GRANULAR POLYTETRAFLUOROETHYLENE RESIN FROM ITALY AND JAPAN

Determination of the Commission in Investigations Nos. 731-TA-385 and 386 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigations

USITC PUBLICATION 2043

DECEMBER 1987

United States International Trade Commission / Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC

Investigations Nos. 731-TA-385 and 386 (Preliminary)

GRANULAR POLYTETRAFLUOROETHYLENE RESIN FROM ITALY AND JAPAN

Determination

On the basis of the record 1/ developed in the subject investigations, the Commission unanimously determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Italy and Japan of granular polytetrafluoroethylene resin, whether filled or unfilled, provided for in item 445.54 of the Tariff Schedules of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On November 6, 1987, a petition was filed with the Commission and the Department of Commerce by E. I. Du Pont De Nemours & Co., Wilmington, DE, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of granular polytetrafluoroethylene resin from Italy and Japan. Accordingly, effective November 6, 1987, the Commission instituted preliminary antidumping investigations Nos. 731-TA-385 and 386 (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

1/ The record is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).

Commission, Washington, DC, and by publishing the notice in the Federal Register of November 17, 1987 (52 F.R. 43952). The conference was held in Washington, DC, on December 1, 1987, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION [1/]

We determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of granular polytetrafluoroethylene resin (granular PTFE) from Italy and Japan that are allegedly sold at less than fair value (LTFV). [2/]

We base this determination on the poor financial condition of the industry, the significant and rising market penetration by imports from Italy and Japan, and evidence of significant price suppression and depression attributable to those imports.

Like product/domestic industry

As a threshold inquiry, the Commission must identify the domestic industry to be examined for the purpose of determining whether there is a reasonable indication of material injury. Section 771(4)(A) of the Tariff Act of 1930 defines the term "industry" as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." [3/] "Like product," in turn, is defined as "a product which is

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1/ Chairman Liebeler joins with the majority on the definition of the like product and the domestic industry, and in the discussions of related parties, the condition of the industry, and cumulation. Her views on causation are set forth in her Additional Views, infra.

2/ Material retardation is not an issue and will not be discussed further.

3/ 19 U.S.C. § 1677(4)(A).

like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation . . . ." [4/]

The imported product subject to these investigations is granular PTFE, whether filled or unfilled, imported from Italy and Japan. PTFE aqueous dispersions and PTFE fine powder are not covered by these investigations. [5/] Granular PTFE is produced from the monomer tetrafluoroethylene (TFE) by suspension polymerization. This process involves vigorous agitation, which produces agglomerates of resin that are wet-cut to achieve the desired particle size and then pelletized (agglomerized) and dried. Pelletized granular PTFE can be ground to produce "fine cut" granular PTFE, or ground and heated to just below the melting point to produce "presintered" granular PTFE. Fine cut granular PTFE can be compounded with fillers such as carbon, graphite, glass fibers or pigments either by mechanical mixing of the filler and the PTFE or by combining the filler and the PTFE in a solvent. The concentration of fillers in "filled" granular PTFE ranges from 5 to 70 percent. [6/]

All granular PTFE products have excellent dielectric properties that make them good insulators. They also have excellent antistick properties and will

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4/ 19 U.S.C. § 1677(10). See also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

5/ The "article subject to an investigation" is defined by the scope of the Department of Commerce's (Commerce) investigation. Commerce has defined the scope of these investigations as "granular polytetrafluoroethylene resin, filled and unfilled, provided for in item 445.54 of the Tariff Schedules of the United States (TSUS) and currently classifiable under Harmonized System (HS) item number 3904.61.00." 52 Fed. Reg. 45983, 45984 (Dec. 3, 1987).

6/ Report at A-3, A-4-5. All four varieties of granular PTFE were imported into the United States during the period of investigation. Id. at A-25.

not support combustion. Granular PTFE retains its useful properties over a wide range of temperatures. Because of its high molecular weight and melt viscosity, it must be molded or extruded under pressure at a high temperature. 7/ Granular PTFE is sold to fabricators for processing into molded shapes and mechanical parts including rings, gaskets, seals, tubes and bearing pads. 8/

In determining what constitutes the like product in a title VII investigation, the Commission examines the following factors: 1) physical characteristics and uses, 2) interchangeability, 3) channels of distribution, 4) the use of common manufacturing facilities and production employees, and 5) customer and/or producer perceptions of the article. 9/

In these preliminary investigations, Ausimont U.S.A. (Ausimont), a domestic producer and importer of granular PTFE, urged the Commission to find four separate like products: pelletized, fine cut, presintered, and filled granular PTFE. Ausimont argues that the flow properties, packing characteristics, and sintering properties of these four types of granular PTFE

7/ The molding and extrusion methods used to fabricate products from granular PTFE are similar to those used with powdered metals and ceramics. Id. at A-2, A-5.

8/ Id. at A-9.

9/ See, e.g., Fabric and Expanded Neoprene Laminate from Taiwan, Inv. No. 731-TA-371 (Final), USITC Pub. 2032 (1987) at 4, n.5. The Commission has looked for clear dividing lines among products in terms of their characteristics and uses and has found minor variations between products insufficient to justify separate like products. See Operators for Jalousie and Awning Windows from El Salvador, Invs. Nos. 701-TA-272 (Final) and 731-TA-319 (Final), USITC Pub. 1934 (1987).

make each of them suitable for a different fabrication technology. As a result, Ausimont argued, each of them is destined for a discrete set of end uses, which are not interchangeable. 10/ Du Pont, the petitioner, argued that all granular PTFE constitutes one like product because the differences among the four grades are insignificant, because all granular PTFE is produced using the same basic manufacturing process, machinery and employees, and because all four grades have the same basic application--further processing into molded and extruded products. 11/

Based on the record in these preliminary investigations, we determine that all granular PTFE--whether pelletized, fine cut, presintered, or filled--constitutes a single like product. Because granular PTFE is not an end-use product but rather a chemical product sold for further processing, 12/ we believe it is appropriate to consider differences, if any, in the manufacturing process of the four grades of granular PTFE rather than differences in the processes applied to the product after it is sold to fabricators. 13/

10/ Ausimont Brief at 9-12; Conference Transcript (Tr.) at 134-137.
11/ Du Pont Brief at 11-12.
12/ The vast majority of granular PTFE is sold directly to processors who fabricate the PTFE into gaskets, seals, bearings, insulating tape and other intermediate mechanical products. Report at A-59. The remainder is sold to compounders, who add fillers and in turn sell the product to processors. Id. at A-6, n.3.
13/ The Commission has used this approach in many cases involving chemical products destined for further processing into finished products. See, e.g., Potassium Chloride from Canada, Inv. No. 731-TA-374 (Preliminary), USITC Pub. 1963 at 5 (1987); Potassium Permanganate from the People's Republic of China, Inv. No. 731-TA-125 (Final), USITC Pub. 1480 at 6 (1984); Choline Chloride from Canada, Inv. No. 731-TA-155 (Final), USITC Pub. 1595 at 4 (1984).

The record of these preliminary investigations discloses no clear dividing lines among the four grades of granular PTFE. All four have the same chemical composition and arise from the same polymerization process. While fine cut, presintered, and filled granular PTFE require some further processing beyond the pelletized stage, in general, all four grades are produced with essentially the same machinery and personnel. 14/ Further, despite the fact that presintering, fine-cutting, and filling enhance some of the product's properties at the expense of others, 15/ any actual differences among the four grades are subtle 16/ and suggest a continuum of grades of one product rather than four discrete products. 17/ In any case, as petitioner argued, all granular PTFE products

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14/ Report at A-5. With regard to machinery, the exception is presintered granular PTFE, which requires the use of a sintering oven at the end of the production process to heat the pellets to a temperature just below the melting point of granular PTFE. Id. at A-5.

15/ Presintered granular PTFE has increased flow properties and diminished dielectric and tensile properties. The addition of increasing amounts of certain fillers will diminish flowability but make for a stronger end product. Fine cut granular PTFE has relatively poor flow properties but offers low shrinkage and high tensile strength. Id. at A-2-A-4.

16/ Tr. at 153.

17/ The mechanical mixing of fine cut resins with fillers results in a filled granular PTFE having many of the properties of the fine cut product. In contrast, combination of the filler and resin in a solvent imparts processing characteristics similar to pelletized granular PTFE. Report at A-3-A-4. Further, Ausimont indicated that it manufactures a fine cut product with some of the flow characteristics of pelletized granular PTFE. Ausimont Brief, Appendix 6 at 5.

have the same basic application--further processing into molded shapes and mechanical parts. 18/

We also note that variations in price among the four grades of granular PTFE are relatively minor and generally reflect the added costs of further processing. 19/ In addition, because the vast majority of granular PTFE is sold directly to processors who fabricate it into intermediate mechanical parts, we conclude that all granular PTFE products move within the same channels of distribution. 20/

For these reasons, we determine that all granular PTFE constitutes a single like product. We further determine that there is a single domestic industry consisting of all U.S. producers of granular PTFE.

18/ Report at A-2. At the staff conference Ausimont argued that presintered granular PTFE was the only grade suitable for ram extrusion into long tubular products. However, Ausimont later clarified that each of the four grades could theoretically be used in any end use fabrication application, although it is more cost-effective to use each grade in one of four fabrication processes. Tr. at 157.

19/ Industry sources report that the price spread among pelletized, fine-cut and presintered granular PTFE is generally less than 10 percent and is usually related to differences in the degree of processing needed for each grade. Report at A-2. Additional costs associated with the filling process generally make it a higher priced product; however, where the filler merely functions as an extender the price of the filled product can be lower than that of the unfilled product. Id. at A-28.

20/ Id. at A-9.

Related parties

The statute permits the Commission to exclude from the domestic industry producers who are also importers, or who are related to importers or foreign exporters, in "appropriate circumstances." 21/ This provision enables the Commission to avoid any distortion in the aggregate data on the domestic industry that might result from including related parties whose operations are shielded from the effect of the imports. 22/

In determining whether the circumstances are appropriate to exclude related parties from the domestic industry, we considered the following factors: (1) the position of the related parties vis-a-vis the rest of the industry, (2) the reasons why the related parties have chosen to import the product under investigation--to benefit from the unfair trade practice, or to enable them to continue production and compete in the domestic market, and (3) the percentage of domestic production attributable to the related parties. 23/

21/ 19 U.S.C. § (4)(B) provides: "When some producers are related to the exporters or importers, or are themselves importers of the allegedly subsidized or dumped merchandise, the term 'industry' may be applied in appropriate circumstances by excluding such producers from those included in that industry." Application of the "related parties" provision is within the Commission's discretion based on the facts presented in each case. Empire Plow Co., Inc. v. United States, ___ CIT ___, Slip Op. 87-125 (Nov. 18, 1987) (hereinafter "Empire Plow") at 9.

22/ See Erasable Programmable Read Only Memories from Japan, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (1986) (hereinafter "EPROMs"); Rock Salt from Canada, Inv. No. 731-TA-239 (Final), USITC Pub. 1798 (1986).

23/ See EPROMs and Rock Salt from Canada, supra n.22. See also Empire Plow at 11-13.

Du Pont imports a small amount of granular PTFE from its joint venture in Japan. 24/ As such, Du Pont is a "related party" within the meaning of the statute. However, because Du Pont accounts for the majority of U.S. production of granular PTFE, its data are essential to our material injury analysis. 25/ Moreover, Du Pont's imports from its Japanese joint venture are negligible in terms of quantity, and most of them are reexported. 26/ Thus, we have not excluded Du Pont from the domestic industry.

Ausimont imports granular PTFE from a related company in Italy. 27/ Thus, Ausimont also is a "related party." However, it appears that Ausimont has become a domestic producer of granular PTFE 28/ and now accounts for a significant share of U.S. granular PTFE production. 29/ Furthermore, although Ausimont imports a substantial amount

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24/ Report at A-7, A-14.
25/ Id. at A-7.
26/ Id. at A-14.
27/ Id.
28/ In June 1986 Ausimont purchased granular PTFE production facilities from Allied-Signal Corp. Immediately thereafter Ausimont began production of granular PTFE at that facility. Ausimont also owns and operates granular PTFE production facilities in Elizabeth and Metuchen, N.J. and in Orange, Texas. Id. at A-7; Ausimont Brief at 13. Ausimont has also engaged in research and development in the United States. Report at A-34. Cf. EPROMs, wherein the Commission excluded Fujitsu from the domestic industry in part because Fujitsu did not engage in research and development activities in the United States. EPROMs at 12-13.
29/ Report at A-6.

of granular PTFE from its affiliate in Italy, [30/] information in the confidential portion of the record indicates that Ausimont is importing granular PTFE to maintain market presence so that it can continue as a U.S. producer. Finally, it is clear that inclusion of Ausimont in the domestic granular PTFE industry will not skew the data on that industry. For these reasons, we have not excluded Ausimont from the domestic industry under the "related parties" provision.

