATED INVESTIGATIONS⁷

Out-of-scope certain polyester staple fiber from Korea and Taiwan has been the subject of prior antidumping and countervailing duty investigations in the United States. The original investigation on certain polyester staple fiber ("certain PSF") was filed on April 2, 1999 by E.I. DuPont de Nemours ("DuPont"); Intercontinental Polymers, Inc. ("Intercontinental"); Arteva Specialties S.a.r.l., d/b/a KoSa ("KoSa"); Nan Ya; and Wellman, Inc. ("Wellman"). Nan Ya subsequently withdrew as a petitioner in the investigation involving Korea and was never an original petitioner in the investigation involving Taiwan. DuPont also later withdrew as a petitioner in the investigation involving Taiwan. In 2000, the Commission determined that an industry in the United States was materially injured by reason of imports from Korea and Taiwan of certain subject PSF, other than low melt PSF. The Commission found that low melt PSF was a separate domestic like product, and it made a negative injury determination with respect to that product.⁸ After receiving the Commission's final affirmative determinations, Commerce issued antidumping duty orders on imports of certain PSF from Korea and Taiwan,⁹ with margins of *de minimis* to 7.91 percent *ad valorem* for certain PSF from Korea and 5.77 to 9.51 percent *ad valorem* for certain PSF from Taiwan.¹⁰

On March 20, 2006, the Commission completed its full first five-year reviews. The Commission determined that revocation of the antidumping duty orders on certain PSF from Korea and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹¹ On April 3, 2006, Commerce published its notice of continuation of the antidumping duty orders.¹²

On September 13, 2011, the Commission completed its expedited second five-year reviews on certain PSF from Korea and Taiwan.¹³ The Commission determined that revocation

⁷ Unless otherwise noted, information contained in this section comes from *Polyester Staple Fiber from Korea and Taiwan*, Inv. Nos. 731-TA-825 and 826 (Third Review), USITC Publication 4668, January 2017, pp. I-9 – I-11.

⁸ *Certain Polyester Staple Fiber From Korea and Taiwan*, 65 FR 33576, May 24, 2000.

⁹ *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Notice of Antidumping Duty Order*, 65 FR 33807, May 25, 2000.

¹⁰ *Certain Polyester Staple Fiber from Korea and Taiwan*, Inv. Nos. 731-TA-825 and 826 (Third Review), USITC Publication 4668, January 2017, p. I-9.

¹¹ *Certain Polyester Staple Fiber from Korea and Taiwan; Determinations*, 71 FR 14721, March 23, 2006.

¹² *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Continuation of Antidumping Duty Orders*, 71 FR 16558, April 3, 2006.

¹³ *Certain Polyester Staple Fiber from Korea and Taiwan*, Inv. Nos. 731-TA-825 and 826 (Second Review), USITC Publication 4257, September 2011, p. I-1.

of the antidumping duty orders on certain PSF from Korea and Taiwan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹⁴ On September 30, 2011, Commerce published its notice of continuation of the antidumping duty orders.¹⁵

On June 23, 2006, a petition was filed with the Commission and Commerce by DAK Americas, Nan Ya, and Wellman, alleging that LTFV imports of polyester staple fiber (“PSF”) from China were materially injuring or threatening to materially injure the domestic industry. On April 1, 2007, Commerce determined that PSF from China was being or was likely to be sold in the United States at LTFV.

On May 24, 2007, the Commission determined that the U.S. industry was materially injured by reason of LTFV imports of PSF from China.¹⁶ On June 1, 2007, Commerce issued the antidumping duty order on PSF from China.¹⁷ On May 1, 2012, the Commission instituted¹⁸ and Commerce initiated¹⁹ the first five-year review on the antidumping duty on PSF from China. Following an expedited five-year review, on September 28, 2012, the Commission determined that revocation of the antidumping duty order on PSF from China would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time,²⁰ and Commerce published the first continuation of the antidumping duty order on PSF from China on October 12, 2012.²¹ The second five-year review of the antidumping duty order on PSF from China is currently scheduled for initiation on September 1, 2017.

NATURE AND EXTENT OF ALLEGED SALES AT LTFV

On July 24, 2017, Commerce published a notice in the *Federal Register* of the initiation of its antidumping duty investigations on product from Korea²² and Taiwan.²³ Commerce has

¹⁴ *Certain Polyester Staple Fiber from Korea and Taiwan*; Determination, 76 FR 58040, September 19, 2011.

¹⁵ *Certain Polyester Staple Fiber from the Republic of Korea and Taiwan: Continuation of Antidumping Duty Orders*, 76 FR 60802, September 30, 2011.

¹⁶ *Certain Polyester Staple Fiber from China: Determination*, 72 FR 30394, May 31, 2007.

¹⁷ *Notice of Antidumping Duty Order: Certain Polyester Staple Fiber from the People's Republic of China*, 72 FR 30545, June 1, 2007.

¹⁸ *Certain Polyester Staple Fiber from China; Institution of a Five-Year Review*, 77 FR 25744, May 1, 2012.

¹⁹ *Initiation of Five-Year (“Sunset”) Review*, 77 FR 25683, May 1, 2012.

²⁰ *Certain Polyester Staple Fiber from China: Determination*, 77 FR 60720, October 4, 2012.

²¹ *Certain Polyester Staple Fiber from the People's Republic of China: Continuation of Antidumping Duty Order*, 77 FR 62217, October 12, 2012.

²² *Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigations*, 82 FR 34277, July 24, 2017.

²³ *Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigations*, 82 FR 34277, July 24, 2017.

initiated antidumping duty investigations based on estimated dumping margins of 39.24 to 52.23 percent for low melt PSF from Korea and 28.47 to 73.21 percent for low melt PSF from Taiwan.

THE SUBJECT MERCHANDISE

Commerce's scope

Commerce has defined the scope of this investigation as follows:^{24 25}

The merchandise subject to these investigations is synthetic staple fibers, not carded or combed, specifically bi-component polyester fibers having a polyester fiber component that melts at a lower temperature than the other polyester fiber component (low melt PSF). The scope includes bicomponent polyester staple fibers of any denier or cut length. The subject merchandise may be coated, usually with a finish or dye, or not coated.

Low melt PSF is classifiable under the Harmonized Tariff Schedule of the United States (HTSUS) subheading 5503.20.0015. Although the HTSUS subheading is provided for convenience and customs purposes, the written description of the scope of the merchandise under the investigations 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 the following provision of the 2017 Harmonized Tariff Schedule of the United States ("HTSUS"): 5503.20.0015. The 2017 general rate of duty for this HTS subheading is 4.3 percent *ad valorem*. The import duty applicable to goods originating from Korea was phased out as provided under the United States-Korea Free Trade Agreement. U.S. imports from Korea that qualify for the preferential rate of duty under the United States-Korea Free Trade Agreement are eligible for duty-free entry.²⁶ Decisions on the tariff classification and treatment of imported goods are within the authority of U.S. Customs and Border Protection.

²⁴ *Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigations*, 82 FR 34277, July 24, 2017.

²⁵ During their review of the Petitions, Commerce determined that the scope language of the low melt PSF Petition overlaps with recently-initiated less-than-fair-value investigations of fine denier polyester staple fiber (PSF) from Korea and Taiwan and the existing AD orders on polyester staple fiber (PSF) from Korean. Where the Department has faced the possibility of administering two proceedings covering identical merchandise, it has chosen to craft the scope of the subsequent proceedings to eliminate the potential overlap. *Low Melt Polyester Staple Fiber From the Republic of Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigations*, 82 FR 34277, July 24, 2017.

²⁶ The United States-Korea Free Trade Agreement entered into force on March 15, 2012.

THE PRODUCT

Description and applications

Low melt PSF is a synthetic (manmade) staple fiber,²⁷ not carded, combed or otherwise processed for spinning, made entirely of polyester. It is similar in appearance to cotton or wool fiber when baled. Like other types of PSF, low-melt PSF is a high tenacity or strong fiber that resists shrinking and stretching.²⁸ Unlike other types of PSF, low melt PSF has a bi-component structure consisting of two strongly bonded, but separate polymers of different chemical and/or physical construction.²⁹ It is most commonly comprised of a pure polyester core and a pure polyester outer sheath, but may also be produced in a side-by-side configuration. The sheath, which melts at a lower temperature (approximate melt point of 90° C to 220° C) than the core (approximate melt point of 250° C), provides a stable structure that allows the fiber to be processed smoothly into another form,³⁰ and acts as an agent for thermal-bonding to the core polymer. Thermal bonding eliminates the need for chemical adhesives and is therefore more environmentally friendly than resin bonding—a process used years ago to bind the outer sheath with the core.³¹ By melting at a lower temperature, the polyester outer sheath bonds the fibers together which imparts specific properties to the fibers.³² These include structural integrity, resilience, and durability for nonwoven products such as fiberfill or batting used in bedding – e.g., for comforters, quilting, and padding.³³ According to the petitioner, “different end uses require different melt points.”³⁴ Low melt PSF can be used in nonwoven products for a broad spectrum of downstream industries— automotive (door trim, dash pads, wheel guards, carpets, trunk and hood liners), industrial purposes (soundproofing and insulation for

²⁷ Staple fiber is cut into specific, predetermined lengths from filaments. Hoeschst Celanese. *Dictionary of Fiber & Textile Technology*, “Staple,” p. 150. 1990

²⁸ Hoeschst Celanese. *Dictionary of Fiber & Textile Technology*, “Polyester Fiber,” p. 116. 1990

²⁹ Hans J. Koslowski. *Dictionary of Man-Made Fibers: Terms-Figures-Statistics, 2nd edition*, p. 2, 34-35.

³⁰ Fiberpartner.com. “Basics about low melt fiber you need to know,” April 4, 2016. <http://www.slideshare.net/.../basics-about-low-melt-fiber-you-need-to-know>, accessed July 12, 2017.

³¹ Low melt polyester staple fibers offer reduced energy costs, recyclability, and a healthier work environment for manufacturers’ employees. Exelto Fibers. “Product Data Sheet: Polyolefin (Low) Melt Fibers.” <http://www.exelto.com>, accessed July 26, 2017, conference transcript, p. 73 (Bernet), and representative of the American Fiber Manufacturers Association, email message to USITC staff, July 26, 2017.

³² Conference transcript, p. 14 (Menegaz).

³³ “Low Melt Polyester Fiber.” <http://www.globalsources.com/gsol/I/Polyester-fiber/p/sm/1133589310.htm> (accessed July 26, 2017) and Drum Creative. “The Low-Down on Low-Melt,” September 29, 2011. <http://www.cdsembles.com/the-low-down-on-low-melt/>, accessed July 12, 2017.

³⁴ Conference transcript, p. 19 (Sparkman).

construction), water and air filtration (such as air-filtering face masks), and hygienic products (wipes, diapers, sanitary and medical goods, etc.).³⁵

The variable physical characteristics of low melt PSF include “denier length, finished luster, and crimp,” percentage of the low melt PSF compared to the main fiber, whiteness or color (for black or other colors, a dye is added to the polymer during the fiber extrusion process),³⁶ and crystalline form (the molecules remain in a repeated and structured arrangement rather than an amorphous form throughout the entire production process, and a chemical additive is inserted before extrusion).³⁷

Black and crystalline low melt PSF are sold at higher prices because of additional raw materials that are needed during the production process.³⁸ Both are used for the same downstream industries as regular low melt PSF, but are targeted for niche markets within those industries. For example, black low melt PSF has been replacing “more toxic and heavier molded plastics in automotive applications such as trunk liners and engine insulation liners...,” and is used in applications in the automotive industry where the fiber might be visible, or for the exterior of the vehicle for which quality, esthetics, and engineering specifications are considered important.³⁹

The respondents state that the chemical structure of crystalline low melt PSF differs from that of standard low melt PSF because “the polymer molecules are in a structured and repeated arrangement.” Furthermore, “crystalline low melt does not soften until it meets the exact melting point...and can withstand a significantly larger variety of temperatures without changing form,” whereas standard low melt PSF softens as the temperature gets closer to its melt temperature.⁴⁰ The petitioner notes that the additive in the crystalline form of low melt PSF provides a bit more rigidity which enables it to resist heat more effectively than standard low melt PSF.⁴¹ For this reason, crystalline low melt PSF is typically used in the underbody of

³⁵ Low Melt Polyester Fiber.” <http://www.globalsources.com/gsol/I/Polyester-fiber/p/sm/1133589310.htm>, accessed July 26, 2017 and Fiberpartner.com. “Basics about low melt fiber you need to know,” April 4, 2016. <http://www.slideshare.net/.../basics-about-low-melt-fiber-you-need-to-know>, accessed 7/12/2017, Conference transcript, p. 74 (Bernet), and Petitioner Nan Ya, postconference brief, p. 5.

³⁶ Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

³⁷ Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017 and Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 7 and conference transcript, pp. 80-81 (Kunik).

³⁸ Respondent Far Eastern New Century Corporation, postconference brief, p. 1 and conference transcript, pp. 47 and 105. Respondent Milliken stated that it has historically paid *** more for black low melt PSF. Respondent Milliken postconference brief, p. 5.

³⁹ Conference transcript, p. 15 (Menegaz), p. 50 (Sparkman), and Respondents Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 122-123.

⁴⁰ Respondents Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 7.