Condition of the domestic industry

In assessing the condition of the domestic industry, the Commission considers, among other factors, domestic consumption, production, capacity, capacity utilization, shipments, inventories, employment, and profitability. [31/] No single factor is determinative, and in each investigation the Commission must consider the particular nature of the relevant industry in making its determination.

Apparent U.S. consumption of granular PTFE fell just over 2 percent in 1984-86, but thereafter in the January-September 1987 interim period rose 6.5 percent above its level in the corresponding period of 1986. [32/] Domestic production of granular PTFE was 10.6 million pounds in 1984, a little less

30/ Id. at A-14.
31/ 19 U.S.C. § 1677(7)(C)(iii).
32/ Report at A-9. Data on apparent U.S. consumption were compiled from Commission questionnaires, because official import statistics do not report imports of granular PTFE separately from imports of other forms of PTFE, and the Commission did not gather information concerning imports from countries other than those under investigation. The data on apparent U.S. consumption therefore somewhat understate actual U.S. consumption. Report at A-8, A-27, Table 16.

than 9.6 million pounds in 1985, and slightly more than 9.6 million pounds in 1986. Production in interim 1987 was 6.0 million pounds as compared with 7.8 million pounds in interim 1986. 33/ U.S. producers' capacity to produce granular PTFE remained constant in 1984-85 at 11.4 million pounds, increased to 11.9 million pounds in 1986, and remained constant at 8.9 million pounds in interims 1986 and 1987. 34/ Capacity utilization decreased throughout the period, falling from 93.2 percent in 1984 to 67 percent in interim 1987. 35/

U.S. producers' domestic shipments of granular PTFE in terms of quantity fell by 9.1 percent from 1984 to 1985, rose by 5.1 percent between 1985 and 1986, and were 2.9 percent higher in interim 1987 as compared with interim 1986. 36/ Inventories increased steadily from 1984 to 1986, then declined from interim 1986 to interim 1987. 37/ While the interim data on shipments and inventories appear positive, they reflect shipments from inventory in conjunction with decreased production. 38/ U.S. exports of granular PTFE rose between 1984 and 1986, but dropped sharply between interim 1986 and

33/ Id. at A-11, Table 3.
34/ Id.
35/ Id. Capacity utilization was 87.0 percent in interim 1986, suggesting that the recent decline in capacity utilization is the result of the substantial decrease in domestic production. Id.
36/ Id. at A-11-A-14, Table 4.
37/ Id. at A-13.
38/ Id. at A-11, A-13.

interim 1987. [39] The unit value of domestic shipments rose slightly in 1985, and then fell throughout the remainder of the period of investigation. Unit values in interim 1987 were slightly lower than in interim 1986. [40] The number of production and related workers, hours worked, and total wages paid decreased throughout the period under investigation. [41]

Domestic producers' net sales of granular PTFE declined steadily from $46.7 million in 1984 to $40.2 million in 1986, and then to $27.9 million in interim 1987 as compared with $32.8 million in interim 1986. [42] As a percentage of net sales, operating losses for the industry increased steadily from 1.5 percent in 1984 to 6.7 percent in 1986, then rose sharply in interim 1987 to 12.8 percent as compared with 4.5 percent in interim 1986. [43]

The domestic granular PTFE industry has suffered declines in almost all significant economic indicators. Production, capacity utilization, and employment all decreased during the the period of investigation. The industry's operating losses increased. We therefore determine that there is a reasonable indication that the domestic industry producing PTFE is materially injured.

39/ Id.
40/ Id. at A-13, Table 5.
41/ Id. at A-14-A-15. We note that wages for production and related workers are largely a fixed cost. It is most efficient to produce granular PTFE 24 hours per day, 7 days per week. Therefore, in the event a manufacturer decides to decrease production, the plant is slowed down but is still operated on a 24-hour, 7 day schedule, resulting in a fairly constant labor force.
42/ Id. at A-16, Table 9.
43/ Id.

Cumulation

The Trade and Tariff Act of 1984 mandates that the Commission "cumulatively assess the volume and effect of imports from two or more countries of like products subject to investigation if such imports compete with each other and with like products of the domestic industry in the United States market," 44/ and are marketed reasonably coincident in time. 45/

In making our determinations in these investigations, we have cumulatively assessed the volume and effect of imports of granular PTFE from Italy and Japan. While there are some differences between the grades of granular PTFE -- for example, in specific end use applications, two different grades may not be substitutable one for the other -- in general we conclude that the imports of all grades of granular PTFE from Italy and Japan compete with each other and with the domestic like product. These imports are also currently subject to investigation, and were marketed in the United States during the period under investigation. Therefore, the conditions for cumulative analysis are met.

Reasonable indication of material injury by reason of allegedly LTFV imports from Italy and Japan

When making a determination as to whether there is a reasonable indication of material injury, the statute provides that

> [t]he Commission shall consider, among other factors:
> (i) the volume of imports of the merchandise which is the subject of the investigation,

44/ 19 U.S.C. § 1677(7)(C)(iv).
45/ H.R. Rep. No. 1156, 98th Cong., 2d Sess. 173 (1984).

(ii) the effect of imports of that merchandise on prices in the United States for like products, and
(iii) the impact of imports of such merchandise on domestic producers of the like product. 46/

U.S. imports of granular PTFE from Italy and Japan increased slightly between 1984 and 1986, in terms of quantity. 47/ However, in the comparison of interim periods, January-September 1986 and 1987, such imports increased at a much faster rate than at any other time during the period under investigation. 48/ The ratio of shipments of imports from Italy and Japan to apparent U.S. consumption also increased, from 19.2 percent in 1984 to 21.0 percent in 1986, and to 23.2 percent in interim 1987 as compared with 20.5 percent in interim 1986. 49/ As noted above, apparent U.S. consumption of granular PTFE declined by just over 2 percent between 1984 and 1986, before increasing by 6.5 percent between interim 1986 and interim 1987. 50/

The Commission collected pricing information from domestic producers and importers for the three grades of granular PTFE. 51/ Du Pont's prices for

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46/ 19 U.S.C. § 1677(7)(B).
47/ Report at A-25.
48/ Id. at A-25.
49/ Id. at A-27, Table 16.
50/ Id. at A-9.
51/ Id. at A-30-A-31. Only Du Pont provided the Commission with price data as requested. The other two U.S. producers' price data are largely incomplete. The importers accounting for all or almost all of the imports from Italy and Japan reported price data. Id. at A-32. However, because of the small number of firms involved in domestic production and importation, the specifics of pricing information are confidential, and can be discussed only in general terms.

all three products fluctuated during the period of investigation, but remained within a relatively narrow percent range of its January-March 1984 prices. 52/ However, its prices for its highest volume granular PTFE product fell from January-March 1984 to July-September 1987. 53/ We note that fine cut granular PTFE accounted for by far the largest share of imports from Italy and Japan during the period of investigation. 54/ Weighted average prices of imports of granular PTFE from both Italy and Japan were below U.S. producer prices in the majority of periods for which comparisons were possible, particularly for the fine cut material. 55/ 56/

Thus, imports of granular PTFE from Italy and Japan increased during the period of investigation, despite a decline in apparent U.S. consumption during the first three years of the period, and they now account for a significant

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52/ Report at A-33.
53/ Id.
54/ Id. at A-25.
55/ Id. at A-34-A-35.
56/ Chairman Liebeler and Vice Chairman Brunsdale believe that the underselling evidence is not persuasive in proving causation in this case. They note that purchasers of PTFE rate quality as an important consideration in their purchasing decisions, lessening the importance of dumping in this case. See Report at A-30. In any final investigations involving this product, Vice Chairman Brunsdale would like parties to analyze and provide quantitative estimates for the following: (1) how dumping affected the prices of the subject imports and the relative magnitude of these effects, (2) how the changed prices of the subject imports affected the prices of the like product and the relative magnitude of these effects, and (3) how the changed prices of the like product affected domestic shipments and domestic industry sales and the relative magnitude of these effects.

portion of the U.S. market. 57/ The imports entered the United States at prices generally below the U.S. producers' prices, which in turn were declining, indicating the existence of price suppression and depression. We therefore determine that there is a reasonable indication that allegedly dumped imports of granular PTFE from Italy and Japan are a cause of material injury to the domestic industry producing the like product.

57/ Vice Chairman Brunsdale notes that the alleged margins of dumping are very high, and the weighted average margin is 82 percent. She believes that this provides further evidence of a reasonable indication of material injury by reason of dumped imports in this case.

ADDITIONAL VIEWS OF CHAIRMAN LIEBELER

Granular Polytetrafluorethylene from Italy and Japan
Inv. Nos. 731-TA-385 and 386 (Preliminary)

I determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of granular polytetrafluoroethylene from Italy and Japan.[1] I concur with the majority in their definitions of the like product and the domestic industry, and their discussions of the condition of the domestic industry and cumulation. Because my views on causation differ from those of the majority, I offer these additional views.

Material Injury by Reason of Imports

In order for a domestic industry to prevail in a preliminary investigation, the Commission must determine that there is a reasonable indication that the dumped or

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1/ I do not discuss material retardation because it is not an issue in these investigations.

subsidized imports cause or threaten to cause material injury to the domestic industry producing the like product. The Commission must determine whether the domestic industry producing the like product is materially injured or is threatened with material injury, and whether any injury or threat thereof is by reason of the dumped or subsidized imports. Only if the Commission finds a reasonable indication of both injury and causation, will it make an affirmative determination in the investigation.

Before analyzing the data, however, the first question is whether the statute is clear or whether one must resort to the legislative history in order to interpret the relevant sections of the this import relief law. In general, the accepted rule of statutory construction is that a statute, clear and unambiguous on its face, need not and cannot be interpreted using secondary sources. Only statutes that are of doubtful meaning are subject to such statutory interpretation.[2]

2/ C. Sands, Sutherland Statutory Construction § 45.02 (4th ed., 1985.).

The statutory language used for both parts of the analysis is ambiguous. "Material injury" is defined as "harm which is not inconsequential, immaterial, or unimportant."[3] As for the causation test, "by reason of" lends itself to no easy interpretation, and has been the subject of much debate by past and present commissioners. Clearly, well-informed persons may differ as to the interpretation of the causation and material injury sections of title VII. Therefore, the legislative history becomes helpful in interpreting title VII.

The ambiguity arises in part because it is clear that the presence in the United States of additional foreign supply will always make the domestic industry worse off. Any time a foreign producer exports products to the United States, the increase in supply, ceteris paribus, must result in a lower price of the product than would otherwise prevail. If a downward effect on price, accompanied by a Department of Commerce dumping or subsidy finding and a Commission finding that financial indicators were down were all that were required for an affirmative

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3/ 19 U.S.C. § 1977(7)(A)(1980).

determination, there would be no need to inquire further into causation.

But the legislative history shows that the mere presence of LTFV imports is not sufficient to establish causation. In the legislative history to the Trade Agreements Acts of 1979, Congress stated:

> [T]he ITC will consider information which indicates that harm is caused by factors other than the less-than-fair-value imports.[4]

The Finance Committee emphasized the need for an exhaustive causation analysis, stating, "the Commission must satisfy itself that, in light of all the information presented, there is a sufficient causal link between the less-than-fair-value imports and the requisite injury."[5]

The Senate Finance Committee acknowledged that the causation analysis would not be easy: "The determination of the ITC with respect to causation, is under current

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4/ Report on the Trade Agreements Act of 1979, S. Rep. No. 249, 96th Cong. 1st Sess. 75 (1979).

5/ Id.

law, and will be, under section 735, complex and difficult, and is a matter for the judgment of the ITC."[6] Since the domestic industry is no doubt worse off by the presence of any imports (whether LTFV or fairly traded) and Congress has directed that this is not enough upon which to base an affirmative determination, the Commission must delve further to find what condition Congress has attempted to remedy.

In the legislative history to the 1974 Act, the Senate Finance Committee stated:

> This Act is not a 'protectionist' statute designed to bar or restrict U.S. imports; rather, it is a statute designed to free U.S. imports from unfair price discrimination practices. * * * The Antidumping Act is designed to discourage and prevent foreign suppliers from using unfair price discrimination practices to the detriment of a United States industry.[7]

Thus, the focus of the analysis must be on what constitutes unfair price discrimination and what harm results therefrom:

6/ Id.

7/ Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

> [T]he Antidumping Act does not proscribe transactions which involve selling an imported product at a price which is not lower than that needed to make the product competitive in the U.S. market, even though the price of the imported product is lower than its home market price.[8]

This "complex and difficult" judgment by the Commission is aided greatly by the use of economic and financial analysis. One of the most important assumptions of traditional microeconomic theory is that firms attempt to maximize profits.[9] Congress was obviously familiar with the economist's tools: "[I]mporters as prudent businessmen dealing fairly would be interested in maximizing profits by selling at prices as high as the U.S. market would bear."[10]

An assertion of unfair price discrimination should be accompanied by a factual record that can support such a

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8/ Id.

9/ See, e.g., P. Samuelson & W. Nordhaus, Economics 42-45 (12th ed. 1985); W. Nicholson, Intermediate Microeconomics and Its Application 7 (3d ed. 1983).

10/ Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

conclusion. In accord with economic theory and the legislative history, foreign firms should be presumed to behave rationally. Therefore, if the factual setting in which the unfair imports occur does not support any gain to be had by unfair price discrimination, it is reasonable to conclude that any injury or threat of injury to the domestic industry is not "by reason of" such imports.

In many cases unfair price discrimination by a competitor would be irrational. In general, it is not rational to charge a price below that necessary to sell one's product. In certain circumstances, a firm may try to capture a sufficient market share to be able to raise its price in the future. To move from a position where the firm has no market power to a position where the firm has such power, the firm may lower its price below that which is necessary to meet competition. It is this condition which Congress must have meant when it charged us "to discourage and prevent foreign suppliers from using unfair price discrimination practices to the detriment of a United States industry."[11]

11/ Trade Reform Act of 1974, S. Rep. 1298, 93rd Cong. 2d Sess. 179.

In Certain Red Raspberries from Canada, I set forth a framework for examining what factual setting would merit an affirmative finding under the law interpreted in light of the cited legislative history.[12]

> The stronger the evidence of the following . . . the more likely that an affirmative determination will be made: (1) large and increasing market share, (2) high dumping margins, (3) homogeneous products, (4) declining prices and (5) barriers to entry to other foreign producers (low elasticity of supply of other imports).[13]

The statute requires the Commission to examine the volume of imports, the effect of imports on prices, and the general impact of imports on domestic producers.[14] The legislative history provides some guidance for applying these criteria. The factors incorporate both the statutory criteria and the guidance provided by the legislative history. Each of these factors is evaluated in turn.

12/ Inv. No. 731-TA-196 (Final), USITC Pub. 1680, at 11-19 (1985) (Additional Views of Vice Chairman Liebeler).

13/ Id. at 16.

14/ 19 U.S.C. § 1677(7)(B)-(C) (1980 & cum. supp. 1985).

Causation analysis

Examining import penetration is important because unfair price discrimination has as its goal, and cannot take place in the absence of, market power. Market penetration of imports of granular polytetrafluoroethylene from Italy and Japan was 19.2 percent of apparent U.S. consumption in 1984, 19.5 percent in 1985, 21.0 percent in 1986, and 23.2 percent for the first three quarters of 1987.[15] Import penetration is moderate, and has been increasing in recent years. This factor is not inconsistent with a finding of unfair price discrimination.

The second factor is a high margin of dumping or subsidy. The higher the margin, ceteris paribus, the more likely it is that the product is being sold below the

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15/ Report at Table 16. The penetration figures presented here are measured on a quantity basis. I note that the import penetration figures are slightly lower when measured on a value basis, although the general trend is the same. Id.

competitive price[16] and the more likely it is that the domestic producers will be adversely affected. In a preliminary investigation, the Commerce Department has not yet had time to calculate any margins. In this case, petitioner alleged margins of 55 percent for imports from Italy, and 103 percent for imports from Japan.[17] The alleged average weighted margin is approximately 82 percent. These alleged margins are high, and consistent with unfair price discrimination.

The third factor is the homogeneity of the products. The more homogeneous the products, the greater will be the effect of any allegedly unfair practice on domestic producers. While it appears that imported and domestic products may be generally substitutable,[18] there are allegations that the products are of varying quality.[19] There have also been assertions that the petitioner offers

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16/ See text accompanying note 8, supra.

17/ Report at A-6.

18/ Report at A-9; Tr. at 30.

19/ See generally Tr. at 96-97, 101-02, 166.

customers better engineering support,[20] and that the petitioner enjoys a sharp competitive advantage because of its "Teflon" trademark.[21] There appears to be a need for further information regarding these issues. Thus, while I find for purposes of this preliminary investigation that these products are substitutable, though not perfectly, I do so with reservations, and note the need for further data in order better to analyze this issue.

As to the fourth factor, evidence of declining domestic prices, ceteris paribus, might indicate that domestic producers were lowering their prices to maintain market share. While price data is somewhat incomplete,[22] available data shows domestic prices to have been relatively stable during the period of investigation, and that for some producers prices have

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20/ Tr. at 32.

21/ Report at A-30; Tr. at 96, 103.

22/ See generally Report at A-30-31.

increased.[23] For example, DuPont's prices for unfilled pelletized granular polytetrafluoroethylene (PTFE) were ***** per pound in the first quarter of 1984 and ***** per pound for the third quarter of 1987.[24] Similarly, DuPont's prices for unfilled, fine cut granular PTFE were ***** per pound in the first quarter of 1984, and ***** per pound in the third quarter of 1987. Ausimont's prices for this same product, however, were ***** per pound for the third quarter of 1986 and ***** for the third quarter of 1987, and ICI's were ***** for the fourth quarter of 1987 and ***** for the third qurter of 1987.[25] For unfilled presintered granular PTFE, DuPont's prices were exactly the same for the first quarter of 1984 and the third quarter of 1987, while Ausimont's prices were ***** for the second quarter of 1986 and ***** for the third quarter of 1987, and ICI's prices were ***** for the fourth quarter of 1986 and *****

23/ Report at Tables 17-19.

24/ Report at Table 17.

25/ Report at Table 18.

for the third quarter of 1987.[26] This factor is inconsistent with unfair price discrimination.

The fifth factor is foreign supply elasticity (barriers to entry). If there is low foreign elasticity of supply (or barriers to entry), it is more likely that a producer can gain market power. Granular polytetrafluoroethylene is imported from a several countries other than Italy and Japan, and imports from these other countries appear to account for over one-quarter of all U.S. imports.[27] Since foreign supply appears to be elastic, this factor is inconsistent with unfair price discrimination.

In each case the five factors must be balanced. The price data (although incomplete), and the lack of barriers to entry support a negative determination. The other three factors, however, weigh in favor of an affirmative determination.

26/ Report at Table 19.

27/ Precise import estimations are confidential. Report at A-24 note 2.

Given the lack of better information on product homogeneity at the prelimianry stage of this investigation, I have assumed that the products are homogeneous. The product homogeneity together with the high alleged dumping margins and an increasing market share that has reached 23.2 percent, cause me to reach an affirmative determination.

Conclusion

Therefore, I conclude that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of granular polytetrafluoroethylene from Italy and Japan.

INFORMATION OBTAINED IN THE INVESTIGATIONS

Introduction

On November 6, 1987, petitions were filed with the U.S. International Trade Commission and the U.S. Department of Commerce by counsel on behalf of E.I. du Pont de Nemours & Co., Wilmington, DE. The petitions allege that an industry in the United States is materially injured and threatened with material injury by reason of imports from Italy and Japan of granular polytetrafluoroethylene resin (hereafter granular PTFE) 1/ that are alleged to be sold in the United States at less than fair value (LTFV). Accordingly, effective November 6, 1987, the Commission instituted preliminary investigations Nos. 731-TA-385 and 386, under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry is materially retarded, by reason of such imports.

Notice of the institution of these investigations and of a 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 November 17, 1987 (52 F.R. 43952). 2/ The conference was held in Washington, DC, on December 1, 1987. 3/

Effective December 3, 1987, the U.S. Department of Commerce initiated antidumping investigations to determine whether the subject merchandise is being, or is likely to be, sold in the United States at LTFV. 4/

The Commission's briefing and vote on these investigations were held on December 16, 1987. The statute directs the Commission to make its determinations within 45 days after receipt of a petition, or in this case, by December 21, 1987.

Previous or Related Commission Investigations

On April 3, 1976, the Commission determined in investigation 337-TA-4 that there was no violation of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337a) in the importation of expanded, unsintered polytetrafluoroethylene resin in tape form, for the reason that the complainant's patent, which was the basis for the allegation of an unfair trade practice, was unenforceable for purposes of section 337.

1/ For purposes of these investigations, the term "granular PTFE" refers to the class of PTFE resin that has been converted from the tetrafluoroethylene monomer through suspension polymerization. The product subject to investigation includes pelletized, fine cut, and presintered grades of granular PTFE, whether or not mixed with filler materials. The investigation does not include PTFE fine powder, PTFE aqueous dispersions, or reprocessed granular PTFE scrap. The product is provided for in item 445.54 of the Tariff Schedules of the United States (TSUS).

2/ A copy of the Federal Register notice is presented in app. A.

3/ A list of witnesses who appeared at the conference is presented in app. B.

4/ A copy of Commerce's notice of initiation is presented in app. C.

The Product

Description and uses

Polytetrafluoroethylene resin is a high-performance plastic used to make articles for a variety of industrial applications. This resin is a completely fluorinated homopolymer made by polymerizing the monomer tetrafluoroethylene (TFE) to form a linear molecular structure of repeating HC_2-CF_2 units. PTFE offers excellent chemical and physical properties in four key areas. First, because of its strong interatomic carbon-fluorine bonds, PTFE resin is highly resistant to oxidation and the action of chemicals, including strong acids, alkalies, and oxidizing agents. Second, PTFE resin possesses high-temperature stability, retaining useful properties at temperatures ranging from -240° C to 260° C; in addition, PTFE resin will not support combustion. Third, PTFE resin offers superior dielectric properties, which makes it an outstanding insulator. Finally, PTFE resin has the lowest surface energy of any common solid, giving it the superior antistick performance for which it is most popularly known under the petitioner's trademark Teflon.

PTFE resins are commercially available in three distinct forms: PTFE fine powder (also known as coagulated dispersions), PTFE aqueous dispersions, and granular PTFE resins. These forms share the basic chemical and physical properties outlined above but are distinct in the way they are manufactured and processed and in their end uses. The product subject to these investigations is granular PTFE, which represents just over 50 percent of reported U.S. shipments of all PTFE resins.

Granular PTFE resin.--Granular PTFE resin is distinct from PTFE fine powder and PTFE dispersions in the way it is manufactured, the way it is processed, and its end uses. PTFE in the granular form is converted from the TFE monomer through suspension polymerization as opposed to the dispersion polymerization method used for fine powder and dispersions. Because granular PTFE has relatively poor flow properties, it must be molded or extruded under pressure in order to fabricate it into shapes. In addition, granular PTFE will not fibrillate (form fibers), as will fine powder and dispersions. PTFE in the granular form is used primarily in the manufacture of molded shapes and mechanical parts.

Granular PTFE resins come in three general product types--pelletized, fine cut, and presintered. 1/ The differences among these grades are subtle and are primarily related to the flow characteristics, density, and particle size and, consequently, the method of fabrication and end use of the polymers. Industry sources report that in the U.S. market the price spread between the three grades of granular PTFE resins is modest (generally less than 10 percent) and is usually, but not always, related to differences in the degree of processing required to manufacture each type. In addition, granular PTFE may be mixed with additives to enhance particular characteristics of the resin, resulting in what is referred to as "filled granular PTFE resin." The price of filled granular PTFE is related to that of the virgin product but will vary depending on the amount and type of filler used and the way in which it is mixed with the virgin material.

1/ These product types are generally referred to as "grades" of granular PTFE, each of which may be offered in additional, slightly modified versions, also referred to as grades (e.g. "pelletized grades of granular PTFE").

Pelletized.--Pelletized granular PTFE is characterized as having soft, medium-size particles of free-flowing granules, offering relatively high tensile properties. This form of granular PTFE is processed using semicontinuous automatic and isostatic molding techniques to produce high volumes of small finished parts, such as rings, gaskets, seals, and cylinder tube sections for use as mechanical parts in chemical and food processing equipment, automobiles, and electronic components. Because it is processed under constant feed and compression conditions, pelletized granular PTFE lends dimensional uniformity to the products into which it is fabricated.