⁴¹ Conference transcript, p. 70 (Sparkman).

the automobile, wheel liners and components near the engine compartment which have various temperature zones.⁴²

The petitioner states that low melt PSF produced in the United States is chemically similar to the low melt PSF produced in Korea and Taiwan, used in the same applications, and made from the same raw materials—monoethylene glycol (MEG) and purified terephthalate acid (PTA).⁴³ However, the respondents state that each producer’s fiber “has slightly different characteristics, such as shrinkage and/or bond strength”⁴⁴ and that the low melt PSF produced in the United States does not offer the “various specialty products in different configurations that Korean sources provide.”⁴⁵

The petitioner estimates that crystalline and black low melt PSF account for about 4 and 10 percent, respectively, (a combined 14 percent) of the U.S. market for low melt PSF.⁴⁶ In contrast, the respondents estimate that together crystalline and black low melt PSF account for 20 to 30 percent of the U.S. market.⁴⁷ Respondents also note there is limited substitutability between the white low melt produced domestically by the petitioners and the black low melt imported into the U.S. market. Respondents claim that black low melt PSF is responsible for the increase in demand worldwide, not just the United States, for low melt PSF.⁴⁸

All low melt staple fiber is sold cut-to-length in bales to distributors or directly to end users—U.S. manufacturers of bedding, mattresses, filters, automotive components, insulation media, and other general industrial components.⁴⁹

Manufacturing processes

Like other forms of polyester staple fiber, the production of bi-component low melt PSF is capital intensive and occurs in two distinct stages—1) the formation of the polymers and 2) the formation of fiber including extruding, stretching, cutting, and baling. However, the production of low melt PSF is distinctive because of the fiber’s unique bi-component structure consisting of two polymers that have different melting points. The most common structures of low melt bi-component staple fiber are: 1) core/sheath types (concentric circles) and 2) side-by-side types.⁵⁰ Most low melt PSF is produced is in the core/sheath type configuration,⁵¹ in which

⁴² Respondents Bernet International Trading, Fibertex Corporation, Stein Fibers, and Consolidated Fibers, postconference brief, p. 7.

⁴³ Conference transcript, p. 23 (Sparkman) and Petitioner Nan Ya, postconference brief, p. 4.

⁴⁴ Conference transcript, p. 75 (Bernet).

⁴⁵ Conference transcript, p. 28 (Kunik).

⁴⁶ Petitioner Nan Ya, postconference brief, pp. 9 and 16.

⁴⁷ Conference transcript, p.15 (Menegaz).

⁴⁸ Conference transcript, p. 15 (Menegaz).

⁴⁹ Conference transcript, p. 82 (Elias).

⁵⁰ Hans J. Koslowski. *Dictionary of Man-Made Fibers: Terms-Figures-Statistics, 2nd edition*, p. 2, 34-35 and representative of the American Fiber Manufacturers Association, telephone call with USITC staff, July 31, 2017.

⁵¹ Conference transcript, p. 46.

the outer sheath, made of virgin materials, melts at a lower temperature (approximate melt point of 90° C to 220° C) than the core (approximate melt point of 250 C), which can be produced with either virgin or recycled materials.⁵² The thermal bonding of the outer sheath with the inner core that occurs when the low-melt PSF is heated, replaces a resin bonding process employed in the past.⁵³

In stage one of the manufacturing process, the polymer is produced by the reaction of the raw materials— monoethylene glycol (MEG) and purified terephthalate acid (PTA) or its derivatives.⁵⁴ The cost of these raw materials accounts for most of the production costs of low melt PSF.⁵⁵ Unlike other forms of PSF, production of low melt PSF requires two reactors, one producing the lower melt temperature product and the second which produces the higher melt temperature product.⁵⁶ The MEG and PTA are chemically combined in one reactor that will eventually form the polyester core of low melt. Polyester that will form the outer sheath is formulated in a second reactor, where MEG and PTA are mixed. Often a third input, purified isophthalic acid (PIA) is added to achieve a lower melting point.⁵⁷ “The melt point of the outer sheath can be controlled by the amount of PIA added to the second reactor vessel.”⁵⁸

The polymerization occurs at a high temperature using a vacuum by one of two methods: 1) The MEG and PTA “react to form a polymer chain, releasing methanol; or 2) the MEG and PTA react directly to form the polymer with water as the by-product.”⁵⁹

The second stage of the production process for low melt PSF, common to all PSF, is extrusion and fiber formation that includes stretching, cutting, and baling. After polymerization, the solid, molten plastic, which has a consistency similar to cold honey, must be heated and liquefied before it can be extruded. The liquid fiber-forming polymers are then extruded through tiny holes of a spinneret, a device similar in principle to a showerhead, to form continuous filaments of semi-solid polymer. The denier of the fiber is controlled by the size of the holes on the spinneret as is the configuration (core/sheath or side by side, for example) of the bi-component low melt PSF.⁶⁰

Petitioner maintains that all low melt PSF (including black low melt PSF and crystalline low melt PSF) is manufactured using the same basic production process on the same equipment

⁵² Conference transcript, p. 19 and p. 44.

⁵³ Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 26, 2017 and conference transcript, p. 73. According to one respondent, “resin bonding manufacturing capabilities no longer really exist in meaningful ways,” conference transcript, p. 73 (Bernet). (***)

⁵⁴ Hoeschst Celanese. *Dictionary of Fiber & Textile Technology*, “Polyester Fiber,” p. 116. 1990

⁵⁵ ***.

⁵⁶ Conference transcript, p. 66 and Representative of the American Fiber Manufacturers Association, telephone call with USITC staff, July 31, 2017.

⁵⁷ Petitioner Nan Ya Plastics, postconference brief, p. 4.

⁵⁸ Conference transcript, p. 20.

⁵⁹ Hoeschst Celanese. *Dictionary of Fiber & Textile Technology*, “Polyester Fiber,” 116. 1990.

⁶⁰ Representative of the American Fiber Manufacturers Association, telephone call with USITC staff, July 31, 2017.

and with the same employees.⁶¹ An industry source reports that the differences between the manufacturing processes for standard low melt PSF and those for black low melt PSF and crystalline low melt PSF are minor.⁶² The principal additional step required to produce black and crystalline low melt PSF is that the dye used to produce the black low melt PSF, or the chemical additive used to produce the crystalline low melt PSF, are added to the polymer before the fiber extrusion.⁶³ Because of the additional materials required to produce black and crystalline low melt PSF, U.S. producers of low melt PSF either use dedicated production lines for these different forms or produce them in alternate small batches.⁶⁴ Standard low melt PSF cannot be produced simultaneously with black or crystalline low melt PSF on the same shared equipment.⁶⁵

After extrusion, the semi-solid fibers are air cooled to form solid fibers. 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,⁶⁶ 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 is sent through a crimping machine, which gives the fiber tow a two-dimensional, saw-tooth shape. The tow is then sent through an oven to heat-set the crimp. A second finish (usually silicone or some type of oil-based finish) may be added during this stage of the process, either before the tow is crimped and heat-set or directly after, depending on the manufacturer’s preference. Finally, the fiber tow is cut to length, baled, and shipped to the end users or customers.⁶⁷ For low melt PSF, the bales are not compressed as much as for other

⁶¹ Petitioner Nan Ya, postconference brief, p. 6 and representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

⁶² Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

⁶³ Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 24, 2017.

⁶⁴ Representative of the American Fiber Manufacturers Association, email message to USITC staff, July 26, 2017 and conference transcript, pp. 89-90.

⁶⁵ Conference transcript, p. 94 (Fee).

⁶⁶ “Tow is a large strand of continuous manufactured fiber filaments without definite twist, collected in loose, rope-like form, usually held together by crimp. Tow is the form that most manufactured fiber reaches before being cut into staple.” Hoeschst Celanese. *Dictionary of Fiber & Textile Technology*, “Tow,” 1990, p. 165.

⁶⁷ *Certain Polyester Staple Fiber from Korea and Taiwan, Invs. Nos. 731-TA-825 and 826 (Final)*, USITC Publication 3300, May 2000, pp. I-3-I-9, and *Certain Polyester Staple Fiber from Korea and Taiwan, Invs. Nos. 731-*, USITC Publication 3843, March 2006, pp. I-12-I-19, *Certain Polyester Staple Fiber from Korea and Taiwan, Invs. Nos. 731-TA-825 and 826 (Review)*, USITC Publication 3843, March 2006, p. I-16. Staff field trip report, Wellman, November 4, 2005, and representative of the American Fibers Manufacturers Association, email message to USITC staff, July 27, 2017.

staple fibers to avoid damaging the fibers.⁶⁸ Therefore, the bales weigh less—about 120 pounds versus as much as 400 pounds for non-low melt PSF.⁶⁹

DOMESTIC LIKE PRODUCT ISSUES

Petitioners contend that the Commission should define the domestic like product as all low melt PSF, separate from other polyester staple fiber, and co-extensive with the scope of these investigations.⁷⁰ Further, they argue that black low melt PSF and crystalline low melt PSF are not separate like products based on the Commission's six factor like product analysis.⁷¹ Respondent Milliken & Company ("Milliken") argues that the Commission should find black and other dyed low melt PSF as separate like products.⁷² Respondents Fibertex Corporation ("Fibertex"), Consolidated Fibers, Inc. ("Consolidated Fibers"), BIT and Stein Fibers agree with respondent Milliken's argument that black low melt PSF is a separate like product and additionally assert that crystalline low melt PSF also should be considered a separate domestic like product.⁷³

⁶⁸ Representative of the American Fibers Manufacturers Association, email message to USITC staff, July 27, 2017.

⁶⁹ Representative of the American Fibers Manufacturers Association, email message to USITC staff, July 27, 2017.

⁷⁰ Petition, pp. 13-15.

⁷¹ Petitioner's postconference brief, pp. 8-11.

⁷² Respondent Milliken's postconference brief, pp. 2-5.

⁷³ Respondents' Fibertex, Consolidated Fibers, BIT and Stein Fibers postconference brief, pp. 4-9.

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

U.S. MARKET CHARACTERISTICS

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

Apparent U.S. consumption of low melt PSF increased from 2014 to 2016. Overall, apparent U.S. consumption in 2016 was *** percent higher than in 2014.

CHANNELS OF DISTRIBUTION

U.S. producers sold mostly to distributors, with the remaining share to end users, while importers sold almost entirely to end users (table II-1).²

Table II-1

Low melt PSF: U.S. producers' and importers' U.S. commercial shipments, by sources and channels of distribution, 2014-16, January to March 2016, and January to March 2017

* * * * *

GEOGRAPHIC DISTRIBUTION

U.S. producers reported selling low melt PSF to all regions in the contiguous United States (table II-2). Importers reported selling to all regions of the United States. For U.S. producers, *** percent of sales were within 100 miles of their production facility, *** percent were between 101 and 1,000 miles, and *** percent were over 1,000 miles. Importers sold 56.7 percent within 100 miles of their U.S. point of shipment, 39.3 percent between 101 and 1,000 miles, and 4.1 percent over 1,000 miles.

¹ Petition, p. 7.

² Eleven of 23 importers imported low melt PSF for internal consumption/company transfers and did not report any U.S. commercial shipments. Imports of low melt PSF from Korea for internal consumption increased from 2014 to 2016. Imports of low melt PSF from Korea for internal consumption accounted for 11.5 percent, by quantity, of total imports from Korea in 2016. Imports of low melt PSF from Taiwan for internal consumption decreased from 11.8 percent in 2014 to 9.7 percent in 2016 and increased from 10.1 percent in interim 2016 to 11.2 percent in interim 2017.

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

Region	U.S. producers	Importers
Northeast	2	6
Midwest	2	7
Southeast	2	8
Central Southwest	1	6
Mountain	1	5
Pacific Coast	1	5
Other ¹	0	1
All regions (except Other)	1	4
Reporting firms	2	10

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 low melt PSF have the ability to respond to changes in demand with large changes in the quantity of shipments of U.S.-produced low melt PSF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are a substantial amount of unused capacity, along with the ability to shift some shipments from alternate markets. Factors mitigating responsiveness of supply include the limited ability to shift production to or from alternate products.

Industry capacity

Domestic capacity utilization decreased from *** percent in 2014 to *** percent in 2016; domestic capacity utilization increased from *** percent in interim 2016 to *** percent in interim 2017. The decline in capacity utilization was a result of declining production, as capacity remained stable during the period. This relatively low level of capacity utilization suggests that U.S. producers may have a substantial ability to increase production of low melt 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, and were *** percent in January-March 2016 and *** percent in January-March 2017. This level of exports indicates that U.S. producers may have some ability to shift shipments between the U.S. market and other markets in response to price changes. The primary export markets listed by U.S. producers were ***.

Inventory levels

U.S. producers' inventories declined during the period. As a ratio to total shipments, U.S. producers' inventories decreased from *** percent in 2014 to *** percent in 2016. These inventory levels suggest that U.S. producers may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

*** responding U.S. producers stated that *** could produce different types of low melt PSF on the same type of equipment.³ However, U.S. producers reported that other PSF products, such as coarse or fine denier PSF, cannot be produced on the same production lines as low melt PSF.⁴

Subject imports from Korea

No foreign producers from Korea responded to the Commission's questionnaires. The United States is the largest export market for low melt PSF from Korea, accounting for 18.4 percent of total Korean exports in 2016.⁵

Subject imports from Taiwan⁶

Based on available information, the producer of low melt PSF from Taiwan, Far Eastern New Century Corporation ("FENC") has the ability to respond to changes in demand with moderate changes in the quantity of shipments of low melt PSF to the U.S. market. The main contributing factors to this degree of responsiveness of supply are some unused capacity, the ability to shift shipments from alternate markets and some ability to shift production to or from alternate products; factors mitigating responsiveness of supply include limited inventories.

Industry capacity

FENC's capacity utilization decreased from *** percent in 2014 to *** percent in 2016, and was *** percent in interim 2016 compared to *** percent in interim 2017. The decline in capacity utilization was a result of declining production, as capacity remained stable during the period. This moderately high level of capacity utilization suggests that the Taiwan producer may

³ The petitioner also specifically noted that black and crystalline low melt PSF, can be produced on the same production line. Conference transcript, p.30 (Ringel).