Fine cut.--Fine cut granular PTFE is distinguished by its soft, small particles of low bulk density, offering low shrinkage and high tensile strength properties. Unlike pelletized and presintered grades, fine cut granular PTFE has poor flow properties. As such, it is processed using nonautomatic, manual molding techniques to produce lower volumes of large- to medium-size semifinished articles such as billets, which are skived 1/ to make insulating tape for electrical applications and sheets for cladding chemical processing equipment. This form of granular PTFE results in products that offer high electric discharge resistance, low void content, high tensile strength, and a smooth exterior surface.

Presintered.--Presintered granular PTFE can be characterized as having hard, medium- to large-size particles, which are baked to enhance the flowability of the granules. Because of its better flow properties, presintered granular PTFE is fabricated using semicontinuous automatic ram extrusion processes to form long rods, tubes, and shapes, which are later cut and machined to form a variety of mechanical parts for the chemical and electrical industries, among others. Because of the baking process, the presintered resin results in finished products having poorer electrical and tensile properties than those made from pelletized or fine cut granular PTFE.

Filled.--Fine cut granular PTFE resins are frequently compounded with fillers and reinforcements, such as carbon, graphite, and glass fibers, in amounts ranging from 5 percent to 70 percent. 2/ These fillers can be used to add strength and enhance mechanical properties without limiting processability. Fillers are also added merely to impart color so that the ultimate end user can identify the source or dimensions of products such as gaskets, which, because of their small size and the slipperiness of the PTFE, are difficult to mark with ink. Filled resins are made from fine cut granular PTFE either by mechanically mixing the resin and the filler to produce a low-flow resin, similar in processability to fine cut granular PTFE, or by combining the materials in a solvent to produce a free-flowing resin with processing characteristics similar to pelletized granular PTFE. Filled PTFE

1/ Skiving refers to the process by which a large billet, or block, of material is shaved in thin layers to form tape or sheets.

2/ According to industry sources, filled granular PTFE resins represent about 20 to 25 percent of the volume of all domestically consumed granular PTFE resin. Ausimont U.S.A. estimates that filled product accounts for about 30 percent of total U.S. consumption of virgin granular PTFE, assuming an average filler content of 20 percent. See Ausimont U.S.A.'s postconference submission, app. 6, p. 3.

compounds are used in such applications as rider rings, bushings, and seals for compressors and automotive systems, and in bearing pads for high-rise buildings and bridges.

PTFE fine powder and PTFE dispersions.--PTFE fine powder and PTFE aqueous dispersions are made in a different type of vessel from PTFE in the granular form, and they are made by a process called aqueous-dispersion polymerization. In this process, precipitation is avoided through the addition of a dispersing agent, or surfactant, and mild agitation, which keeps the particles separated. Following polymerization, more surfactant can be added to form aqueous dispersions of approximately 60-percent PTFE in water, or the suspended particles can be agglomerated, separated, and dried to make fine powder. Suspension polymerization and dispersion polymerization both result in high-molecular-weight PTFE resins of the same molecular structure; however, the physical characteristics and processability of the resins produced by each method are quite distinct. 1/ Whereas granular PTFE is processed by molding or ram extrusion methods, fine powder and dispersions require more delicate processing methods. PTFE fine powders are used in the manufacture of tubing and wire insulation via a paste extrusion process for thin-walled sections. PTFE dispersions are sprayed on metal substrates to provide a desired chemical resistance and nonstick and low friction properties, such as to coat cookware.

Reprocessed granular PTFE.--Granular PTFE scrap, which is generally rejected or waste material from processors of virgin granular PTFE, can be reprocessed and sold to fabricators for less demanding applications. Reprocessing of the virgin material involves reduction of particle size through repeated cutting processes, chemical cleaning, and drying. Reprocessed scrap is then graded by level of contamination and resold for use in applications where greater tolerances are permitted. The market for reprocessed scrap is estimated to have been 2.2 million to 2.5 million pounds in 1985 and 1986. 2/

Manufacturing process

The production process for granular PTFE resin is reported to be similar for all producers and is designed to optimize the handleability (flow into a mold), moldability (sinterability, shrinkage), and physical and electrical properties of the product. Granular PTFE resins are converted from the monomer through a process called suspension polymerization to form agglomerates of resin that are dried and further processed to attain desired shape and particle size. Little or no dispersing agent is used in this method of polymerization, which relies instead on vigorous agitation to produce a precipitated resin.

1/ Kirk-Othmer, Encyclopedia of Chemical Technology, 3rd ed., vol. 11, New York, 1980, pp. 4-6, states, in effect, that the granular PTFE resin is neither substitutable for, nor interchangeable with, PTFE resin made by the aqueous-dispersion process.

2/ Ausimont U.S.A.'s post conference submission, app. 6, p. 3; Daikin's post-conference submission, app. 1, p. 1.

This process produces a resin consisting of string-like particles of raw polymer. Next, the raw polymer is wet cut to achieve desired particle size. Then the cut polymers are pelletized (agglomerized) and dried. In addition, the pelletized granular PTFE resin can be ground to produce "fine cut" granular PTFE resins, or ground and heated to just below the melting point to produce "presintered" granular resins. These operations are carried out using much of the same machinery. To maximize production efficiencies, manufacturers "campaign" products, dedicating the production line for a period of several days to a week to produce a predetermined quantity of one or two of the three grades of granular PTFE. Although each grade involves some variation in production and may require some dedicated machinery, such as the sintering oven used to make presintered granular PTFE resin, generally they are produced on the same machinery, with the same personnel, using similar processes.

Because PTFE resin has an extremely high molecular weight, which results in an exceptionally high melt viscosity (well in excess of the melting point of the resin), granular PTFE resin cannot be processed by conventional melt extrusion or molding techniques. Methods of molding and extruding granular PTFE resins into fabricated products are similar to those used with powdered metals and ceramics. The basic steps employ compression followed by sintering at high temperatures. 1/

Du Pont reports that the imported granular PTFE resin is comparable in quality and performance to the domestically produced granular PTFE resin and can be substituted for the domestic product in virtually all major end uses. The petitioner further states that PTFE resin is expensive (* * *) relative to other plastics and, further, that granular PTFE resin usually competes with exotic metals (for example, "Hastelloy C") in end-use areas where ultra-high performance properties are required. 2/ The petitioner also reports that industry users consider granular PTFE resin to be a "product of last resort" and, in most of its major applications, granular PTFE resin cannot be substituted for by other plastics materials.

U.S. tariff treatment

Imports of the granular PTFE covered in these investigations are provided for in item 445.54 of the TSUS, a classification that includes all PTFE resins. The column 1 (most-favored-nation) rate of duty for this tariff item,

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1/ "Sintering" is a process that involves the welding together of powdered plastic particles at temperatures just below the melting or fusion point of the resin. The particles are fused (sintered) together to form a relatively strong mass, but the mass as a whole does not melt. This is often followed by further heating and/or postforming.

2/ Kirk-Othmer, op. cit., p. 18, reports that the high cost of monomer preparation and purification and of polymerization and posttreatments are the main contributors to PTFE's price. Since the PTFE fabrication techniques are different from typical thermoplastics and generally involve batch operations, the cost of converting the polymer to an end-use article is also high. Hence, the final product is relatively expensive.

applicable to imports from Italy and Japan, is 0.7 cent per pound plus 5.7 percent ad valorem; the calculated ad valorem equivalent for item 445.54 was 5.8 percent for the first 8 months of 1987. 1/

Nature and Extent of Alleged Sales at LTFV

To estimate dumping margins, the petitioner compared the ex-factory price of Italian granular PTFE exports to the United States with the ex-factory price of similar merchandise sold in the home market at prices above the cost of production. 2/ For imports from Japan, the petitioner compared the ex-factory price of exports from Japan of granular PTFE to the United States with the constructed value of the merchandise. On the basis of the petitioner's estimates, the alleged dumping margins are 55 percent for imports from Italy and 103 percent for imports from Japan.

The U.S. Industry

Ausimont U.S.A., E.I. du Pont de Nemours & Co., and ICI Americas are the only producers of granular PTFE in the United States. 3/ All three of these companies responded to the Commission's questionnaire sent in connection with these investigations. Ausimont U.S.A., Morristown, NJ, is a wholly owned subsidiary of Ausimont Compo N.V., the Netherlands, 4/ of which the Italian chemical conglomerate, Montedison SpA, owns *** percent. 5/ Ausimont U.S.A., which presently accounts for about *** percent of total U.S. production, began manufacturing granular PTFE in the United States in June 1986, just after it purchased granular PTFE production facilities and the related business

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1/ Col. 1 rates of duty are applicable to imported products from all countries except those Communist countries and areas enumerated in general headnote 3(d) of the TSUS. Imports of granular PTFE from the latter countries are assessed the col. 2 duty rate of 33.5 percent ad valorem. In addition, special rates of duty are afforded to imports from Israel and from various designated beneficiaries of preferential tariff programs.

2/ The petitioner suspects that some of Ausimont U.S.A.'s home-market sales to favored customers are being discounted to a level below its cost of production and argues that such sales must be excluded from the calculation of Ausimont U.S.A.'s foreign market value. (See the petition, p. 16.)

3/ These companies account for all U.S. production of virgin (unfilled) granular PTFE. There are other U.S. firms that purchase domestic or imported granular PTFE and compound it with filler materials for resale to processors or for internal use in fabricated products. This report does not include information on these firms; however, a list of them appears in app. D.

4/ Ausimont Compo N.V.'s legal domicile is the Netherlands. Its executive offices are located in Waltham, MA.

5/ Ausimont U.S.A. also imports granular PTFE from another Ausimont Compo N.V. subsidiary in Italy and is in opposition to the petition in these investigations.

organization from Allied-Signal. 1/ At its plant in Elizabeth, NJ, Ausimont U.S.A. produces fine cut and presintered grades of granular PTFE resin. In addition, the company produces filled granular PTFE and reprocessed scrap at facilities in Metuchen, NJ, which it also purchased from Allied-Signal in 1986. For the purposes of this report, the filled operations, but not those making reprocessed scrap, are considered part of Ausimont U.S.A.'s overall granular business.

Du Pont, Wilmington, DE, by far the largest manufacturer of granular PTFE, accounts for approximately *** percent of U.S. production. 2/ Engineers at Du Pont discovered and began developing PTFE in the late 1930's. In 1946 Du Pont introduced PTFE to the commercial market under the trade name Teflon. 3/ Du Pont produces all three grades of granular PTFE, as well as PTFE fine powders and aqueous dispersions, at its Washington Works plant in Parkersburg, WV; it does not produce filled granular PTFE or reprocessed scrap. Seagram Co., Montreal Canada, holds a ***-percent share in the corporation.

The third producer, ICI Americas, Inc., Wilmington, DE, is owned by ICI Americas Holdings, Inc., a wholly owned subsidiary of the British company Imperial Chemical Industries PLC. 4/ ICI, * * *, manufactures all three grades of granular PTFE at its plant in Bayonne, NJ, and accounts for *** percent of U.S. production. In addition, ICI produces filled granular PTFE through LNP Corp., Malvern, PA, which became part of ICI Americas in 1987. 5/

U.S. Importers

Ausimont U.S.A. (see also "The U.S. Industry" section of this report) is the sole importer of granular PTFE from Italy. Gunze New York, Inc., and Sumitomo Corp. of America, both of New York, NY, import the subject merchandise from Japan. 6/ Sumitomo is the * * * importer of granular PTFE from Japan, accounting for *** percent of reported imports from Japan in

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1/ Ausimont U.S.A. also acquired a facility in Orange, TX, which produces ethylene-chlorotrifluorothylene (ECTFE), a fluoropolymer not subject to these investigations.

2/ Du Pont also produces granular PTFE in Japan through its joint venture, Du Pont-Mitsui Fluorochemicals Co., Ltd.

3/ The patent for Teflon in the granular form expired about 1964, at which time Allied-Signal built its granular PTFE plant in Elizabeth, NJ.

4/ ICI PLC also produces granular PTFE in Japan through its joint venture Asahi-Fluoropolymers Co., Ltd.

5/ LNP was purchased by ICI Americas Holdings, Inc., in 1985 and remained a separate legal entity until the end of 1986, when it became part of ICI Americas. * * *. Data on the filled business are not included in this report, except where indicated.

6/ Du Pont imports * * * of granular PTFE from its joint venture in Japan, Du Pont-Mitsui Fluorochemicals Co., Ltd. These imports accounted for approximately *** percent of reported imports from Japan in 1986. Du Pont reported that the vast majority of these imports were for reexport * * *.