⁴ Petitioners' postconference brief, p. 7.

⁵ Official exports statistics under HS subheading 5503.20 as reported by Korea Customs and Trade Development Institution in the IHS/GTA database, accessed July 13, 2017.

⁶ For data on the number of responding foreign firms and their share of U.S. imports from Taiwan, please refer to Part I, "Summary Data and Data Sources."

have a moderate ability to increase production of low melt PSF in response to an increase in prices.

Alternative markets

Taiwan shipments to markets other than the United States, as a percentage of total shipments, decreased from *** percent in 2014 to *** percent in 2016. FENC's home market shipments increased from *** percent in 2014 to *** percent in 2016. This level of exports indicates that FENC may have some ability to shift shipments between the U.S. market and other markets in response to price changes.

Inventory levels

FENC's inventories declined during the period. Inventory levels, as a ratio to total shipments, decreased from *** percent in 2014 to *** percent in 2016. These inventory levels suggest that the FENC may have limited ability to respond to changes in demand with changes in the quantity shipped from inventories.

Production alternatives

***. It reported that it can produce ***. ***.

Supply constraints

*** U.S. producers and the *** responding foreign producer reported no supply constraints since January 2014.

Nonsubject imports

Nonsubject imports accounted for 1.8 percent of total U.S. imports, by quantity, in 2016. The only sources of nonsubject imports reported by U.S. importers were China and Japan. Combined, these countries accounted for 78.6 percent of the reported nonsubject imports from January 2014 to March 2017.

U.S. demand

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

End uses and cost share

U.S. demand for low melt PSF depends on the demand for U.S.-produced downstream products. Reported end uses include antibacterial wipes and diapers, soundproofing, batting,

furniture, padding and insulation in the trunks of cars and in engine hoods, car floors, and the headliners of cars.

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

- 20 to 30 percent in general non-woven fabrics
- 10 to 20 percent in bedding applications
- 18 to 20 percent in furniture
- 18 to 50 percent in general automotive end uses
- 20 to 30 percent in high loft batting

Business cycles

*** responding U.S. producers and three of the responding 20 importers indicated that the market for low melt PSF was subject to business cycles or distinctive conditions of competition. Specifically, U.S. producer *** reported that the demand for low melt PSF depends heavily on the production of automobiles. One importer, ***, reported that the demand for low melt PSF increases during the late fall through early spring due to tax refunds being issued to consumers and increased outdoor furniture purchases. Another importer reported that demand spikes around national holidays in the United States that involve major sales events in the bedding industry, such as President’s Day, Memorial Day, July 4th, and Labor Day.

Demand trends

*** U.S. producers and 12 of 22 importers reported an increase in U.S. demand for low melt PSF since January 1, 2014 (table II-3). Four importers reported that increased U.S. demand was in part driven by increased use in automotive applications.

Table II-3
Low melt PSF: Firms’ responses regarding U.S. demand and demand outside the United States

Item	Increase	No change	Decrease	Fluctuate
Demand in the United States				
U.S. producers	***	0	0	0
Importers	12	5	2	3
Demand outside the United States				
U.S. producers	1	0	0	0
Importers	11	4	0	1

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

Substitute products

Substitutes for low melt PSF are limited. *** U.S. producers and 18 of 22 responding importers reported that there were no substitutes. However, four importers identified substitutes, including bicomponent fiber made from polyethylene and polyethylene terephthalate, polypropylene, as well as powder and spray bonding instead of bonding using low melt PSF.

SUBSTITUTABILITY ISSUES

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

Lead times

Low melt PSF is primarily sold from inventory. U.S. producers reported that *** percent of their commercial shipments in 2016 came from inventories, with lead times averaging *** days. The remaining *** percent of their commercial shipments were produced-to-order, with lead times averaging *** days. Importers reported that 80.4 percent of their commercial shipments of imported low melt PSF from Korea and Taiwan came from their U.S. inventories, with an average lead time of 2 days. Importers reported that 11.3 percent of their commercial shipments were shipped from foreign inventories, with an average lead time of 62 days. The remaining 8.3 percent of importers' commercial shipments were produced-to-order, with an average lead time of 57 days.

Factors affecting purchasing decisions

Purchasers responding to lost sales lost revenue allegations⁷ were asked to identify the main purchasing factors their firm considered in their purchasing decisions for low melt PSF. The major purchasing factors identified by firms included price, quality, and availability. Six of eight purchasers listed price as a major factor in their purchase decision. Six of eight purchasers also listed quality as a major factor, and four of eight purchasers listed availability as one of their three main purchasing factors. Two purchasers also reported that the availability of black low melt PSF was a major purchasing factor and one purchaser reported the availability of crystalline low melt PSF as a major factor. Two of eight purchasers reported the unavailability of domestically produced black low melt PSF, instead of price, was a primary reason for purchasing subject imports rather than domestically produced low melt PSF.

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

In order to determine whether U.S.-produced low melt PSF can generally be used in the same applications as imports from Korea and Taiwan, U.S. producers and importers were asked whether the products can always, frequently, sometimes, or never be used interchangeably. As shown in table II-4, *** U.S. producers reported that low melt PSF can always be used

⁷ This information is compiled from responses by purchasers identified by the petitioner or other U.S. producers to the lost sales lost revenue allegations. See Part V for additional information.

interchangeably, regardless of the source country. Only one of 15 importers reported the U.S. product was always interchangeable with low melt PSF from Korea, and the same importer was the only one of 12 responding importers to report the U.S. product was always interchangeable with low melt PSF from Taiwan. The majority of importers reported that U.S. product was either sometimes or never interchangeable with low melt PSF from both Korea and Taiwan. Three importers reported the unavailability of U.S.-produced black low melt PSF as a reason for the domestic product being sometimes or never interchangeable with either Korea or Taiwan product.^{8 9} Another reason cited was quality. For instance, importer *** reported that low melt PSF from Korea always runs on their production lines, whereas U.S.-produced low melt PSF sometimes does not. Several importers also cited how easily customers can process the product as a reason for the products being sometimes or never interchangeable.

Table II-4
Low melt PSF: Interchangeability between low melt PSF produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. Korea	***	***	***	***	1	4	8	2
U.S. vs. Taiwan	***	***	***	***	1	3	7	2
Subject countries comparisons:								
Korea vs. Taiwan	***	***	***	***	1	4	4	4
Nonsubject countries comparisons:								
U.S. vs. nonsubject	***	***	***	***	1	2	5	2
Korea vs. nonsubject	***	***	***	***	1	2	4	3
Taiwan vs. nonsubject	***	***	***	***	1	2	5	1

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

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

In addition, U.S. producers and importers were asked to assess how often differences other than price were significant in sales of low melt PSF from the United States, subject, or nonsubject countries. As seen in table II-5, *** U.S. producers reported that factors other than the price were never important factors in their sales decisions. A plurality of importers reported that factors other than price were always or frequently a factor in their firms' sales decisions.

⁸ Respondents contend that black low melt PSF is not interchangeable with white low melt PSF. Respondents argue that the addition of a pigment dye results in different end-uses based on their color, and therefore, the two products are not substitutable with one another. Respondent *** postconference brief, p. 7. The petitioner contends that for end-uses were the low melt PSF is not visible all color variations of low melt PSF are interchangeable. Petitioner's postconference brief, p. 9.

⁹ The petitioner estimated that the black and crystalline low melt PSF account for 10 percent and 4 percent of the U.S. low melt market, respectively. Petitioner's postconference brief, p. 16.

Differences other than price cited by importers include quality, how well the product can be processed through the machines of customers, and the unavailability of black low melt PSF from U.S. producers.

Table II-5
Low melt PSF: Significance of differences other than price between low melt PSF produced in the United States and in other countries, by country pairs

Country pair	Number of U.S. producers reporting				Number of U.S. importers reporting			
	A	F	S	N	A	F	S	N
U.S. vs. subject countries:								
U.S. vs. Korea	***	***	***	***	4	4	4	0
U.S. vs. Taiwan	***	***	***	***	5	3	3	0
Subject countries comparisons:								
Taiwan vs. Korea	***	***	***	***	3	2	2	3
Nonsubject countries comparisons:								
U.S. vs. nonsubject	***	***	***	***	4	2	1	0
Korea vs. nonsubject	***	***	***	***	4	2	1	0
Taiwan vs. nonsubject	***	***	***	***	3	2	1	0

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

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

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

The Commission analyzes a number of factors in making injury determinations (see 19 U.S.C. §§ 1677(7)(B) and 1677(7)(C)). Information on the dumping margins was presented in *Part I* of this report and information on the volume and pricing of imports of the subject merchandise is presented in *Part IV* and *Part V*. Information on the other factors specified is presented in this section and/or *Part VI* and (except as noted) is based on the questionnaire responses of two firms that accounted for the all U.S. production of low melt PSF during 2016.

U.S. PRODUCERS

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

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

Table III-1
Low melt PSF: U.S. producers of low melt PSF, their positions on the petition, production locations, and shares of reported production, 2016

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

¹ Fiber Innovation Technology, Inc. ("FIT Fibers") is ***.

² Nan Ya Plastics Corporation, America ("Nan Ya America") is ***.

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

Table III-2 presents information on U.S. producers' ownership, related and/or affiliated firms, and their share of total production of low melt PSF.

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

* * * * *

As indicated in table III-2, U.S. producer *** is related to a foreign producer of the subject merchandise. Nan Ya is wholly owned by Nan Ya Plastics Corporation, ***. No U.S. producers are related to U.S. importers of the subject merchandise.

FIT Fibers

FIT Fibers, a wholly owned subsidiary of The Cha Technologies Group, is a producer of low melt PSF, black low melt polyester staple fiber, and crystalline polyester staple fiber headquartered in Johnson City, Tennessee. FIT Fibers operates a research and development facility on-site and maintains a large number of patents that it utilizes to jointly develop products with customers.¹ The Johnson City facility was constructed and became operational in 1997.

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

Nan Ya America

Nan Ya America, a wholly owned subsidiary of Nan Ya Plastics Corporation, is a producer of low melt PSF headquartered in Livingston, New Jersey. Nan Ya America operates three business units in the United States (1) flexible PVC films (Batchelor, Louisiana), (2) polyester fiber (Lake City, South Carolina), and (3) ethylene glycol production (Point Comfort, Texas).⁴ Established in 1990, Nan Ya America's Lake City, South Carolina plant is the firm's largest U.S. production site⁵ and began production of low melt PSF in 2008.⁶ In addition to low melt PSF, this site produces polyester chip (resin) for textile and bottle/sheet industries, other polyester staple fiber, and polyester continuous filament yarns through a fully automated and continuous production lines process.⁷ The firm estimates that this site produces 2 billion pounds of polyester polymer per year.⁸

Nan Ya Plastics Corporation, which is headquartered in Taipei, Taiwan, focuses on the production of petrochemical products, polyester products and electronics. In 2015, Nan Ya

¹ *Fiber Innovation Technology webpage*, <http://www.fitfibers.com/>, July 24, 2017.

² *The Cha Technologies Group webpage*, <http://www.chatechnologies.com/who-we-are/the-cha-group/>, accessed July 24, 2017.

³ *The Cha Technologies Group webpage*, <http://www.chatechnologies.com/who-we-are/group-structure/>, July 24, 2017.

⁴ *Nan Ya Plastics Corporation, America webpage*, <http://www.npcam.com/nno1.htm>, accessed July 24, 2017.

⁵ *Nan Ya Plastics Corporation, America webpage*, <http://www.npcam.com/nj-sc/AAAAA-01.htm>, accessed July 24, 2017.

⁶ Conference transcript, p. 19 (Sparkman).

⁷ *Nan Ya Plastics Corporation, America webpage*, <http://www.npcam.com/nj-sc/AAAAA-01.htm>, accessed July 24, 2017.

⁸ *Nan Ya Plastics Corporation, America webpage*, <http://www.npcam.com/nj-sc/AAAAA-01.htm>, accessed July 24, 2017.

reported annual operating revenue of \$9,066 million.⁹ The firm manufactures polyester products at plants located throughout Taiwan, the United States, Vietnam and mainland China.¹⁰

Producers were asked to report any changes in operations such as plant openings, plant closings, relocations, expansions, acquisitions, consolidations, prolonged shutdowns or production curtailments since January 1, 2014. Such changes are presented in table III-3.

Table III-3
Low melt 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. Total annual capacity to produce low melt PSF in the United States remained unchanged from 2014 to 2016. Total U.S. production of low melt PSF decreased by *** percent from 2014 to 2016, but was *** percent higher in January to March 2017 relative to January to March 2016. U.S. producers' capacity utilization rate for low melt PSF decreased by *** percentage points from 2014 to 2015, remained unchanged from 2015 to 2016, but was *** percentage points higher in January to March 2017 relative to January to March 2016.

Table III-4
Low melt PSF: U.S. producers' capacity, production, and capacity utilization, 2014-16, January to March 2016, and January to March 2017

* * * * *

Figure III-1
Low melt PSF: U.S. producers' capacity, production, and capacity utilization, 2014-16, January to March 2016, and January to March 2017

* * * * *

U.S. producers' production is calculated ***.¹¹ Petitioner Nan Ya testified that efficient low melt PSF production requires a continuous high volume production to maintain

⁹ Nan Ya Plastics webpage, http://www.npc.com.tw/j2npc/enus/company_highlights.jsp, accessed July 24, 2017.

¹⁰ Nan Ya Plastics webpage, http://www.npc.com.tw/j2npc/enus/company_highlights.jsp, accessed July 24, 2017.

¹¹ Nan Ya's producer questionnaire response, section II-7. FIT Fibers' producer questionnaire response, section II-7.

efficiencies.¹² Furthermore, maintaining a high level of capacity utilization is essential because stopping and restarting production is inefficient and raises production costs.¹³ Additionally, Petitioner Nan Ya asserted that it could make adjustments to double its capacity with existing equipment should pricing make it commercially justifiable.¹⁴

The Commission asked producers to report constraints on capacity to produce low melt PSF. FIT Fibers stated that the ***¹⁵ are constraints while Nan Ya reported that ***¹⁶ limits production. FIT Fibers reported that it ***¹⁷ while Nan Ya reported that its firm ***.¹⁸ However, Nan Ya testified their facility operates a secondary line that produces conjugate which could be switched to low melt production, and would require the manufacture of new spinnerets, which could take four to six weeks.¹⁹

Alternative products

*** firm reported producing products other than low melt PSF on the same equipment and machinery used to make low melt PSF. As shown in table III-5, low melt PSF accounted for between *** percent of U.S. producers' production on this shared equipment from 2014 to 2016. ***.

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

* * * * *

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

Table III-6 presents U.S. producers' U.S. shipments, export shipments, and total shipments.

Table III-6
Low melt PSF: U.S. producers' U.S. shipments, export shipments, and total shipments, 2014-16, January to March 2016, and January to March 2017

* * * * *

¹² Conference transcript, p. 22 (Sparkman).
¹³ Conference transcript, p. 22 (Sparkman).
¹⁴ Conference transcript, p. 22 (Sparkman).
¹⁵ FIT Fibers producer questionnaire response, section II-3d.
¹⁶ Nan Ya producer questionnaire response, section II-3.
¹⁷ FIT Fibers producer questionnaire response, section II-3f.
¹⁸ Nan Ya producer questionnaire response, section II-3d.
¹⁹ Conference transcript, pp. 65-66 (Sparkman).

U.S. producers' ship *** of their low melt PSF domestically, with U.S. shipments accounting for *** percent, *** percent, and *** percent of total shipments in 2014, 2015 and 2016 respectively. The quantity of total shipments decreased by *** percent from 2014 to 2016 and was *** percent lower in January to March 2017 relative to January to March 2016. The value of total shipments also decreased *** percent from 2014 to 2016, but was *** percent higher in January to March 2017 relative to January to March 2016.

U.S. producers' U.S. commercial shipments decreased by *** percent from 2014 to 2016 and were *** percent lower in January to March 2017 relative to January to March 2016. The value of U.S. commercial shipments decreased by *** percent from 2014 to 2016 and was *** percent higher in January to March 2017 relative to January to March 2016. The unit value of U.S. producers' U.S. commercial shipments decreased *** percent from 2014 to 2016 and was *** percent higher in January to March 2017 relative to January to March 2016.²⁰

*** reported exporting shipments to low melt PSF to ***. *** export shipments increased by *** percent from 2014 to 2016 by quantity, while the value decreased by *** percent over the same period. In the interim period, *** export shipments were *** percent lower in January to March 2017 relative to January to March 2016 by quantity and *** percent lower by value in January to March 2017 relative to January to March 2016.

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' inventories of low melt PSF decreased by *** percent from 2014 to 2016 and were *** percent lower in January to March 2017 relative to January to March 2016. The ratio of inventories to production, inventories to U.S. shipments, and inventories to total shipments each decreased from 2014 to 2016, by ***, *** and *** percentage points respectively. Additionally, the ratio of inventories to production, inventories to U.S. shipments, and inventories to total shipments were all lower in January to March 2017 relative to January to March 2016.

Table III-7
Low melt PSF: U.S. producers' inventories, 2014-16, January to March 2016, and January to March 2017

* * * * *

U.S. PRODUCERS' IMPORTS AND PURCHASES

No U.S. producer reported imports or purchases of low melt PSF during the period for which data were collected.

²⁰ *** email message to USITC staff, July 17, 2017.

U.S. EMPLOYMENT, WAGES, AND PRODUCTIVITY

Table III-8 shows U.S. producers' employment-related data. The level of production related workers (PRWs), their hours worked and wages all decreased from 2014 to 2016. PRWs decreased by *** percent from 2014 to 2015, increased slightly by *** percent from 2015 to 2016, and was *** percent higher in January to March 2017 relative to January to March 2016. Total hours worked decreased *** percent from 2014 to 2015, then decreased *** percent from 2015 to 2016, but was *** percent higher in January to March 2017 relative to January to March 2016. Wages paid decreased *** percent from 2014 to 2015, then increased by *** percent from 2015 to 2016, and was *** percent higher in January to March 2017 relative to January to March 2016. Hourly wages increased *** percent from 2014 to 2015, then increased by *** percent from 2015 to 2016, but were *** percent lower in January to March 2017 relative to January to March 2016. Productivity decreased from *** pounds per hour in 2014, to *** pounds per hour in 2015, then increased to *** pounds per hour in 2016 and was *** percent higher in January to March 2017 relative to January to March 2016.

Table III-8
Low melt PSF: U.S. producers' employment related data, 2014-16, January to March 2016, and January to March 2017

* * * * *

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

U.S. IMPORTERS

The Commission issued importer questionnaires to 41 firms believed to be importers of subject low melt PSF, as well as to all U.S. producers of low melt PSF.¹ Usable questionnaire responses were received from 23 companies, representing the vast majority of total U.S. imports and *** percent of total subject imports during.

Firms responding to the Commission's questionnaire accounted for the following estimated shares of each subject country's imports during 2016.

- *** percent of subject imports from Korea;
- *** percent of subject imports from Taiwan

Table IV-1 lists all responding U.S. importers of low melt PSF from Korea and Taiwan, and 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, along with firms that, based on a review of data provided by U.S. Customs and Border Protection ("Customs"), may have accounted for more than one percent of total imports under HTS subheading 5503.20.0015 in January 2014 to April 2017.

Table IV-1
Low melt PSF: U.S. importers by source, 2016

Firm	Headquarters	Share of imports by source (percent)				
		Korea	Taiwan	Subject sources	All other sources	All import sources
3M	St. Paul, MN	***	***	***	***	***
American Outdoor Living	Rancho Cucamonga, CA	***	***	***	***	***
Ann's Trading	Vernon, CA	***	***	***	***	***
Bernet International	Los Angeles, CA	***	***	***	***	***
Consolidated Fibers	Charlotte, NC	***	***	***	***	***
Custom Nonwoven	New Albany, MS	***	***	***	***	***
Fibertex	Teaneck, NJ	***	***	***	***	***
Goetz	Dallas, TX	***	***	***	***	***
HSM	Hickory, NC	***	***	***	***	***
Janesville Acoustics ¹	Southfield, MI	***	***	***	***	***
Kilop	High Point, NC	***	***	***	***	***
Milliken	Spartanburg, SC	***	***	***	***	***
NC Works ²	Franklin, OH	***	***	***	***	***
Piana ³	Cartersville, GA	***	***	***	***	***
Poole Company	Greenville, SC	***	***	***	***	***
Precision Custom Coatings	Totowa, NJ	***	***	***	***	***
RSM	Charlotte, NC	***	***	***	***	***
Shalag US, Inc. ⁴	Oxford, NC	***	***	***	***	***
Spuntech ⁵	Roxboro, NC	***	***	***	***	***
Stein Fibers	Albany, NY	***	***	***	***	***
Tenowo Inc.	Lincolnton, NC	***	***	***	***	***
William Barnet & Son ⁶	Spartanburg, SC	***	***	***	***	***
Wm. T. Burnett & Co.	Statesville, NC	***	***	***	***	***
Total		***	***	***	***	***

¹ Janesville Acoustics is ***. ***

² NC Works is ***.

³ Piana is ***.

⁴ Shalag US, Inc. is ***.

⁵ Spuntech Industries, Inc. is ***. ***

⁶ William Barnet & Son is related to importer/exporter *** which is a subsidiary.

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

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

U.S. IMPORTS

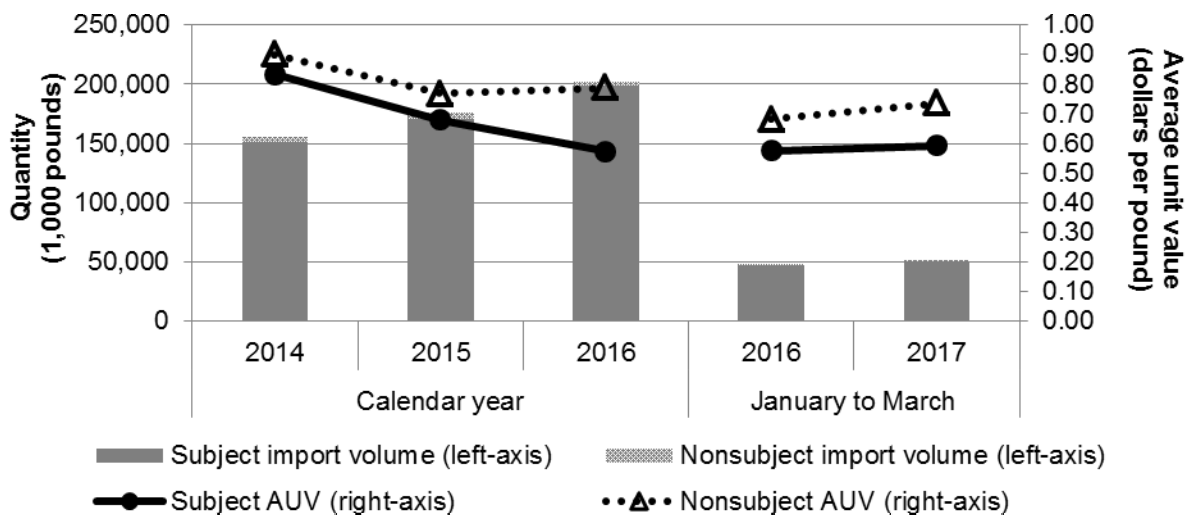
Table IV-2 and figure IV-1 present data for U.S. imports of low melt PSF from Korea, Taiwan and all other sources. From 2014 to 2016, total U.S. imports increased by 30.5 percent by quantity, but decreased by 9.7 percent by value. Subject imports, which exceeded those from nonsubject sources in each period for which data were collected, increased by 31.5 percent by quantity, but decreased 9.4 percent by value. The increase in subject imports was driven by an increase in imports from Korea, which accounted for 67.9 percent of the total increase of subject imports during 2014 to 2016. Nonsubject imports decreased by 8.9 percent by quantity and 20.3 percent by value. Average unit values of subject and nonsubject sources fell during 2014 to 2016, 31.1 percent and 12.5 percent respectively.

Table IV-2
Low melt PSF: U.S. imports, by source, 2014-16, January to March 2016, and January to March 2017

Item	Calendar year			January to March	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
U.S. imports from.-- Korea	106,685	120,703	139,081	33,640	34,901
Taiwan	44,751	50,115	60,059	13,775	15,519
Subject sources	151,436	170,818	199,141	47,415	50,420
Nonsubject sources	3,940	5,534	3,589	1,250	1,150
All import sources	155,376	176,352	202,729	48,666	51,571
	Value (1,000 dollars)				
U.S. imports from.-- Korea	91,162	83,707	83,259	20,173	21,300
Taiwan	34,965	32,304	30,981	7,105	8,535
Subject sources	126,128	116,011	114,240	27,278	29,835
Nonsubject sources	3,547	4,245	2,827	852	847
All import sources	129,675	120,256	117,067	28,130	30,681
	Unit value (dollars per pound)				
U.S. imports from.-- Korea	0.85	0.69	0.60	0.60	0.61
Taiwan	0.78	0.64	0.52	0.52	0.55
Subject sources	0.83	0.68	0.57	0.58	0.59
Nonsubject sources	0.90	0.77	0.79	0.68	0.74
All import sources	0.83	0.68	0.58	0.58	0.59
	Share of quantity (percent)				
U.S. imports from.-- Korea	68.7	68.4	68.6	69.1	67.7
Taiwan	28.8	28.4	29.6	28.3	30.1
Subject sources	97.5	96.9	98.2	97.4	97.8
Nonsubject sources	2.5	3.1	1.8	2.6	2.2
All import sources	100.0	100.0	100.0	100.0	100.0
	Share of value (percent)				
U.S. imports from.-- Korea	70.3	69.6	71.1	71.7	69.4
Taiwan	27.0	26.9	26.5	25.3	27.8
Subject sources	97.3	96.5	97.6	97.0	97.2
Nonsubject sources	2.7	3.5	2.4	3.0	2.8
All import sources	100.0	100.0	100.0	100.0	100.0
	Ratio to U.S. production				
U.S. imports from.-- Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

Figure IV-1
Low melt PSF: U.S. imports, by source, 2014-16, January to March 2016, and January to March 2017



Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

NEGLIGENCE

The statute requires that an investigation be terminated without an injury determination if imports of the subject merchandise are found to be negligible.² Negligible imports are generally defined in the Tariff Act of 1930, as amended, as imports from a country of merchandise corresponding to a domestic like product where such imports account for less than 3 percent of the volume of all such merchandise imported into the United States in the most recent 12-month period for which data are available that precedes the filing of the 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.³ Imports from Korea accounted for 67.7 percent and imports from Taiwan accounted for 30.6 percent of total imports of low melt PSF by quantity from June to May 2017. Table IV-3 presents the individual shares of total imports accounted for by subject countries by quantity during the most recent 12-month period.