1986. Gunze accounted for *** percent of reported imports of Japanese granular PTFE in 1986. Shares of apparent U.S. consumption held by individual domestic producers and U.S. importers are presented in table 1.

Table 1
Granular PTFE: U.S. producers' and importers' trade names and shares of apparent U.S. consumption, by firms, 1986 1/

(In percent)

Firm	PTFE trade name	Share of apparent U.S. consumption 2/
Producers:		
Ausimont U.S.A.	Halon	***
Du Pont	Teflon	***
ICI	Fluon	***
Importers:		
Ausimont U.S.A.	Algoflon	***
Gunze	Daiflon 3/	***
Sumitomo	Daiflon 3/	***
Total 4/		100.0

1/ The calculation of apparent U.S. consumption does not include imports of granular PTFE from countries other than Italy and Japan, and is thus understated.
2/ Shares are based on U.S. producers' and importers' domestic shipments.
3/ Daiflon is the trade name for PTFE produced by Daikin.
4/ In addition, Du Pont reported *** pounds of U.S. shipments of imports of granular PTFE from its joint venture with Mitsui in Japan.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The Domestic Market

Apparent U.S. consumption

Data on apparent consumption of granular PTFE were compiled from information submitted in response to questionnaires of the U.S. International Trade Commission. The consumption data presented are composed of reported shipments of U.S.-produced granular PTFE and reported shipments of imports from Italy and Japan in the U.S. market by each of the major known importers. Because imports from all other countries, primarily West Germany, the Netherlands, and the United Kingdom, are not included, consumption figures are understated. 1/

1/ According to Du Pont, Gunze and Sumitomo account for about *** percent of the subject merchandise imported from Japan, and Ausimont U.S.A. accounts for *** percent of imports from Italy. Total imports from all other sources were estimated to be *** pounds in 1986 (see petition, p. 22).

Apparent U.S. consumption of granular PTFE by weight decreased by 8.7 percent from 1984 to 1985, then increased by 7.1 percent from 1985 to 1986 (table 2), for an overall decline of just over 2 percent between 1984 and 1986. Apparent U.S. consumption during January-September 1987 was 6.5 percent above the level of apparent consumption in the corresponding period of 1986.

Table 2
Granular PTFE: U.S. shipments of imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1984-86, January-September 1986, and January-September 1987

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Channels of distribution

The vast majority of granular PTFE is sold directly to processors who fabricate the resin into gaskets, seals, bearings, insulating tape, and other intermediate mechanical parts. There are approximately 100 customers in the United States for granular PTFE, 10 to 12 of which are reported to be large, sophisticated companies with their own engineering and technical support staffs. 1/ Processors, in turn, sell these parts to end users, typically manufacturers of automobiles, chemical plant equipment, food processing machinery, and a variety of other final products. U.S. producers reported *** direct sales to end users during the period under investigation. Two producers, * * *. 2/

All three domestic producers market and sell granular PTFE through a sales division of their own organization on a nationwide basis. Most warehousing facilities are * * *. Producers maintain * * * inventories, determined according to * * *. These levels generally enable U.S. producers to fill customers' orders in a matter of days. Granular PTFE imported from Italy is sold by the same sales people who sell Ausimont's domestically produced product. Channels of distribution for imports from Japan are similar to those for the U.S. producers. Gunze sells granular PTFE throughout the United States, whereas Sumitomo serves primarily the Northeast. 3/

Market factors

The petitioner and respondents in these investigations generally agree that imported granular PTFE competes directly with the U.S.-produced product and that both are sold through similar channels of distribution to similar markets. Sales representatives typically carry a range of their companies' fluoropolymer products, such as PTFE fine powder and aqueous dispersions, and melt-processable fluoropolymers. Although granular PTFE from one producer can be substituted with that from another with a fair amount of ease, there are quality differences and performance characteristics that enable purchasers to

1/ Field trip notes from Commission staff visit to Ausimont U.S.A., Nov. 20, 1987.
2/ * * *.
3/ Daikin's postconference brief, p. 2.

differentiate among sources. In some cases, differentiation is based on relatively objective standards, such as level of purity and dielectric strength. 1/ In other cases, differentiation has more to do with how well the material performs on the individual processor's equipment or how easily it is fabricated into the specific items the processor manufactures.

The ability to fabricate granular PTFE into the desired product in a cost efficient manner is the purchaser's primary concern. Processing conditions, such as temperature, feed rate, and pressure, have to be be adjusted according to the specific grade and source of granular PTFE. As such, processors must "qualify" each producer's product to determine whether the cost and time involved in adjusting and/or retooling their machinery to utilize a different source of granular PTFE is justified by the potential gains from having the option to switch to a new, perhaps lower cost or superior quality, source of the resin. 2/ Once qualified, one producer's granular PTFE can be interchanged with another's fairly easily, though interchangeability will vary depending on the application and will still require the adjustments to machinery and equipment. 3/

Respondents argue that this qualification process serves as a barrier to entry to the U.S. granular PTFE market, raising the cost and time involved in winning market share. This process is made more difficult because of the inherent value of the Teflon name. It is not uncommon, respondents maintain, for end users to list Teflon as a specification, requiring processors to use it even when higher quality and/or lower cost alternatives are available. 4/

Consideration of Material Injury to an Industry in the United States

In order to evaluate the condition of the U.S. industry producing granular PTFE, the Commission surveyed all known U.S. manufacturers of the virgin (unfilled, excluding reprocessed) product. These producers are the three firms discussed above in the section entitled "The U.S. Industry." Unless otherwise noted, the sections of this report describing the condition of the domestic industry include information on all three producers.

1/ Dielectric strength refers to the ability of a material, when used for insulating purposes, to take a powerful electrical charge before breaking down.
2/ Ausimont U.S.A. claims that the qualification process can take anywhere from * * *, for applications where performance is not critical, to * * *, where standards are more demanding. In some instances, the end user--that is, the processor's customer--may want to test and qualify the granular PTFE under the conditions in which the fabricated article will ultimately be used. This can take from * * * to * * * (from field trip notes of a Commission staff visit to Ausimont U.S.A, Nov. 20, 1987, and transcript, p. 137). In response to a marketing survey commissioned by Du Pont prior to filing its petition, the majority of the *** purchasers responding to the relevant question indicated that the length of time required to qualify a new supplier is less than * * *. Du Pont's postconference brief, app. A.
3/ Transcript, pp. 68-70 and 156.
4/ Transcript, p. 137.

U.S. production, capacity, and capacity utilization

U.S. production of granular PTFE decreased by 9.4 percent from 1984 to 1986 (table 3). During January-September 1987, U.S. production decreased by 23.0 percent compared with the level of production in the corresponding period of 1986. Capacity to produce such PTFE increased by 500,000 pounds from 1985 to 1986 and has since remained stable. As a result of the decrease in production during 1984-86, capacity utilization dropped from 93.2 percent in 1984 to 80.9 percent in 1986. In January-September 1987 capacity utilization fell to 67.0 percent, from 87.0 percent in the corresponding period of 1986.

Table 3
Granular PTFE: U.S. production, capacity, and capacity utilization, by firms, 1984-86, January-September 1986, and January-September 1987 1/

Firm	1984	1985	1986	Jan.-Sept.-- 1986	Jan.-Sept.-- 1987
	Quantity (1,000 pounds)				
Production:					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Total	10,627	9,585	9,632	7,766	5,983
Capacity: 2/					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Total	11,400	11,400	11,900	8,925	8,925
	Percent				
Capacity utilization:					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Average	93.2	84.1	80.9	87.0	67.0

1/ Data for Ausimont U.S.A. include information on Allied-Signal's granular PTFE operations from January 1984 to June 1986 and information on its own operations from June 1986 to September 1987.
2/ All firms operate 24 hours per day (generally 3 shifts), 49 to 50 weeks per year.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. producers' shipments and inventories

Domestic shipments of U.S.-produced granular PTFE decreased by 9.1 percent from 1984 to 1985, then increased by 5.1 percent from 1985 to 1986, representing an overall decline of 4.5 percent for the period 1984-86 (table 4).

Table 4
Granular PTFE: U.S.-produced domestic shipments, export shipments, and end-of-period inventories, by firms, 1984-86, January-September 1986, and January-September 1987 1/

Firm	1984	1985	1986	Jan.-Sept.-- 1986	1987
	Quantity (1,000 pounds)				
Domestic shipments:					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Total	***	***	***	***	***
Export shipments:					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Total	***	***	***	***	***
Total shipments:					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Total	***	***	***	***	***
End-of-period inventories:					
Ausimont U.S.A.	***	***	***	***	***
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Total	1,286	1,598	***	***	1,243
	Percent				
Ratio of inventories to total shipments:					
Ausimont U.S.A.	***	***	***	2/ ***	2/ ***
Du Pont	***	***	***	2/ ***	2/ ***
ICI	***	***	***	2/ ***	2/ ***
Average	***	***	***	2/ ***	2/ ***

1/ Data for Ausimont U.S.A. include information on Allied-Signal's granular PTFE operations from January 1984 to June 1986 and information on its own operations from June 1986 to September 1987.
2/ Calculated on the basis of annualized shipments.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Between January-September 1986 and January-September 1987, domestic shipments of the subject PTFE increased by 2.9 percent. Export shipments of U.S.-produced granular PTFE, which accounted for approximately *** percent of total shipments during 1986, increased by *** percent from 1984 to 1985, then fell in 1986 by *** percent for an overall increase during 1984-86 of *** percent. Between January-September 1986 and the 1987 corresponding period, export shipments fell by *** percent. * * *. 1/

During 1984-86, Du Pont's end-of-period inventories * * *. From January-September 1986 to the corresponding period in 1987, Du Pont's end-of-period inventories were * * *. * * *, ICI's end-of-period inventories in 1986 were * * *; as a ratio to the firm's total shipments of granular PTFE, end-of-period inventories * * *. This trend * * * between January-September 1986 and January-September 1987, with inventories * * * in nominal terms and * * * as a ratio to total (annualized) shipments. The unit values of domestic and export shipments of granular PTFE as reported by the three U.S. producers are presented in table 5.

Table 5
Granular PTFE: Domestic and export shipments of U.S. producers, 1984-86, January-September 1986, and January-September 1987

*	*	*	*	*	*	*

U.S. producers' domestic shipments of the various grades of granular PTFE are shown in table 6. In every period covered by these investigations, fine cut held the largest share of total shipments of PTFE in the granular form. Pelletized granular PTFE accounted for the second largest share, followed by presintered, which recorded the fastest rate of growth, increasing by *** percent from 1984 to 1986. U.S. shipments of filled granular PTFE, 2/ which is made from the fine cut grade, * * * by *** percent between 1984 and 1986 and by *** percent from January-September 1986 to the corresponding period of 1987. Ausimont U.S.A., the only U.S. producer reporting shipments of the filled product, * * *. * * *.

Table 6
Granular PTFE: U.S. producers' domestic shipments, by grades, 1984-86, January-September 1986, and January-September 1987

*	*	*	*	*	*	*

1/ * * *.
2/ Shipments by producers only; does not include product filled by purchasers.

Combined U.S. shipments of non-granular PTFE, namely PTFE fine powder and aqueous dispersions, account for * * * (table 7). U.S. fine powder shipments fell during 1984-86, while shipments of dispersions registered moderate growth, increasing by *** percent from 1985 to 1986 after a drop of *** percent between 1984 and 1985. Unit values of fine powder generally have been * * * higher than those of dispersions. Unit values of fine powder and dispersions were higher than those of granular resins by roughly * * * in 1986.

Table 7
PTFE fine powder and aqueous dispersions: U.S. producers' domestic shipments, by types, 1984-86, January-September 1986, and January-September 1987

* * * * * * *

U.S. producers' domestic purchases and imports

During the period covered by these investigations, * * * reported purchases of the product from other U.S. suppliers. Ausimont U.S.A. did import * * * of granular PTFE from Montefluos SpA, another subsidiary of Ausimont Compo N.V. that produces granular PTFE in Italy. Du Pont imported granular PTFE from its joint venture in Japan and from its subsidiary, Du Pont de Nemours (Nederland) B.V., in the Netherlands. The vast majority of Du Pont's imports from Japan and the Netherlands are reexported to markets outside of Europe and Japan. 1/ ICI * * *. Data on the producers' imports, as reported in their questionnaire responses, are presented in the following tabulation (in thousands of pounds):

* * * * * * *

Employment and productivity 2/

The total number of employees in the establishments in which granular PTFE is produced and the number of production and related workers producing all PTFE resin each decreased * * * from 1984 to 1986 (table 8). The number of production and related workers producing granular PTFE, accounting for roughly *** percent of all establishment employees during the period of investigation, decreased by *** percent from 1984 to 1986. Employment of production and related workers producing granular PTFE during January-September 1987 * * * from the level of employment in the corresponding period of 1986.