² Sections 703(a)(1), 705(b)(1), 733(a)(1), and 735(b)(1) of the Act (19 U.S.C. §§ 1671b(a)(1), 1671d(b)(1), 1673b(a)(1), and 1673d(b)(1)).

³ Section 771 (24) of the Act (19 U.S.C § 1677(24)).

Table IV-3**Low melt PSF: U.S. imports in the twelve months preceding the filing of the petition, June 2016 through May 2017**

Source	June 2016 through May 2016	
	Quantity (1,000 pounds)	Share of quantity (percent)
U.S. imports from.-- Korea	131,896	67.7
Taiwan	59,536	30.6
Subject sources	191,432	98.3
Nonsubject sources	3,307	1.7
All import sources	194,738	100.0

Source: Official U.S. import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

CUMULATION CONSIDERATIONS

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

Fungibility

The Commission collected data on U.S. producers and U.S. importers' U.S. shipments of low melt PSF in 2016 by melt point and denier size. Table IV-4 and figures IV-2 and IV-3 presents U.S. producers' U.S. shipments and U.S. importers' U.S. shipments of low melt PSF by denier size⁴ and melt point. The majority of U.S. producers' U.S. shipments and U.S. importers' subject U.S. shipments of low melt PSF of small denier and medium denier were at melting points of 120°C or below. Small denier at melting points of 120°C or less accounted for *** percent U.S. producers' U.S. shipments and *** percent of U.S. importers' total subject U.S. shipments. Medium denier at melting points of 120°C or less accounted for *** percent of U.S. producers' U.S. shipments and *** of U.S. importers' total subject U.S. shipments. U.S. producers' reported no U.S. shipments of large denier of any melt point, while the majority of U.S. importers' subject U.S. shipments of large denier, which were sold at melting points of 120°C or below, accounting for *** percent of shipments.

⁴ The Commission defined "small denier" as measuring 3 denier or less, "medium denier" as measuring 3 to 8 denier, and "large denier" as measuring 8 denier or greater.

Table IV-4

Low melt PSF: U.S. producers' and U.S. importers' U.S. shipments, by size and melt point, 2016

Item	U.S. producers	U.S. importers					U.S. producers and U.S. importers combined
		Korea	Taiwan	Subject sources	Nonsubject sources	All import sources	
Quantity (1,000 pounds)							
U.S. shipments.--	***	***	***	***	***	***	***
Small denier: Melt point <120 C	***	***	***	***	***	***	***
Small denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Small denier: Melt point >170 C	***	***	***	***	***	***	***
Small denier: All melt pounds	***	***	***	***	***	***	***
Medium denier: Melt point <120 C	***	***	***	***	***	***	***
Medium denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Medium denier: Melt point >170 C	***	***	***	***	***	***	***
Medium denier: All melt pounds	***	***	***	***	***	***	***
Large denier: Melt point <120 C	***	***	***	***	***	***	***
Large denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Large denier: Melt point >170 C	***	***	***	***	***	***	***
Large denier: All melt pounds	***	***	***	***	***	***	***
All denier: Melt point <120 C	***	***	***	157,729	***	***	***
All denier: Melt point 120 to 170 C	***	***	***	7,097	***	***	***
All denier: Melt point >170 C	***	***	***	18,020	***	***	***
All denier: All melt points	***	***	***	182,846	***	***	***
Share across (percent)							
U.S. shipments.--	***	***	***	***	***	***	***
Small denier: Melt point <120 C	***	***	***	***	***	***	***
Small denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Small denier: Melt point >170 C	***	***	***	***	***	***	***
Small denier: All melt pounds	***	***	***	***	***	***	***
Medium denier: Melt point <120 C	***	***	***	***	***	***	***
Medium denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Medium denier: Melt point >170 C	***	***	***	***	***	***	***
Medium denier: All melt pounds	***	***	***	***	***	***	***
Large denier: Melt point <120 C	***	***	***	***	***	***	***
Large denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Large denier: Melt point >170 C	***	***	***	***	***	***	***
Large denier: All melt pounds	***	***	***	***	***	***	***
All denier: Melt point <120 C	***	***	***	***	***	***	***
All denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
All denier: Melt point >170 C	***	***	***	***	***	***	***
All denier: All melt points	***	***	***	***	***	***	***

Table Continued.

Table IV-4 -- Continued

Low melt PSF: U.S. producers' and U.S. importers' U.S. shipments, by size and melt point, 2016

Item	U.S. producers	U.S. importers					U.S. producers and U.S. importers combined
		Korea	Taiwan	Subject sources	Nonsubject sources	All import sources	
		Quantity (1,000 pounds)					
Share down by subtotal (percent)							
U.S. shipments.--	***	***	***	***	***	***	***
Small denier: Melt point <120 C	***	***	***	***	***	***	***
Small denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Small denier: Melt point >170 C	***	***	***	***	***	***	***
Small denier: All melt pounds	***	***	***	***	***	***	***
Medium denier: Melt point <120 C	***	***	***	***	***	***	***
Medium denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Medium denier: Melt point >170 C	***	***	***	***	***	***	***
Medium denier: All melt pounds	***	***	***	***	***	***	***
Large denier: Melt point <120 C	***	***	***	***	***	***	***
Large denier: Melt point 120 to 170 C	***	***	***	***	***	***	***
Large denier: Melt point >170 C	***	***	***	***	***	***	***
Large denier: All melt pounds	***	***	***	***	***	***	***
All denier: Melt point <120 C	***	***	***	86.3	***	***	***
All denier: Melt point 120 to 170 C	***	***	***	3.9	***	***	***
All denier: Melt point >170 C	***	***	***	9.9	***	***	***
All denier: All melt points	***	***	***	100.0	***	***	***

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

Figure IV-2

Low melt PSF: U.S. producers' and U.S. importers' U.S. shipments, by denier size, 2016

* * * * *

Figure IV-3

Low melt PSF: U.S. producers' and U.S. importers' U.S. shipments, by denier size, 2016

* * * * *

The Commission also requested data on low melt PSF by type (virgin and non-virgin). The majority of U.S. producers and U.S. importers reported U.S. shipments of virgin low melt PSF. While several firms reported that virgin and non-virgin low melt PSF cannot be used interchangeably due to ***⁵, most firms reported they had no experience with non-virgin low melt PSF.⁶

Presence in the market

Table IV-5 presents monthly data for U.S. subject and nonsubject imports of low melt PSF between January 2014 and March 2017. Subject U.S. imports of low melt PSF from Korea and Taiwan were present in each month during January 2014-March 2017. Imports from Korea and Taiwan, respectively, peaked in April 2015 at 16.8 million pounds and May 2016 at 7.3 million pounds. Imports from nonsubject sources peaked at 1.4 million pounds in March 2015.

⁵ *** importer questionnaire response, section II-5c. *** importer questionnaire response, section II-5c.

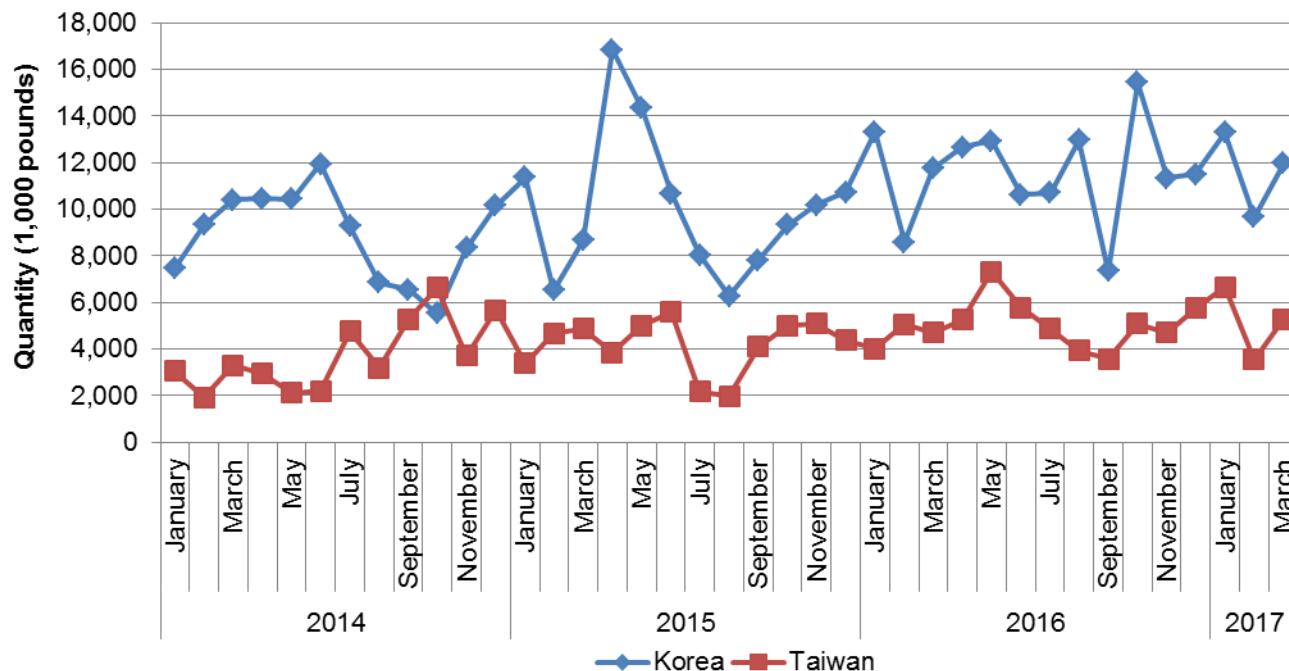
⁶ *** importer questionnaire response, section II-5c.

Table IV-5
Low melt PSF: U.S. imports, by month, January 2014 through March 2017

Month	Korea	Taiwan	Subject sources	Nonsubject sources	All imports sources
	Quantity (1,000 pounds)				
2014:					
January	7,454	3,042	10,496	1,235	11,731
February	9,320	1,926	11,246	172	11,418
March	10,408	3,303	13,711	873	14,585
April	10,460	2,937	13,397	597	13,994
May	10,430	2,121	12,551	386	12,937
June	11,938	2,214	14,151	171	14,323
July	9,260	4,764	14,023	0	14,023
August	6,845	3,178	10,023	51	10,074
September	6,554	5,273	11,826	51	11,877
October	5,534	6,623	12,157	121	12,279
November	8,330	3,714	12,044	2	12,047
December	10,152	5,657	15,809	278	16,087
2015:					
January	11,371	3,395	14,766	402	15,168
February	6,526	4,680	11,205	1,111	12,316
March	8,664	4,873	13,537	1,428	14,965
April	16,832	3,865	20,697	483	21,180
May	14,330	5,010	19,341	598	19,938
June	10,671	5,579	16,250	711	16,962
July	8,021	2,182	10,203	132	10,335
August	6,268	1,984	8,251	67	8,318
September	7,800	4,086	11,887	129	12,016
October	9,323	5,002	14,325	66	14,391
November	10,167	5,090	15,257	84	15,341
December	10,731	4,368	15,099	322	15,421
2016:					
January	13,307	4,015	17,322	693	18,015
February	8,584	5,053	13,637	339	13,976
March	11,749	4,708	16,457	218	16,675
April	12,654	5,257	17,911	177	18,088
May	12,929	7,305	20,234	369	20,602
June	10,613	5,791	16,405	126	16,531
July	10,698	4,860	15,558	450	16,008
August	12,952	3,946	16,898	46	16,944
September	7,339	3,585	10,924	229	11,153
October	15,436	5,090	20,527	419	20,945
November	11,332	4,703	16,035	197	16,233
December	11,488	5,746	17,234	325	17,560
2017:					
January	13,286	6,663	19,950	483	20,432
February	9,646	3,563	13,208	528	13,736
March	11,969	5,293	17,262	139	17,402

Source: Official import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

Figure IV-4
Low melt PSF: Subject U.S. imports, by month, January 2014 through March 2017



Source: Official import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

Geographical markets

According to Commission questionnaire responses, low melt PSF production occurs in the Southern geographic regions of the United States. Low melt PSF is generally shipped nationwide.⁷ As presented in table IV-6, U.S. Customs districts located in the East⁸ accounted for 68.5 percent, the largest share of the imports of low melt PSF from subject countries during 2016, whereas U.S. Customs districts located in the North,⁹ South,¹⁰ and West¹¹ accounted for

⁷ See part II for additional information on geographic markets.

⁸ The “East” includes the following Customs entry districts: Baltimore, Maryland; Boston, Massachusetts; Buffalo, New York; Charleston, South Carolina; Charlotte, North Carolina; New York, New York; Norfolk, Virginia; Ogdensburg, New York; Philadelphia, Pennsylvania; Portland, Maine; San Juan, Puerto Rico; Savannah, Georgia; St. Albans, Vermont; and Washington, District of Columbia.

⁹ The “North” includes the following Customs entry districts: Chicago, Illinois; Cleveland, Ohio; Detroit, Michigan; Duluth, Minnesota; Great Falls, Montana; Milwaukee, Wisconsin; Minneapolis, Minnesota; and Pembina, North Dakota.

¹⁰ The “South” includes the following Customs entry districts: Dallas-Fort Worth, Texas; El Paso, Texas; Houston-Galveston, Texas; Laredo, Texas; Miami, Florida; Mobile, Alabama; New Orleans, Louisiana; and Tampa, Florida.

¹¹ The “West” includes the following Customs entry districts: Columbia-Snake, Oregon; Honolulu,

(continued...)

smaller shares (8.6 percent, 6.9 percent, and 16.0 percent of imports from subject countries, respectively).

Table IV-6
Low melt PSF: U.S. imports, by border of entry, 2016

	East	North	South	West	Total
	Quantity (1,000 pounds)				
U.S. imports from.-- Korea	95,184	12,677	11,869	19,352	139,081
Taiwan	41,235	4,736	2,094	11,995	60,059
Subject sources	136,418	17,413	13,963	31,347	199,141
Nonsubject sources	2,527	5	52	1,004	3,589
All import sources	138,946	17,418	14,015	32,351	202,729
	Share across (percent)				
U.S. imports from.-- Korea	68.4	9.1	8.5	13.9	100.0
Taiwan	68.7	7.9	3.5	20.0	100.0
Subject sources	68.5	8.7	7.0	15.7	100.0
Nonsubject sources	70.4	0.1	1.5	28.0	100.0
All import sources	68.5	8.6	6.9	16.0	100.0
	Share down (percent)				
U.S. imports from.-- Korea	68.5	72.8	84.7	59.8	68.6
Taiwan	29.7	27.2	14.9	37.1	29.6
Subject sources	98.2	100.0	99.6	96.9	98.2
Nonsubject sources	1.8	0.0	0.4	3.1	1.8
All import sources	100.0	100.0	100.0	100.0	100.0

Source: Official import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

(...continued)

Hawaii; Los Angeles, California; Nogales, Arizona; San Diego, California; San Francisco, California; and Seattle, Washington.

APPARENT U.S. CONSUMPTION

Table IV-7 and figure IV-5 present data on apparent U.S. consumption and U.S. market shares for low melt PSF. Apparent U.S. consumption based on quantity increased by *** percent from 2014 to 2016 and was *** higher in January to March 2017 relative to January to March 2016. The increase in apparent consumption was driven by an increase in U.S. importers' U.S. shipments, which rose from *** pounds in 2014 to *** pounds in 2016, an increase of *** percent. By value, apparent U.S. consumption fell *** percent from 2014 to 2016, but was *** higher in January to March 2017 relative to January to March 2016.

U.S. producers' market share based on quantity decreased by *** percentage points from 2014 to 2016. U.S. producers' market share was *** percentage points lower in January to March 2017 relative to January to March 2016. Subject imports' market share increased *** percentage points from 2014 to 2016 and was *** percentage points higher in January to March 2017 relative to January to March 2016. The increase in subject imports' market share between 2014 and 2016 was driven by subject imports from Korea, which accounted for *** percent of the market share increase. Overall, U.S. producers' U.S. shipments accounted for *** percent of U.S. market share in 2016, while U.S. importers' shipments of subject imports accounted for *** percent.

Table IV-7
Low melt PSF: Apparent U.S. consumption, 2014-16, January to March 2016, and January to March 2017

Item	Calendar year			January to March	
	2014	2015	2016	2016	2017
	Quantity (1,000 pounds)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from.-- Korea	106,685	120,703	139,081	33,640	34,901
Taiwan	44,751	50,115	60,059	13,775	15,519
Subject sources	151,436	170,818	199,141	47,415	50,420
Nonsubject sources	3,940	5,534	3,589	1,250	1,150
All import sources	155,376	176,352	202,729	48,666	51,571
Apparent U.S. consumption	***	***	***	***	***
	Value (1,000 dollars)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from.-- Korea	91,162	83,707	83,259	20,173	21,300
Taiwan	34,965	32,304	30,981	7,105	8,535
Subject sources	126,128	116,011	114,240	27,278	29,835
Nonsubject sources	3,547	4,245	2,827	852	847
All import sources	129,675	120,256	117,067	28,130	30,681
Apparent U.S. consumption	***	***	***	***	***
	Share of quantity (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from.-- Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***
	Share of value (percent)				
U.S. producers' U.S. shipments	***	***	***	***	***
U.S. imports from.-- Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Subject sources	***	***	***	***	***
Nonsubject sources	***	***	***	***	***
All import sources	***	***	***	***	***

Source: Compiled from data submitted in response to Commission questionnaires and official import statistics for HTS statistical reporting number 5503.20.0015, accessed July 13, 2017.

Figure IV-5
Low melt PSF: Apparent U.S. consumption, 2014-16, January to March 2016, and January to March 2017

* * * * *

PART V: PRICING DATA

FACTORS AFFECTING PRICES

Raw material costs

The primary raw materials used to produce low melt PSF are monoethylene glycol (“MEG”), purified terephthalic acid (“PTA”), and purified isophthalic acid (“PIA”).¹ U.S. producers’ raw material costs, as a share of the cost of goods sold (“COGS”), decreased from *** in 2014 to *** percent in 2016. During January-March 2017, U.S. producers’ raw material costs as a share of COGS was *** percent, compared with *** percent during January-March 2016.

Overall, the prices of MEG and PTA both decreased from January 2014 to December 2016 (figure V-1). The price of MEG decreased by *** percent during this time, while the price of PTA decreased by *** percent. Between December 2016 and March 2017, the prices of each of these inputs increased by *** percent and *** percent, respectively.

Figure V-1
Raw materials: Purified terephthalic acid (“PTA”) and monoethylene glycol (“MEG”), monthly, January 2014-March 2017

* * * * *

U.S. inland transportation costs

*** U.S. producers and nine of 10 responding importers reported that they typically arrange transportation to their customers. One U.S. producer reported that its U.S. inland transportation costs were *** percent,² while most importers reported costs of 0 to 3 percent.

PRICING PRACTICES

Pricing methods

*** U.S. producers and the majority of importers reported using transaction-by-transaction negotiations, while the second most common price setting method used by importers was contracts (table V-1).

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

² ***.

Table V-1

Low melt PSF: U.S. producers' and importers' reported price setting methods, by number of responding firms¹

Method	U.S. producers	Importers
Transaction-by-transaction	***	9
Contract	***	6
Set price list	***	0
Other	***	0
Responding firms	***	10

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.

*** U.S. producers reported selling *** of their low melt PSF through spot sales (table V-2). Importers reported that they sold most of their product under short-term contracts, with the remaining share on the spot market.

Table V-2

Low melt PSF: U.S. producers' and importers' shares of U.S. commercial shipments by type of sale, 2016

* * * * *

All eight responding importers used short-term contracts and reported that the average duration of their short-term contracts ranged from 60 and 120 days, not allow for price renegotiations, and fixed both price and quantity. Most importers (7 of 8) reported that their short-term contracts did not have meet-or-release provisions.

Purchasers provided general information about their methods of purchase for low melt PSF. Five of eight responding U.S. purchasers reported that they purchase low melt PSF on a quarterly basis through contracts. Two purchasers also reported using individual purchase orders. Four purchasers reported soliciting contracts from suppliers based on a request for quote or bidding system. One purchaser, ***, reported that pricing is based on market prices for raw materials and conversion costs for low melt PSF.

Sales terms and discounts

***. Seven importers quote prices on an f.o.b. basis and the remaining two importers quote on a delivered basis.

No U.S. producer or importer reported having discount policies for sales of low melt PSF. U.S. producers reported sales terms of net 30 days. Seven out of nine importers reported sales terms of net 30 days and six reported sales terms of net 60 days.

PRICE DATA

The Commission requested U.S. producers and importers to provide quarterly data for the total quantity and f.o.b. value of the following low melt PSF products shipped to unrelated U.S. customers during January 2014 – March 2017.

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

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

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

Both U.S. producers and nine importers provided usable pricing data for sales of the requested products, although not all firms reported pricing for all products for all quarters.^{3 4 5} Pricing data reported by these firms accounted for approximately *** percent of U.S. producers' commercial U.S. shipments of low melt PSF, *** percent of U.S. commercial shipments of imports from Korea, and *** percent of U.S. commercial shipments of imports from Taiwan in 2016. Price data for products 1-3 are presented in tables V-3 to table V-5 and figures V-2 to V-4.

³ 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.

⁴ The petitioner contended that sales are occurring at different levels of distribution. U.S. producers sell to both distributors and end users and subject importers, some of which are distributors, sell only to end users. The petitioner reports that because ***. The petitioner argued that this makes the importer price data not comparable with the producer price data, since the former includes markups while the latter does not. For instance, ***. Postconference brief, p. 23, 30-31.

⁵ Firms' reported AUVs varied widely. ***.

Importer ***. William Barnet reported that its focus with this product is on ***. These data were included in the pricing data analysis.

Importer ***.

Table V-3

Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 1 and margins of underselling/(overselling), by quarters, January 2014-March 2017

* * * * *

Table V-4

Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 2 and margins of underselling/(overselling), by quarters, January 2014-March 2017

* * * * *

Table V-5

Low melt PSF: Weighted-average f.o.b. prices and quantities of domestic and imported product 3 and margins of underselling/(overselling), by quarters, January 2014-March 2017

* * * * *

Figure V-2

Low melt PSF: Weighted-average prices and quantities of domestic and imported product 1, by quarters, January 2014-March 2017

* * * * *

Figure V-3

Low melt PSF: Weighted-average prices and quantities of domestic and imported product 2, by quarters, January 2014-March 2017

* * * * *

Figure V-4

Low melt PSF: Weighted-average prices and quantities of domestic and imported product 3, by quarters, January 2014-March 2017

* * * * *

Price trends

In general, prices decreased during January 2014-March 2017. Table V-6 summarizes the price trends, by country and by product. As shown in the table, domestic price decreases for products 1 and 2 ranged from *** percent to *** percent during January 2014-March 2017. Import price decreases for all three products ranged from *** percent to *** percent. Domestic prices for *** increased during the period.⁶

Table V-6

Low melt PSF: Summary of weighted-average f.o.b. prices for products 1-3 from the United States, Korea, and Taiwan

* * * * *

Price comparisons

As shown in table V-7, prices for low melt PSF imported from subject countries were below those for U.S.-produced product in 31 of 77 instances (81.3 million pounds); margins of underselling ranged from 1.0 to 64.3 percent. In the remaining 46 instances (365.7 million), prices for low melt PSF from subject countries were between 0.3 and 20.4 percent above prices for the domestic product.^{7 8} On an individual country basis, prices of imports from Korea and Taiwan were both higher than domestic prices in the majority of instances.

⁶ ***.

⁷ The petitioner attributed some of the overselling to product differences as subject imports include black and crystalline low melt PSF, both of which are generally sold at higher prices. Respondents also indicated that some of this overselling may be attributed to the import of black and crystalline low melt PSF. Petitioner's postconference brief, pp. 32-33; conference transcript, p. 105 (Bernet).

⁸ The petitioner also alleged that some of the overselling is due to the Commission not collecting cost data on direct import costs (i.e., the price importers pay to a foreign producer). Petitioner's postconference brief, pp. 31-32.

Table V-7

Low melt PSF: Instances of underselling/overselling and the range and average of margins, by country, January 2014-March 2017

Source	Underselling				
	Number of quarters	Quantity ¹ (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Total	31	81,348,437	29.5	1.0	64.3
Source	(Overselling)				
	Number of quarters	Quantity ¹ (pounds)	Average margin (percent)	Margin range (percent)	
				Min	Max
Korea	***	***	***	***	***
Taiwan	***	***	***	***	***
Total	46	365,722,635	(9.6)	(0.3)	(20.4)

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

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

LOST SALES AND LOST REVENUE

The Commission requested that U.S. producers of low melt PSF identify purchasers in which they experienced instances of lost sales or lost revenue due to competition from imports of low melt PSF from Korea and Taiwan during January 2014-March 2017. Both U.S. producers reported that they had to reduce prices and one reported that it had to roll back announced price increases. Both U.S. producers reported that they had lost sales. U.S. producer *** submitted lost sales and lost revenue allegations, identifying five firms to which it lost sales or revenue (three consisting of lost sales allegations and two consisting of lost revenue allegations). Of the five lost sale allegations, four were lost sales to imports from Korea, and one lost sale allegation was to imports from both Korea and Taiwan. The allegations occurred during February and March of 2015 and March 2017-May 2017.

Staff contacted the five purchasers identified by the U.S. producer, and received responses from eight purchasers.⁹ Responding purchasers reported purchasing 143,876 pounds of low melt PSF during 2016 (table V-8).

⁹ In addition to the five firms identified by the U.S. producer, three additional purchasers, ***, ***, and *** submitted unsolicited purchaser questionnaire responses to the Commission.

**Table V-8
Low melt PSF: Purchases and imports, 2016**

Purchaser	Purchases and imports in 2016 (1,000 pounds)			Change in domestic share ² (pp, 2014-16)	Change in subject country share ² (pp, 2014-16)
	Domestic	Subject	All other ¹		
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
***	***	***	***	***	***
Totals	40,028	99,377	4,471	(11.9)	15.6

¹ Includes all other sources and unknown sources.

²Percentage 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.

During 2016, responding purchasers purchased 45.5 percent from U.S. producers, 29.6 percent from Korea, 19.9 percent from Taiwan, and 3.1 percent from nonsubject countries, and 1.9 percent from “unknown source” countries. Of the responding purchasers, three reported decreasing purchases from domestic producers, one reported increasing purchases, one reported no change, one reported fluctuating purchases, and one did not purchase any domestic product. Explanations for increasing purchases of domestic product included an increase in demand from the U.S. bedding industry. Explanations for decreasing purchases of domestic product included quality issues being raised by two firms. One firm also mentioned availability issues and another reported that it has become more difficult in 2017 to get a “two-day call-out” for orders and that unscheduled loads have been shipped before.