Workers at Ausimont U.S.A. and ICI are represented by the Oil, Chemical, and Atomic Workers Union and the Bayonne Chemical Workers Union, respectively. Du Pont's production and related workers are not represented by any union.

1/ Du Pont's postconference brief, app. B.
2/ The Commission has requested, but has not received, employment data for Allied-Signal prior to Ausimont U.S.A.'s acquisition of the business in June 1986. Consequently, this section covers employment and productivity trends only as they relate to Du Pont and ICI.

Table 8
Granular PTFE: Number of employees in producing establishments and hours worked by, average wages and total compensation paid to, and productivity of production and related workers producing granular PTFE, 1984-86, January-September 1986, and January-September 1987

* * * * * * *

*** U.S. producers reported reductions in the number of production and related workers producing granular PTFE during the period of investigation. * * *. * * *. The dates and duration of each layoff and the number of workers involved are shown in the following tabulation:

* * * * * * *

Total wages paid to production and related workers producing granular PTFE decreased *** during 1984-86, dropping by *** percent over the period, and fell by *** percent between January-September 1986 and January-September 1987. Total compensation paid to production and related workers producing granular PTFE also decreased, dropping by *** percent from 1984 to 1986 and by *** percent between January-September 1986 and the corresponding period of 1987.

Average hourly wages paid to production and related workers producing granular PTFE rose by *** percent from 1984 to 1986. Average hourly wages paid to such workers in January-September 1987 * * * in the corresponding period of 1986.

The productivity of workers producing granular PTFE rose *** between 1984 and 1986, increasing by *** percent over the 3-year period. However, between January-September 1986 and the corresponding period of 1987, productivity of workers producing granular PTFE fell from *** pounds per hour to *** pounds per hour, or by *** percent. The wage roll for production and related workers in the granular PTFE business is largely a fixed cost. It is most efficient to produce granular PTFE 24 hours per day, 7 days per week. Therefore, in the event a manufacturer decides to decrease production, the plant is slowed down but is still operated on a 24-hour schedule. * * *. 1/

Financial experience of U.S. producers

Three U.S. producers of granular PTFE, accounting for all known U.S. production, provided usable income-and-loss data on their granular PTFE operations as well as their overall operations. Ausimont U.S.A. acquired Allied-Signal's granular PTFE production facilities at Elizabeth, NJ, in June 1986.

Granular PTFE operations.--The income-and-loss data on the granular PTFE operations of each individual company are presented in table 9. Total net sales of granular PTFE declined by 14 percent from $46.7 million in 1984 to

1/ Transcript, p. 65, and staff interview with * * *.

Table 9
Income-and-loss experience of U.S. producers on their operations producing granular PTFE, by firms, accounting years 1984-86 and interim periods ended September 30, 1986, and September 30, 1987

Firm	1984	1985	1986	Interim period ended Sept. 30-- 1986	1987
	Value (1,000 dollars)				
Net sales:					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Total	46,739	44,187	40,208	32,765	27,850
Cost of goods sold:					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Total	40,074	39,259	36,170	29,165	26,571
Gross profit or (loss):					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Total	6,665	4,928	4,038	3,600	(1,279)
General, selling, and administrative expenses:					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Total	7,347	7,062	6,742	5,075	4,849
Operating income or (loss):					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Total	(682)	(2,134)	(2,704)	(1,475)	(3,570)
Depreciation and amortization:					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A 3/	2/	2/	***	***	***
Total	1,851	1,533	2,510	1,870	2,010
Cash flow: 4/					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Total	1,169	(601)	(194)	395	(1,560)

See footnotes at end of table.

Table 9--Continued
Income-and-loss experience of U.S. producers on their operations producing granular PTFE, by firms, accounting years 1984-86 and interim periods ended September 30, 1986, and September 30, 1987

Item	1984	1985	1986	Interim period ended Sept. 30-- 1986	1987
	Ratio to net sales (percent)				
Cost of goods sold:					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Average	85.7	88.8	90.0	89.0	95.4
Gross profit or (loss):					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Average	14.3	11.2	10.0	11.0	4.6
General, selling, and administrative expenses:					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Average	15.7	16.0	16.8	15.5	17.4
Operating income or (loss):					
Du Pont	***	***	***	***	***
ICI	***	***	***	***	***
Allied-Signal 1/	***	***	***	***	2/
Ausimont U.S.A.	2/	2/	***	***	***
Average	(1.5)	(4.8)	(6.7)	(4.5)	(12.8)

1/ * * *.
2/ Not applicable.
3/ * * *.
4/ Cash flow is defined as operating income or (loss) plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

$40.2 million in 1986 and further dropped by 15 percent to $27.9 million during the interim period ended September 30, 1987, compared with $32.8 million in the corresponding period of 1986.

The granular PTFE producers reported aggregate operating losses throughout the period covered by the investigations. Such operating loss increased steadily from $682,000 in 1984 to $2.7 million in 1986 and peaked at $3.6 million in the interim period ended September 30, 1987, compared with $1.5 million during the corresponding period of 1986. The average operating loss margin rose from 1.5 percent in 1984 to 4.8 percent in 1985 and 6.7 percent in 1986. Such loss margin jumped from 4.5 percent in interim 1986 to 12.8 percent in interim 1987.

* * * * * * *

Overall establishment operations.--The income-and-loss data for U.S. producers' establishments within which granular PTFE is produced are shown in table 10. Granular PTFE sales accounted for about *** percent of establishment sales during 1984-86 but declined to *** percent in interim 1987. The overall establishment net sales declined less rapidly than granular PTFE, by *** percent, from *** in 1984 to *** in 1986. During 1984-86, operating income declined precipitously from *** to ***. During the same period, the operating income margin fell significantly from *** percent to *** percent. During the interim period ended September 30, 1987, net sales increased by *** percent and the operating income margin rose to *** percent compared with *** percent in the corresponding period of 1986.

Table 10
Income-and-loss experience of U.S. producers on the overall operations of their establishments within which granular PTFE is produced, accounting years 1984-86 and interim periods ended September 30, 1986, and September 30, 1987

* * * * * * *

Investment in productive facilities.--U.S. producers provided data concerning the valuation of property, plant, and equipment employed in the production of all products of their establishments and also provided such data for their production of granular PTFE. These data are presented in the following tabulation (in thousands of dollars):

* * * * * * *

Aggregate investment in property, plant, and equipment used in the production of granular PTFE, by Du Pont and ICI, valued at cost, declined from *** in 1984 to *** in 1985 and then rose to *** in 1986 and to *** as of September 30, 1987. Du Pont stated that * * *. ICI reported * * * in its investment during the period covered by the investigations. The book value of productive facilities for granular PTFE followed the same trend as the original cost of investment.

Ausimont U.S.A. reported an appraisal value of *** for the Elizabeth, NJ, property, plant, and equipment used in connection with granular PTFE operations acquired from Allied-Signal in June 1986. The company increased its investment relating to the manufacture of granular PTFE to *** at the end of 1986 and to *** as of September 30, 1987. Allied-Signal's data on investment in productive facilities were not available for the period 1984 through June 1986.

Capital expenditures.--Du Pont and ICI furnished data on their total capital expenditures used in the manufacture of all products of the reporting establishments and their capital expenditures related to the production of granular PTFE. These data are shown in the tabulation below (in thousands of dollars):

* * * * * * *

Total capital expenditures for granular PTFE by Du Pont and ICI declined by *** percent from *** in 1984 to *** in 1986. During January-September 1987, total capital expenditures rose to ***, compared with *** in the corresponding period of 1986. * * *. Du Pont's direct capital expenditures related to granular PTFE ranged from *** to *** percent of its total capital expenditures during the period covered by the investigations.

Ausimont U.S.A. incurred *** of capital expenditures for granular PTFE in the last 6 months of 1986, after acquiring Allied-Signal's plant, and *** of such expenses in January-September 1987. Allied-Signal's data on capital expenditures were not available for the period 1984 through June 1986.

Research and development expenses.--Research and development expenditures by Du Pont and ICI in connection with all products produced in their establishments as well as for granular PTFE were compiled from questionnaire data and are presented in the following tabulation (in thousands of dollars):

* * * * * * *

Research and development expenses related to granular PTFE by Du Pont and ICI declined by *** percent from *** in 1984 to *** in 1986, but rose by *** percent to *** during January-September 1987 compared with *** in the corresponding period of 1986. * * *.

Ausimont U.S.A. incurred research and development expenses in connection with the operation of granular PTFE of *** in the last 6 months of 1986 and *** during January-September 1987. Allied-Signal's data on research and development expenses were not available for the period 1984 through June 1986.

Impact of imports on capital and investment.--The U.S. producers of granular PTFE were asked to describe any actual or potential negative effects of imports of granular PTFE from Italy and Japan on their firms' growth, investment, and ability to raise capital. Excerpts from producers' comments are quoted below:

* * * * * * *

The Question of Threat of Material Injury to an Industry in the United States

Section 771(7)(F)(i) of the Tariff Act of 1930 (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 any merchandise, the Commission shall consider, among other relevant factors 1/--
>
> (I) If a 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 subsidy is an export subsidy inconsistent with the Agreement),
>
> (II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,
>
> (III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,
>
> (IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,
>
> (V) any substantial increase in inventories of the merchandise in the United States,
>
> (VI) the presence of underutilized capacity for producing the merchandise in the exporting country,
>
> (VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury, and

---

1/ Section 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 736, are also used to produce the merchandise under investigation.

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Allegedly LTFV Imports and the Alleged Material Injury." The potential for "product-shifting" (item VIII) is not an issue in these investigations since there are no known products subject to investigation or to final orders that use production facilities that can be shifted to produce granular PTFE. The available data on foreign producers' operations (items (II) and (VI) above) and information on U.S. inventories of the subject product (item (V)) follow.

The industry in Italy

Montefluos SpA, a subsidiary of Ausimont Compo N.V., is the only known producer of granular PTFE in Italy, which it sells under the trade name Algoflon. Data on Montefluos, which produces granular PTFE at its plant in Spinetta, are presented in table 11. 1/

Table 11
Granular PTFE: Montefluos SpA's production, capacity, capacity utilization, export shipments, home-market shipments, and end-of-period inventories, 1984-86, January-September 1986, and January-September 1987

* * * * * * *

Since early 1983, Ausimont Compo N.V. has been cooperating with the French chemical company Produits Chimiques Ugine Kuhlmann SA (PCUK), Pierre-Benite, France, in the production and marketing of TFE monomer and granular PTFE through a complex toll arrangement. * * *.

* * * * * * *

In Italy, production of granular PTFE * * * from 1984 to 1986. Production in Italy in January-September 1987 was *** percent * * * than that reported in January-September 1986. Capacity to produce granular PTFE in Italy * * * during 1984-86 and * * * between January-September 1986 and the corresponding period of 1987. * * *, capacity utilization * * * from ***

1/ On Nov. 27, 1987, the Commission requested data on the industry in Italy producing granular PTFE via a telegram to the U.S. Embassy in Rome. No response has been received as yet.

percent in 1984 to *** percent in 1986. Capacity utilization * * * from *** percent in January-September 1986 to *** percent in January-September 1987. 1/

Export shipments to the United States, accounting for *** percent of total exports from Italy of granular PTFE in 1986, * * * by *** percent from 1984 to 1985 and then * * * by *** percent from 1985 to 1986. In January-September 1987, export shipments to the United States * * * by *** percent compared with export shipments in the corresponding period of 1986. 2/ Total exports * * * during the period under investigation.

Home-market shipments as a percent of total shipments remained above *** percent during 1984-86; however, from January-September 1986 to the corresponding period of 1987, home-market shipments as a percent of total shipments * * * from *** percent to *** percent. In nominal terms, home-market shipments * * * by *** percent between 1984 and 1985, and then * * * by *** percent from 1985 to 1986. From January-September 1986 to January-September 1987 home-market shipments * * * by *** percent in nominal terms. The * * * trend in both export shipments and home-market shipments during 1984-86 translated into a * * * of *** percent in total shipments of granular PTFE produced in Italy. Total shipments * * * by *** percent in January-September 1987, compared with those in the corresponding period of 1986.