All eight purchasers reported that, they had purchased imported low melt PSF from Korea instead of U.S.-produced product since 2014. Five purchasers reported that they had purchased imported low melt PSF from Taiwan instead of U.S.-produced product. Six of eight purchasers reported that subject import prices were lower than U.S.-produced product, and two of these purchasers reported that price was a primary reason for the decision to purchase imported product rather than U.S.-produced product. One purchaser estimated that it purchased 2,000 pounds of low melt PSF from Korea instead of domestic product (table V-9). Estimates for quantities purchased from Taiwan were not provided. Purchasers identified performance, quality, and availability as non-price reasons for purchasing imported rather than U.S.-produced product. Purchasers specifically mentioned black low melt PSF not being produced in the U.S. as a reason for purchasing imports. Several purchasers also reported that imports were purchased instead of U.S.-produced product due to plant preferences and the product having to pass production trials.

Table V-9
Low melt PSF: Purchasers' responses to shifting supply sources, by firm

* * * * *

Table V-9--Continued
Low melt PSF: Purchasers' responses to shifting supply sources, by firm

* * * * *

One of 8 purchasers reported that U.S. producers had reduced prices in order to compete with lower-priced imports from subject countries (table V-10; seven reported that they did not know). The reported estimated price reduction by this purchaser was 33.0 percent from Korea.

Responding U.S. purchasers identified various methods that they use in purchasing low melt PSF including bids or requests for quotes. In responding to the lost sales and lost revenue survey, some purchasers provided additional information on purchases and market dynamics. Purchasers identified needs to secure their supply chain, increased sourcing options, transportation costs, and raw material supply and costs. Some purchasers also noted lack of sufficient quantity and/or specific products from domestic producers.

Table V-10
Low melt PSF: Purchasers' responses to U.S. producer price reductions

* * * * *

PART VI: FINANCIAL EXPERIENCE OF U.S. PRODUCERS

BACKGROUND

Two U.S. producers (Nan Ya and FIT Fibers) reported their financial results on low melt PSF. These data are believed to account for *** U.S. production of low melt PSF from January 2014 to March 2017. *** represented the majority ***. Thus, the aggregated data largely reflect the financial performance of ***. *** reported internal consumption transfers to related firms, or tolling. *** reported their financial results on a calendar year basis.

OPERATIONS ON LOW MELT PSF

Table VI-1 presents aggregated data on U.S. producers' operations on low melt PSF during the period examined, while table VI-2 presents selected company-specific financial data.

Net sales

***. As shown in table VI-1, total net sales quantity declined by *** percent from 2014 to 2016, and was *** percent lower in January-March 2017 than in January-March 2016. The total net sales value declined *** percent from 2014 to 2016, and was *** percent higher in January-March 2017 than in January-March 2016.

On a per-pound basis, the net sales value decreased from 2014 to 2016, and was higher in January-March 2017 than in January-March 2016. As shown in table VI-2, the per-pound net sales values ***. ***.¹

Cost of goods sold and gross profit or (loss)

As shown in table VI-1, raw materials represented the largest component of COGS, accounting for between *** and *** percent of total COGS during the period examined. ***.^{2 3 4} Company-specific per-unit data shows ***.^{5 6}

¹ ***. *** email to Commission staff, July 13, 2017. ***. *** email to Commission staff, July 17, 2017.

² ***. ***, email to Commission staff, July 24, 2017.

³ ***. U.S. producers' questionnaire, question III-7, and ***, email to Commission staff, July 24, 2017.

⁴ Conference testimony alleged that due to the abundant supply of the main ingredient PTA in the Far East, the cost of this critical raw material is significantly lower than the price of PTA in the U.S. markets. Conference transcript, p. 17 (Menegaz).

⁵ ***. *** email to Commission staff, July 13, 2017.

⁶ ***. U.S. producers' questionnaire, question III-9b, *** email to Commission staff, July 13, 2017, and ***, email to Commission staff, July 24, 2017.

Table VI-1
Low melt PSF: Results of operations of U.S. producers, 2014-16, January to March 2016, and January to March 2017

* * * * *

Table VI-2
Low melt PSF: Selected Results of operations of U.S. producers, by company, 2014-16, January to March 2016, and January to March 2017

* * * * *

Other factory costs were the second largest component of COGS, representing *** to *** percent of total COGS during the period examined. Company-specific per-unit data shows ***.⁷

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

As shown in table VI-1, the total COGS ***. As shown in table VI-2, company-specific per-unit data shows that ***.⁸

The industry's gross profits declined from *** Gross profit also fell ***. In contrast, ***.

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

As shown in table VI-1, the industry's selling, general, and administrative ("SG&A") expense ratio (i.e., total SG&A expenses divided by total revenue) steadily increased from *** percent in 2014 to *** percent in 2016 and ***. Table VI-2 shows that ***.⁹

***. Both firms reported lower operating income or increased losses in January-March 2017 compared to January-March 2016.

All other expenses and net income or (loss)

***.^{10 11}

Net income followed the same trend as operating income, ***.

Variance analysis

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

⁷ ***. ***, email to Commission staff, July 24, 2017.

⁸ ***. *** email to Commission staff, July 13, 2017.

⁹ ***. *** email to Commission staff, July 13, 2017.

¹⁰ ***. ***, email to Commission staff, July 24, 2017.

¹¹ ***.

CAPITAL EXPENDITURES AND RESEARCH AND DEVELOPMENT EXPENSES

Table VI-3 presents the U.S. producers’ capital expenditures and research and development expenses. ***.¹² ***.¹³

Table VI-3
Low melt PSF: Capital expenditures and research development of U.S. producers, 2014-16, January to March 2016, and January to March 2017

* * * * *

ASSETS AND RETURN ON ASSETS

Table VI-4 presents data on the U.S. producers’ total assets and their return on assets (“ROA”). ***. Total assets irregularly increased from \$*** in 2014 to \$*** in 2016, and the ROA consistently declined from *** percent in 2014 to *** percent in 2016.¹⁴

Table VI-4
Low melt PSF: U.S. producers’ total assets and ROA, 2014-16

* * * * *

CAPITAL AND INVESTMENT

The Commission requested U.S. producers of low melt PSF to describe any actual or potential negative effects of imports of low melt PSF from China on their firms’ growth, investment, ability to raise capital, development and production efforts, or the scale of capital investments. Table VI-5 presents U.S. producers’ responses in a tabulated format and table VI-6 provides the narrative responses.

Table VI-5
Low melt PSF: Actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2014

* * * * *

Table VI-6
Low melt PSF: Narratives relating to the actual and anticipated negative effects of imports on investment, growth, and development, since January 1, 2014

* * * * *

¹² ***.***, email to Commission staff, July 24, 2017.

¹³ ***.

¹⁴ With respect to a company’s overall operations, staff notes that a total asset value reflects an aggregation of a number of assets which generally are not product specific. Thus, high-level allocation factors may have been required in order to report a total asset value for low melt PSF.

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 factors¹--

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

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

- (VI) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products,*
- (VII) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both),*
- (VIII) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the domestic like product, and*
- (IX) any other demonstrable adverse trends that indicate the probability that there is likely to be material injury by reason of imports (or sale for importation) of the subject merchandise (whether or not it is actually being imported at the time).²*

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

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

THE INDUSTRY IN KOREA

The Commission issued foreign producers' or exporters' questionnaires to 10 firms believed to produce and/or export low melt PSF from Korea.³ The Commission did not receive a response from any Korean producers. According to petitioners, there are three major producers of low melt PSF: Huvis Corporation, Toray Chemical Korea Inc. and Taekwang Industrial. Petitioners noted that Huvis Corporation claims a total polyester staple fiber capacity of 1.1 billion pounds per year and expanded its capacity by adding a new low melt production line in 2013.⁴ Petitioners also stated that Toray, which claims to be the world's third largest low melt producer, broke ground on a new facility that would more than double its low melt PSF production capacity increasing it from 144 million pounds to 342 million pounds.⁵ Additionally, they noted Taekwang Industrial's claim that its vertical integration process that allows it to produce low melt PSF with its own PTA facility gives the firm a price competitive edge.⁶

Exports

According to GTA, the leading export markets for low melt PSF from Korea are the United States, China, and Germany (table IV-1). During 2016, the United States was the top single market for low melt PSF from Korea, accounting for 18.4 percent, followed by the China, accounting for 9.1 percent.

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

⁴ Petitioner's postconference brief, p. 45.

⁵ Petitioner's postconference brief, p. 45.

⁶ Petitioner's postconference brief, p. 45.

Table IV-1
Low melt PSF: Korea exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
Korea exports to the United States	247,078	272,174	289,033
Korea exports 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 Korea exports	1,422,221	1,496,118	1,574,954
	Value (1,000 dollars)		
Korea exports to the United States	168,801	153,283	143,008
Korea exports 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 Korea exports	992,546	848,107	789,722

Table continued.

Table IV-1 -- Continued
Low melt PSF: Korea exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
Korea exports to the United States	0.68	0.56	0.49
Korea exports 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 Korea exports	0.70	0.57	0.50
	Share of quantity (percent)		
Korea exports to the United States	17.4	18.2	18.4
Korea exports 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 Korea exports	100.0	100.0	100.0

Source: Official exports statistics under HS subheading 5503.20 as reported by Korea Customs and Trade Development Institution in the IHS/GTA database, accessed July 13, 2017.

THE INDUSTRY IN TAIWAN

The Commission issued foreign producers' or exporters' questionnaires to 5 firms believed to produce and/or export low melt PSF from Taiwan.⁷ A usable response to the Commission's questionnaire was received from Far Eastern New Century Corporation ("FENC"). FENC's exports to the United States accounted for the majority of U.S. imports of low melt PSF

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

from Taiwan over the period being examined.⁸ According to estimates requested of the responding Taiwan producers, the production of low melt PSF in Taiwan reported in this part of the report accounts for approximately *** percent of overall production of low melt PSF in Taiwan.

Far Eastern New Century Corporation

Far Eastern New Century Corporation (“FENC”), formerly known as Far Eastern Textile Limited, is headquartered in Taipei, Taiwan and operates three distinct business units (1) a petrochemicals, polyester and textiles production unit, (2) an industrial holdings unit that includes telecommunications, cement, retail, financial services and transportation, and (3) a land asset management and property development unit.⁹

Changes in operations

FENC reported no changes in operations in relation to the production of low melt PSF since January 1, 2014.

Operations on low melt PSF

Table VII-2 presents information on the low melt PSF operations of the responding producers and exporters in Taiwan.

Table VII-2

Low melt PSF: Data on industry in Taiwan, 2014-16, January to March 2016, and January to March 2017 and projection calendar years 2017 and 2018

* * * * *

⁸ “FENC believes that it accounts for 100 percent of Taiwan low melt PSF exports to the U.S.” Respondent FENC postconference brief, p. 1.

⁹ http://about.fenc.com/ir_report.aspx?lang=en, retrieved July 21, 2017.

Alternative products

As shown in table VII-3, responding Taiwan firms produced other products on the same equipment and machinery used to produce low melt PSF.

Table VII-3
Low melt PSF: Overall capacity and production on the same equipment as in-scope production Taiwan, 2014-16, January to March 2016, and January to March 2017

* * * * *

Exports

According to GTA, the leading export markets for low melt PSF from Taiwan are Vietnam, the United States, and the United Kingdom (table IV-4). During 2016, the Vietnam was the top export market for low melt PSF from Taiwan, accounting for 21.9 percent, followed by the United States, accounting for 10.4 percent.

Table IV-4
Low melt PSF: Taiwan exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
Taiwan exports to the United States	66,862	73,306	88,759
Taiwan exports 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 Taiwan exports	817,008	796,495	857,550
	Value (1,000 dollars)		
Taiwan exports to the United States	47,960	41,431	42,922
Taiwan exports 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 Taiwan exports	573,445	450,993	426,910

Table continued.

Table IV-4 -- Continued
Low melt PSF: Taiwan exports by destination market, 2014-16

Destination market	Calendar year		
	2014	2015	2016
	Unit value (dollars per pound)		
Taiwan exports to the United States	0.72	0.57	0.48
Taiwan exports 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 Taiwan exports	0.70	0.57	0.50
	Share of quantity (percent)		
Taiwan exports to the United States	8.2	9.2	10.4
Taiwan exports 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 Taiwan exports	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 July 13, 2017.

U.S. INVENTORIES OF IMPORTED MERCHANDISE

Table VII-5 presents data on U.S. importers' reported inventories of low melt PSF. From 2014 to 2016, U.S. importers' end-of-period inventories of U.S. imports of low melt from Korea and Taiwan increased by *** percent and *** percent, respectively. The majority of these inventories were held by ***.

Table VII-5

Low melt PSF: U.S. importers' end-of-period inventories of imports by source, 2014-16, January to March 2016, and January to March 2017

Item	Calendar year			January to March	
	2014	2015	2016	2016	2017
	Inventories (1,000 pounds); Ratios (percent)				
Imports from Korea Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from Taiwan: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from subject sources: Inventories	25,064	29,693	47,403	32,495	89,021
Ratio to U.S. imports	16.0	16.3	23.1	16.0	24.0
Ratio to U.S. shipments of imports	17.2	17.1	25.9	17.4	23.7
Ratio to total shipments of imports	16.7	16.7	25.3	16.9	23.4
Imports from nonsubject sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***
Imports from all import sources: Inventories	***	***	***	***	***
Ratio to U.S. imports	***	***	***	***	***
Ratio to U.S. shipments of imports	***	***	***	***	***
Ratio to total shipments of imports	***	***	***	***	***

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

U.S. IMPORTERS' OUTSTANDING ORDERS

The Commission requested importers to indicate whether they imported or arranged for the importation of low melt PSF from subject sources after March 31, 2017. ***.

Table VII-6
Low melt PSF: Arranged imports, April 2017 through March 2018

* * * * *

ANTIDUMPING OR COUNTERVAILING DUTY ORDERS IN THIRD-COUNTRY MARKETS¹⁰

According to petitioners, there have been several unfair trade remedy investigations in third-country markets on polyester staple fiber (without restriction to denier size or fiber structure) from Korea and Taiwan. In 1993, Mexico imposed an antidumping duty order on all forms of polyester staple fiber from Korea, which was extended in 2013. Turkey imposed an antidumping duty order on all forms of polyester staple fiber from Korea in 2000, which was extended in 2012. In 2003, Turkey issued a similar antidumping order on all forms of polyester staple fiber from China, India, and Taiwan, which was extended in 2014. In 2011, Indonesia enacted antidumping duty orders on all forms of polyester staple fiber from China, India, and Taiwan, which were extended in 2016.

INFORMATION ON NONSUBJECT COUNTRIES

In assessing whether the domestic industry is materially injured or threatened with material injury “by reason of subject imports,” the legislative history states “that the Commission must examine all relevant evidence, including any known factors, other than the dumped or subsidized imports, that may be injuring the domestic industry, and that the Commission must examine those other factors (including non-subject imports) ‘to ensure that it is not attributing injury from other sources to the subject imports.’”¹¹

¹⁰ Unless otherwise noted, information in this section is based on petitioner’s postconference brief, exh. 11.

¹¹ *Mittal Steel Point Lisas Ltd. v. United States*, Slip Op. 2007-1552 at 17 (Fed. Cir. Sept. 18, 2008), quoting from Statement of Administrative Action on Uruguay Round Agreements Act, H.R. Rep. 103-316, Vol. I at 851-52; see also *Bratsk Aluminum Smelter v. United States*, 444 F.3d 1369 (Fed. Cir. 2006).

Table VII-7 presents global exports of synthetic staple fibers, not carded, combed or otherwise processed for spinning that are of polyester (HS 5503.20) by country.¹² Export data specifically for low melt PSF, as defined by the scope of this investigation, are not available from global trade databases. However, export data are available for a somewhat broader category of synthetic staple fiber. This would include out-of-scope products such as coarse polyester staple fiber and fine denier polyester staple fiber. Global exports increased by 9.1 percent during 2014-16. In 2016, the five leading country exporters (China, Korea, Taiwan, Thailand, and India) accounted for 76.5 percent of global exports of synthetic staple fiber.

¹² Global trade databases present data based on six-digit HTS subheading 5503.20, which describes the article as: “synthetic staple fibers, not carded, combed or otherwise processed for spinning: of polyester.” Harmonized Tariff Schedule of the United States (2016). HTS subheading 5503.20 covers products that are outside the scope of this investigation. Therefore, export data compiled from these databases may overstate the quantity of exports of low melt PSF.

Table VII-7
Low melt PSF: Global exports by exporter, 2014-16

Exporter	Calendar year		
	2014	2015	2016
	Quantity (1,000 pounds)		
United States	129,279	97,775	96,151
Korea	1,422,221	1,496,118	1,574,954
Taiwan	817,008	796,495	857,550
Subject sources	2,368,508	2,390,388	2,528,655
All other major reporting exporters.-- China	1,924,913	2,079,684	2,219,563
Thailand	448,486	555,955	575,526
India	432,133	389,980	458,294
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	113,748
Turkey	79,907	99,452	101,300
Belgium	107,196	108,571	100,628
All other exporters	565,642	552,644	473,234
Nonsubject sources	4,444,184	4,750,297	4,904,655
Total global exports	6,812,692	7,140,685	7,433,310
	Value (1,000 dollars)		
United States	103,349	83,847	78,925
Korea	992,546	848,107	789,722
Taiwan	573,445	450,993	426,910
Subject sources	1,669,341	1,382,947	1,295,557
All other major reporting exporters.-- China	1,105,404	987,901	940,967
Thailand	285,377	273,617	258,917
India	277,192	201,068	212,020
Indonesia	185,604	164,908	150,449
Malaysia	140,423	115,358	113,266
Ireland	144,095	128,301	118,593
Belarus	57,238	51,611	56,692
Romania	78,396	64,482	64,004
Turkey	59,710	57,146	51,927
Belgium	88,050	71,232	62,153
All other exporters	489,596	407,902	308,528
Nonsubject sources	2,911,085	2,523,527	2,337,515
Total global exports	4,580,426	3,906,474	3,633,072

Table continued.

Table VII-7 -- Continued
Low melt PSF: 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
Korea	0.70	0.57	0.50
Taiwan	0.70	0.57	0.50
Subject sources	0.70	0.58	0.51
All other major reporting exporters.--			
China	0.57	0.48	0.42
Thailand	0.64	0.49	0.45
India	0.64	0.52	0.46
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
All other exporters	0.87	0.74	0.65
Nonsubject sources	0.66	0.53	0.48
Total global exports	0.67	0.55	0.49
	Share of quantity (percent)		
United States	1.9	1.4	1.3
Korea	20.9	21.0	21.2
Taiwan	12.0	11.2	11.5
Subject sources	34.8	33.5	34.0
All other major reporting exporters.--			
China	28.3	29.1	29.9
Thailand	6.6	7.8	7.7
India	6.3	5.5	6.2
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	1.5
Turkey	1.2	1.4	1.4
Belgium	1.6	1.5	1.4
All other exporters	8.3	7.7	6.4
Nonsubject sources	65.2	66.5	66.0
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 July 13, 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 30907, July 3, 2017	<i>Low Melt Polyester Staple Fiber from Korea and Taiwan; Institution of Antidumping Duty Investigation and Scheduling of Preliminary Phase Investigation</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-07-03/pdf/2017-13910.pdf
82 FR 34277, July 24, 2017	<i>Low Melt Polyester Staple Fiber from Korea and Taiwan: Initiation of Less-Than-Fair-Value Investigation</i>	https://www.gpo.gov/fdsys/pkg/FR-2017-07-24/pdf/2017-15475.pdf

APPENDIX B
CONFERENCE WITNESSES

CALENDAR OF PUBLIC PRELIMINARY CONFERENCE

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

- Subject:** Low Melt Polyester Staple Fiber from Korea and Taiwan
- Inv. Nos.:** 731-TA-1378 and 1379 (Preliminary)
- Date and Time:** July 18, 2017 - 9:30 a.m.

Sessions were held in connection with these preliminary phase investigations in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, DC.

OPENING REMARKS:

Petitioner (**Kathleen W. Cannon**, Kelley Drye & Warren LLP)
Respondents (**Gregory S. Menegaz**, deKieffer & Horgan PLLC)

**In Support of the Imposition of
Antidumping Duty Orders:**

Kelley Drye & Warren LLP
Washington, DC
on behalf of

Nan Ya Plastics Cooperation, America

Michael Sparkman, Senior Business Manager, Nan Ya Plastics
Cooperation, America

John Freeman, Assistant Director of Sales, Nan Ya Plastics
Cooperation, America

Gina Beck, Economic Consultant, Georgetown Economic Services LLC

Paul C. Rosenthal)
Kathleen W. Cannon) – OF COUNSEL
Brooke M. Ringel)

**In Opposition to the Imposition of
Antidumping Duty Orders:**

deKieffer & Horgan PLLC
Washington, DC
on behalf of

Bernet International Trading, LLC
Consolidated Fibers, Inc.
Fibertex Corporation
Stein Fibers, Ltd.

Mervyn Bernet, Chief Executive Officer, Bernet International
Trading, LLC

Ryan Bernet, Vice President of Operations, Bernet International
Trading, LLC

Robert Kunik, President *and* Owner, Consolidated Fibers, Inc.

Ernest Elias, Vice President *and* 50% Owner, Fibertex Corporation

Sidney J. Stein, III, Vice President, Stein Fibers, Ltd.

Jaren Edwards, Vice President of Sales, Stein Fibers, Ltd.

Gregory S. Menegaz)
) – OF COUNSEL
Judith Holdsworth)

Alston & Bird LLP
Washington, DC
on behalf of

Milliken & Company

Jon Fee) – OF COUNSEL

Squire Patton Boggs (US) LLP
Washington, DC
on behalf of

Far Eastern New Century Corporation

Peter Koenig) – OF COUNSEL

INTERESTED PARTY APPEARANCE:

Precision Custom Coatings, LLC

Peter Longo, Chairman *and* Owner

REBUTTAL/CLOSING REMARKS:

Petitioner (**Paul C. Rosenthal**, Kelley Drye & Warren LLP)

Respondents (**Gregory S. Menegaz**, deKieffer & Horgan PLLC)

-END-

APPENDIX C
SUMMARY DATA

Table C-1

Low melt PSF: Summary data concerning the U.S. market, 2014-16, January to March 2016, and January to March 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			
	2014	Calendar year		January to March		2014-16	Calendar year		Jan-Mar 2016-17
		2015	2016	2016	2017		2014-15	2015-16	
U.S. consumption quantity:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Korea.....	***	***	***	***	***	***	***	***	***
Taiwan.....	***	***	***	***	***	***	***	***	***
Subject sources.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	***	***	***	***
U.S. consumption value:									
Amount.....	***	***	***	***	***	***	***	***	***
Producers' share (fn1).....	***	***	***	***	***	***	***	***	***
Importers' share (fn1):									
Korea.....	***	***	***	***	***	***	***	***	***
Taiwan.....	***	***	***	***	***	***	***	***	***
Subject sources.....	***	***	***	***	***	***	***	***	***
Nonsubject sources.....	***	***	***	***	***	***	***	***	***
All import sources.....	***	***	***	***	***	***	***	***	***
U.S. imports from:									
Korea:									
Quantity.....	106,685	120,703	139,081	33,640	34,901	30.4	13.1	15.2	3.7
Value.....	91,162	83,707	83,259	20,173	21,300	(8.7)	(8.2)	(0.5)	5.6
Unit value.....	\$0.85	\$0.69	\$0.60	\$0.60	\$0.61	(29.9)	(18.8)	(13.7)	1.8
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Taiwan:									
Quantity.....	44,751	50,115	60,059	13,775	15,519	34.2	12.0	19.8	12.7
Value.....	34,965	32,304	30,981	7,105	8,535	(11.4)	(7.6)	(4.1)	20.1
Unit value.....	\$0.78	\$0.64	\$0.52	\$0.52	\$0.55	(34.0)	(17.5)	(20.0)	6.6
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Subject sources:									
Quantity.....	151,436	170,818	199,141	47,415	50,420	31.5	12.8	16.6	6.3
Value.....	126,128	116,011	114,240	27,278	29,835	(9.4)	(8.0)	(1.5)	9.4
Unit value.....	\$0.83	\$0.68	\$0.57	\$0.58	\$0.59	(31.1)	(18.5)	(15.5)	2.9
Ending inventory quantity.....	25,064	29,693	47,403	32,495	45,065	89.1	18.5	59.6	38.7
Nonsubject sources:									
Quantity.....	3,940	5,534	3,589	1,250	1,150	(8.9)	40.5	(35.1)	(8.0)
Value.....	3,547	4,245	2,827	852	847	(20.3)	19.7	(33.4)	(0.7)
Unit value.....	\$0.90	\$0.77	\$0.79	\$0.68	\$0.74	(12.5)	(14.8)	2.7	8.0
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
All import sources:									
Quantity.....	155,376	176,352	202,729	48,666	51,571	30.5	13.5	15.0	6.0
Value.....	129,675	120,256	117,067	28,130	30,681	(9.7)	(7.3)	(2.7)	9.1
Unit value.....	\$0.83	\$0.68	\$0.58	\$0.58	\$0.59	(30.8)	(18.3)	(15.3)	2.9
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
U.S. producers:									
Average capacity quantity.....	***	***	***	***	***	***	***	***	***
Production quantity.....	***	***	***	***	***	***	***	***	***
Capacity utilization (fn1).....	***	***	***	***	***	***	***	***	***
U.S. shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Export shipments:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Ending inventory quantity.....	***	***	***	***	***	***	***	***	***
Inventories/total shipments (fn1).....	***	***	***	***	***	***	***	***	***
Production workers:									
Hours worked (1,000s).....	***	***	***	***	***	***	***	***	***
Wages paid (\$1,000).....	***	***	***	***	***	***	***	***	***
Hourly wages (dollars).....	***	***	***	***	***	***	***	***	***
Productivity (pounds per hour).....	***	***	***	***	***	***	***	***	***
Unit labor costs.....	***	***	***	***	***	***	***	***	***
Net sales:									
Quantity.....	***	***	***	***	***	***	***	***	***
Value.....	***	***	***	***	***	***	***	***	***
Unit value.....	***	***	***	***	***	***	***	***	***
Cost of goods sold (COGS):									
Gross profit or (loss).....	***	***	***	***	***	***	***	***	***
SG&A expenses.....	***	***	***	***	***	***	***	***	***
Operating income or (loss).....	***	***	***	***	***	***	***	***	***
Net income or (loss).....	***	***	***	***	***	***	***	***	***
Capital expenditures.....	***	***	***	***	***	***	***	***	***
Unit COGS.....	***	***	***	***	***	***	***	***	***
Unit SG&A expenses.....	***	***	***	***	***	***	***	***	***
Unit operating income or (loss).....	***	***	***	***	***	***	***	***	***
Unit net income or (loss).....	***	***	***	***	***	***	***	***	***
COGS/sales (fn1).....	***	***	***	***	***	***	***	***	***
Operating income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***
Net income or (loss)/sales (fn1).....	***	***	***	***	***	***	***	***	***

Notes:

fn1.--Reported data are in percent and period changes are in percentage points.
fn2.--Undefined.

Source: Compiled from data submitted in response to Commission questionnaires and official import statistics for HTS statistical reporting number 5503.20, accessed July 13, 2017