The industry in Japan

There are three known producers of granular PTFE in Japan: Asahi Fluoropolymers Co., Ltd.; Daikin Industries, Ltd.; and Du Pont-Mitsui Fluorochemicals Co., Ltd. Asahi Fluoropolymers Co., Ltd., is a joint venture between Asahi-Glass and ICI-UK, and Du Pont-Mitsui Fluorochemicals Co., Ltd., is a joint venture between Mitsui and Du Pont. Data on Daikin, reportedly the largest producer in Japan of granular PTFE, 3/ are presented in table 12. 4/

Production at Daikin * * * by *** percent between 1984 and 1985 then * * * by *** percent from 1985 to 1986, representing an overall * * * of *** percent for the period 1984-86. Daikin estimates that production will * * * in 1987 before * * * in the following year. Between 1984 and 1986, Daikin's

---

1/ In testimony at the public conference, an official for Ausimont U.S.A. reported that as of December 1986, Montefluos had ceased virtually all production of granular PTFE at the PCUK plant and had begun to produce exclusively at its newly expanded plant in Spinetta, Italy, to which it had been shifting production gradually over a period of several years. * * *. According to Ausimont U.S.A., this new plant was built in order to consolidate Italian and French production of granular PTFE into a single new facility.

2/ * * *.

3/ In its post conference brief, p. 1, counsel for Daikin stated that Daikin accounts for "most" of the granular PTFE exported from Japan to the United States; Daikin does not know the exact percentage of its share because there are no publicly available statistics in Japan or the United States that break out granular PTFE from all PTFE resins.

4/ On Nov. 27, 1987, the Commission requested data on the industry in Japan producing granular PTFE via a telegram to the U.S. Embassy in Tokyo. No response has been received as yet. In addition, letters were sent to counsel for the three producers in Japan. * * *.

Table 12
Granular PTFE: Daikin Industries, Ltd.'s, production, capacity, capacity utilization, export shipments, home-market shipments, and end-of-period inventories, fiscal years 1984-88

* * * * * * *

total capacity to produce granular PTFE * * * by *** percent. Data for 1987 show capacity * * * by nearly *** percent, representing the completion of a new state-of-the-art plant at Kashima. Daikin claims that as capacity at Kashima comes on line, a process that should be completed by the close of 1987, old capacity at Osaka is being shut down. 1/

Capacity utilization fluctuated between 1984 and 1986, * * * from just above *** percent in 1984 to *** percent in the following year due to the fact that * * *. The figure * * * in 1986 as production * * *. Because all new capacity will have been brought on line at Kashima by yearend, Daikin estimates capacity utilization * * * in 1987. * * *.

Export shipments to the United States as a share of Daikin's total exports * * * from approximately *** percent in 1984 to about *** percent in 1986. According to Daikin's estimate, this share will * * * to *** percent by the end of 1987. In nominal terms, Daikin's export shipments to the United States * * * by *** percent from 1984 to 1985, then * * * by * * * from 1985 to 1986. Exports to the United States are expected to * * * by approximately *** percent between 1986 and 1987. Total exports * * * by more than *** percent from 1984 to 1985, * * * in 1986 compared to the year-earlier figure. Reportedly, Daikin is targeting markets outside of the United States, particularly in the Far East, where demand for granular PTFE is expected to increase, where the exchange rate is more favorable for exports from Japan, and where transportation costs are lower. Daikin's sales to South America and India were also reported to have increased substantially during the past several years. 2/

Home-market shipments as a percent of total shipments have fluctuated in the range of *** percent to *** percent since 1984. In nominal terms, home-market shipments * * * by *** percent during 1985-86, after having * * * between 1984 and 1985. Such shipments are expected to * * * by another *** percent in 1987 compared with those in 1986.

Daikin's inventories of granular PTFE * * * by almost *** percent from 1984 to 1986, though by yearend 1987 they are expected to * * * by *** percent when compared to 1986 levels. * * *. 3/ As a ratio to total shipments of granular PTFE, Daikin's end-of-period inventories were about *** percent in 1986 and 1987.

U.S. inventories of granular PTFE from Italy and Japan

The importers of granular PTFE from Italy and Japan reported end-of-period inventories during the period of investigation. From 1984 to

1/ Daikin's postconference brief, pp. 21 and 22.
2/ Daikin's postconference brief, pp. 22 and 23.
3/ Daikin's postconference brief, p. 24.

1986, end-of-period inventories of imports of granular PTFE from Italy * * * from 1984 to 1985, and * * * from 1985 to 1986 (table 13). End-of-period inventories * * * in January-September 1987 compared with those in the corresponding period of 1986. 1/ The ratio of end-of-period inventories to reported imports from Italy * * * from *** percent in 1984 to *** percent in 1986. Between January-September 1986 and the interim 1987 period, the ratio of inventories to reported (annualized) imports * * *, * * * from *** percent to *** percent.

Table 13
Granular PTFE: End-of-period inventories of imports from Italy and Japan held in the United States, reported imports, and ratios of end-of-period inventories to reported imports, by countries, 1984-86, January-September 1986, and January-September 1987

* * * * * * *

Reported end-of-period inventories held by the U.S. importers of products from Japan jumped by *** percent during 1984-85. These inventories declined somewhat by the end of 1986, resulting in an overall increase of *** percent between 1984 and 1986. Such inventories were * * * between January-September 1986 and the corresponding period of 1987. As a ratio to imports from Japan, end-of-period inventories trended upward from *** percent in 1984 to *** percent in 1986. During the 1986 and 1987 interim periods, this ratio dropped by approximately *** percentage points.

End-of-period inventories of combined imports from Italy and Japan followed trends similar to those of imports from Japan, increasing rather substantially between 1984 and 1985, then falling by a smaller percent between 1985 and 1986. Overall, end-of-period inventories of imports from Italy and Japan increased by *** percent from 1984 to 1986. As a share of reported imports, total inventories trended upward from *** percent in 1984 to *** percent in 1986. This ratio remained around *** percent in the 1986 and 1987 interim periods.

Consideration of the Causal Relationship Between Allegedly LTFV Imports and the Alleged Material Injury

U.S. imports

U.S. imports of granular PTFE covered by these investigations are provided for in TSUS item 445.54. This tariff classification applies to all PTFE resins and thus includes imports of PTFE products that are not within the scope of these investigations. For the purposes of this report, data on U.S. imports and U.S. shipments of imports were compiled from responses to the Commission's questionnaires. Reported imports from Italy and Japan are presented in table 14. 2/

1/ * * *.

2/ Data on imports from countries other than Italy and Japan are not available; however, Du Pont estimates such imports to be *** pounds in 1986 (see petition p. 22).

Table 14
Granular PTFE: U.S. imports from Italy and Japan, 1984-86, January-September 1986, and January-September 1987

* * * * * * *

Imports of granular PTFE from Italy and Japan * * * during 1984-86. Imports from Italy * * * from 1984 to 1985, then * * * in 1986, representing an overall * * * of *** percent from 1984 to 1986. * * *, imports from Japan grew by *** percent between 1984 and 1985 before dropping by *** percent from 1985 to 1986, for an overall increase of *** percent for the period 1984-86. As a result of * * *, combined imports of granular PTFE from Italy and Japan * * *, increasing by *** percent from 1984 to 1986. Imports in terms of value followed similar trends, although the rate of change was * * *.

From January-September 1986 to the corresponding period of 1987, imports from both Italy and Japan increased at much faster rates than at any other time during the period under investigation. Imports from Italy * * * by *** percent in January-September 1987 compared to the interim 1986 period, and imports from Japan increased by *** percent from interim 1986 to interim 1987. Combined imports from these two countries increased by *** percent from January-September 1986 to January-September 1987. Imports, in terms of value, increased by similar amounts.

Unit values of imports from Japan were * * * in every period covered by these investigations. For imports from Italy, unit values * * * from 1984 to 1985, then * * * in 1986 for an overall * * * during 1984-86. Unit values of imports from Japan increased by *** percent from 1984 to 1985, but * * * in 1986 compared with those in 1985. Between January-September 1986 and the interim 1987 period, unit values were * * *.

Fine cut granular PTFE accounted for by far the largest share of total U.S. imports of granular PTFE throughout the period under investigation, though its share dropped by more than *** percentage points in January-September 1987 compared to the corresponding period in 1986 (table 15). Imports of filled product, while relatively small in terms of magnitude, registered the fastest rate of growth, increasing * * * from 1984 to 1986 and by * * * between January-September 1986 and January-September 1987. In every year and period under investigation, unit values of fine cut were the lowest, followed by pelletized, then presintered (among the unfilled grades). In contrast to U.S. shipments of domestically produced filled granular PTFE, which carried a unit value premium of * * * over the other forms of the granular product during 1984-86, annual unit values of U.S. imports of filled PTFE did not show a unit value premium in 1984-85 and showed premiums of * * * or less in 1986 and the interim periods of 1986 and 1987.

Table 15
Granular PTFE: U.S. imports, by types, 1984-86, January-September 1986, and January-September 1987

* * * * * * *

Market penetration of imports 1/

In terms of quantity, U.S.-produced domestic shipments of the subject merchandise as a share of apparent U.S. consumption were relatively stable, decreasing by less than 2 percentage points from 1984 to 1986 (table 16). During the same period, the market penetration of imports from Italy * * *, while the ratio of imports from Japan * * *. From January-September 1986 to January-September 1987, the market penetration of imports from Italy and the market penetration of imports from Japan * * *.

The trends in the market penetration of imports of granular PTFE in terms of value were similar to those measured in terms of quantity. The market penetration of combined imports from Italy and Japan remained unchanged at 17.6 percent in 1984 and 1985. This ratio and * * * were somewhat higher in 1986 than in 1985. From January-September 1986 to the corresponding period of 1987, the market penetration of combined imports from Italy and Japan increased, * * *.

The petitioner maintains that the U.S. market for granular PTFE has grown since 1981 and that all additional demand for the product has been captured by imports. The Commission requested data on U.S. shipments, U.S. imports, and U.S. shipments of imports going back to 1980; however, only two producers and no importers provided these data. Du Pont's estimates of import penetration from 1980 to 1986, as provided on page 22 in the petition, are presented in the following tabulation (in percent, by quantity):

* * * * * * *

Prices

Suppliers of granular PTFE quote prices by the pound on a delivered basis. Petitioner and respondents have stated that cost of the monomer TFE, which is used in all types of granular PTFE is a major determinant of granular PTFE prices. Du Pont and Ausimont U.S.A. stated that TFE accounts for approximately *** and *** percent, respectively, of their production costs of granular PTFE. 2/ Prices of granular PTFE vary to some extent on the processing technique for which they are designed. The three most common types of virgin granular PTFE--fine cut, pelletized, and presintered--were developed for different and increasingly advanced processing techniques. On U.S. producers' price lists, fine cut grades are lower priced than pelletized

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1/ Because the calculation of apparent U.S. consumption does not include imports of granular PTFE from countries other than Italy and Japan, and is thus understated, the market penetration ratios presented in this section are somewhat overstated. Du Pont estimates imports from all other sources to be *** pounds in 1986, accounting for approximately *** percent of the U.S. market (see petition, p. 22).

2/ Postconference brief of Du Pont, annex B., p. 2, and questionnaire submission of Ausimont U.S.A. In addition, in its questionnaire submission, ICI estimated that the raw material (* * *) from which it produces TFE accounts for *** percent of its costs of production for granular PTFE.

Table 16
Granular PTFE: U.S. shipments of imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1984-86, January-September 1986, and January-September 1987 1/

Item	1984	1985	1986	Jan.-Sept. 1986	Jan.-Sept. 1987
	Quantity (1,000 pounds)				
U.S. shipments of imports from--					
Italy	***	***	***	***	***
Japan	***	***	***	***	***
Total, all imports	***	***	***	***	***
U.S.-produced domestic shipments	***	***	***	***	***
Apparent U.S. consumption	***	***	***	***	***
	Percent				
Ratio to consumption of--					
U.S. shipments of imports from--					
Italy	***	***	***	***	***
Japan	***	***	***	***	***
Total, all imports	19.2	19.5	21.0	20.5	23.2
U.S.-produced domestic shipments	80.8	80.5	79.0	79.5	76.8
	Value (1,000 dollars) 2/				
U.S. shipments of imports from--					
Italy	***	***	***	***	***
Japan	***	***	***	***	***
Total, all imports	***	***	***	***	***
U.S.-produced domestic shipments	***	***	***	***	***
Total	***	***	***	***	***
	Percent				
Ratio to consumption of--					
U.S. shipments of imports from--					
Italy	***	***	***	***	***
Japan	***	***	***	***	***
Total, all imports	17.6	17.6	19.5	19.1	21.7
U.S.-produced domestic shipments	82.4	82.4	80.5	80.9	78.3

1/ Because the calculation of apparent U.S. consumption does not include imports of granular PTFE from countries other than Italy and Japan, and is thus understated, the market penetration ratios presented in this section are somewhat overstated. Du Pont estimates imports from all other sources to be *** pounds in 1986, accounting for approximately *** percent of the U.S. market (see petition, p. 22).
2/ F.o.b. point-of-shipment in the United States.

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

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

grades, which, in turn, are lower priced than presintered grades. Transaction data received by the Commission, however, indicate that price variation among these grades is smaller than is suggested by list prices, particularly between the fine cut and the pelletized grades. During 1984-87, prices for all grades of U.S.-produced and imported Italian and Japanese unfilled, virgin granular PTFE generally ranged from $3 to $5 per pound.

Granular PTFE prices also vary with the chemical purity and physical properties of the product sold. A small segment of the market for granular PTFE consists of material that has been reprocessed from scrap generated during processors' or end users' production processes. Du Pont and Ausimont U.S.A. estimated that reprocessed granular PTFE accounts for *** to *** percent of the total market for all granular PTFE resins. The impurities in reprocessed PTFE reduce the product's special properties, such as dielectric strength, and reprocessed material is therefore used in less demanding end uses. Reprocessed PTFE is sold at a discount below the price of virgin material and may compete with virgin granular PTFE on the basis of price for certain applications. Estimates of recent prices of reprocessed material range from $3.20 to $3.85 per pound. 1/ 2/

Certain end uses of virgin granular PTFE require material that has been filled with another product to enhance the physical properties of the PTFE or to give it color. The extra costs associated with the filling process generally make it a higher priced product, although when filler is used simply as an extender, the filled product could be lower priced than unfilled granular PTFE. 3/ Producers and importers responding to the Commission's questionnaires reported that prices of filled granular PTFE generally have been higher than prices of unfilled material during 1984-87. The average price premiums reported by these firms for filled granular PTFE in 1984-87 were $1.20 to $1.75 per pound higher than prices of unfilled material. 4/ Petitioner and respondents estimated that filled products are less than one-third of the total virgin granular PTFE market (not including reprocessed material).

Sales practices.--As outlined above, U.S. producers and importers of granular PTFE sell almost exclusively to processors who manufacture the material into plastic products for sale to end users requiring granular PTFE's unique combination of chemical and physical properties. Perhaps owing to the existence of few global suppliers of PTFE and the importance of regular technical service for many purchasers, long-term relationships between suppliers and purchasers are common. Price negotiations for multiple-shipment sales occur, involving either contractual or informal agreements. * * *, * * *, and * * * reported that written contracts fixing price and/or quantity

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1/ * * *; Du Pont's postconference brief, App. B, p. 7; * * *.

2/ Other than reprocessed material, ICI reported that *** to *** percent of its total production of granular PTFE is material of inferior quality that is sold * * * (Commission staff interview with official from ICI, Dec. 4, 1987).

3/ * * *.

4/ Questionnaire submissions of Du Pont, ICI, Ausimont U.S.A., Sumitomo, and Gunze.

for multiple-shipment sales represented 30 to 50 percent of their 1986 sales. * * * reported that it did not have legally binding contracts for multiple-shipment sales in 1986, and * * * reported that 30 to 40 percent of its 1986 sales * * * involved informal verbal commitments for multiple-shipment sales.

Ausimont U.S.A. reported price negotiations generally occurring every * * * for sales of Italian PTFE, and Sumitomo and Gunze reported * * * price negotiations as typical for sales of Japanese PTFE. While Du Pont reported that prices were typically renegotiated * * *, it also stated that it permits price flexibility during the period covered by contractual agreements. Some suppliers publish price lists for sales of granular PTFE, but these are used mainly to announce general price changes or in negotiations with new customers. Negotiated prices are traditionally well below list prices.

As a result of suppliers' sales practices, transportation costs and leadtimes do not appear to play an important role in the market for granular PTFE. U.S. inland transportation costs are absorbed by all domestic and foreign suppliers and represent a relatively small proportion of granular PTFE prices (generally *** to *** percent). Thus, while inland transportation costs may affect suppliers' netbacks, they are not a price-related factor in purchasers' source decisions. Because importers of Italian and Japanese granular PTFE maintain inventories in the United States, leadtimes are not likely to play a major role in competition between U.S.-produced and imported PTFE, although they may occasionally influence particular purchasing decisions.

Purchasing decisions.--PTFE products are high-priced (relative to other plastics, for example), high-performance products that are difficult to process. For many applications, there are no substitutes for granular PTFE. * * * stated that there are no viable substitutes for PTFE in applications where PTFE's full set of chemical and physical properties are required. According to * * *, "regarding applications where only one property is required, it is likely that another plastic is already in use since fluoropolymers are, in general, the poorest of plastics with respect to structural, physical properties." 1/

Although * * * cited a few products that could be substituted for PTFE in limited applications, in response to a direct question in the Commission's questionnaires, it is unclear whether reporting firms were addressing the practical ability of processors to substitute these materials in their current operations, or the possibility that ultimate end users may be able to substitute parts made of other materials for parts made of PTFE. Some possible substitutes mentioned by reporting firms, including perfluoroalkoxies (PFA's), are melt-processable materials that would require entirely different processing equipment from that now in use for processing granular PTFE. Two processors contacted in connection with lost sales allegations said that there were no close substitutes for granular PTFE in their current operations.

Another factor that may affect demand for granular PTFE is the proportion of processors' costs accounted for by the cost of granular PTFE. It appears that for certain processors, the cost of granular PTFE may account for a large percentage of processors' total production costs. At the conference, the petitioner stated that granular PTFE costs could represent as much as 70

1/ * * *.

percent of processors' total production costs. 1/ One large processor contacted in connection with lost sales allegations stated that the proportion of processors' total production costs accounted for by the cost of granular PTFE ranges from around 10 to 15 percent for a labor-intensive product such as * * * to as high as 75 to 80 percent for a capital-intensive product such as * * *. 2/

Price and quality appear to be the major factors in purchasers' source decisions, and their relative importance varies by purchaser. On the whole, purchasers contacted reported no general quality problems with either U.S.-produced or imported Italian or Japanese PTFE during 1984-87.

Nonprice factors can affect price competition between U.S.-produced and imported products. Besides price and general product quality, nonprice factors affecting source decisions for granular PTFE cited by the petitioner, respondents, or purchasers were product suitability for certain applications, technical service, the long-term nature of relationships, and trademarks. Two purchasers contacted in connection with lost sales allegations have commented that a particular producer's product might be better for one application, while another's product might be better for a second application. 3/ In instances where this is true, relative prices of suppliers may be of little importance to purchasers. Due to the difficult nature of processing granular PTFE products, technical service can be an important nonprice factor for smaller purchasers that do not have large in-house technical staffs. Although purchasers generally appear to purchase from several suppliers at one time, respondents have argued that it is difficult to switch suppliers. Petitioner agreed that switching the source of supply for some applications may require equipment or process adjustments. Finally, petitioner and respondents generally agree that Du Pont often receives a price premium for its granular PTFE due to the popularity of its longstanding trademark Teflon.

Price data.--For the purposes of analyzing price trends and price comparisons, the Commission requested producers and importers to provide price data, separately by product and by country of origin, for the three common types of granular PTFE listed below: 4/

> PRODUCT 1: Pelletized grades of free-flowing granular PTFE resulting from the agglomeration and drying of a slurry of finely ground particles, not filled.

1/ Transcript of conference, p. 74.
2/ Commission staff interview with * * *.
3/ For example, Daikin's fine-cut product is reportedly particularly suited for skived sheet products as a result of its outstanding purity and hardness, properties that are not as important for automatic-molded or extruded parts (see transcript of conference, p. 97.)
4/ Within each of the product categories defined above, producers and importers may offer subcategories of these products with minor physical differences. Price variations among these subcategories, if any, are reportedly small, and no one complained that these categories were inadequate for price comparisons. Hereinafter, granular PTFE products are referred to only by the major product categories defined above.

PRODUCT 2: Fine-cut grades of granular PTFE that are produced by grinding the stringy raw polymer to a particle size of less than 100 microns, not filled.

PRODUCT 3: Presintered grades of granular PTFE that are produced by heating granular PTFE to above the melting point and then regrinding it to impart particle flow properties, not filled.

For sales during January 1984-September 1987, the Commission requested price and other transaction data for reporting firms' largest sale (by pounds shipped) in each quarter and the value and quantity of total shipments to all customers in each quarter.

Du Pont, accounting for *** percent of domestic shipments of U.S.-produced granular PTFE, provided price data as requested. Price data provided by the remaining U.S. producers, Ausimont U.S.A. and ICI, are largely incomplete, however. Due to its recent acquisition of the Allied-Signal plant, Ausimont U.S.A. reported price data only for July 1986-September 1987. ICI provided price data only for the period October 1986-September 1987. Thus, for the purposes of price trends, U.S. producers' prices are discussed separately. Also, Ausimont U.S.A. stated that it does not produce pelletized products in the United States. The only importer of granular PTFE from Italy, Ausimont U.S.A., and the two major importers of granular PTFE from Japan, Gunze and Sumitomo, reported price data as requested.

In addition, producers and importers were asked to report the value and quantity of total shipments to all customers on an annual basis for 1981-83, but Du Pont was the only reporting firm that supplied this information.

Domestic producers' price trends.--Delivered prices reported by U.S. producers for their largest quarterly sales of pelletized, fine cut, and presintered unfilled granular PTFE are presented in tables 17 through 19. Also shown in these tables are indexes for Du Pont's quarterly prices. These price data show that Du Pont's prices for all three products fluctuated during the period under investigation but remained within a ***-percent range of its prices in January-March 1984.

Table 17
Delivered prices reported by U.S. producers for their largest quarterly sales of unfilled, pelletized granular PTFE (Product 1) and an index of Du Pont's sales prices, by quarters, January 1984-September 1987

* * * * * * *

Table 18
Delivered prices reported by U.S. producers for their largest quarterly sales of unfilled, fine-cut granular PTFE (Product 2) and an index of Du Pont's sales prices, by quarters, January 1984-September 1987

* * * * * * *

Table 19
Delivered prices reported by U.S. producers for their largest quarterly sales of unfilled, presintered granular PTFE (Product 3) and an index of Du Pont's sales prices, by quarters, January 1984-September 1987

* * * * * * *

From January-March 1984 to July-September 1987, Du Pont's delivered prices for its largest quarterly sales declined for two of the three products for which price data were reported. During this period, Du Pont's prices of pelletized material declined by *** percent, and its prices for * * *, fine-cut material, fell by *** percent. Du Pont's prices for the presintered product initially fell by *** percent in April-September 1985 but recovered in January-March 1987 to * * *. While prices reported by Ausimont U.S.A. and ICI are insufficient for a complete trend analysis, it appears that prices of these U.S. producers for their largest sales were at higher levels in 1987 than in 1986.

In addition to transaction price data, the Commission staff calculated quarterly unit values using producers' and importers' reported values and quantities of total quarterly shipments to all customers. Quarterly unit values for U.S. producers' and importers' shipments of granular PTFE are presented in appendix tables E-1 through E-3. 1/ Quarterly unit values reported by Du Pont exhibit trends similar to those for its delivered prices. From January-March 1984 to July-September 1987, Du Pont's unit values declined on a quarterly basis for all three covered products, by *** percent for the pelletized and fine-cut granular PTFE, and by *** percent for the presintered product.

Average annual unit values for 1981-87 are available only for Du Pont (table E-4). 2/ To summarize, these data show that Du Pont's average annual unit values declined in 1981-87 and in 1984-87, although by less in 1984-87, and that unit values were increasing in 1987 for two of the three covered products. On an annual basis, Du Pont's average unit values declined by roughly *** percent in 1981-87 for each of the three granular PTFE products for which data were reported. In 1984-87, Du Pont's average annual unit values declined by *** percent for the pelletized and presintered products, and by almost *** percent for the fine-cut material. For the pelletized and presintered products, the largest declines in annual unit values occurred in 1981-84, whereas unit values for fine-cut material declined by more in 1984-87 than they did in 1981-84. As of September 1987, unit values for Du Pont's pelletized and presintered products were slightly higher in 1987 than those in 1986. However, the unit value for Du Pont's fine cut granular PTFE in 1987 was *** percent lower than that in 1986.

1/ Changes in unit values can reflect shifts in customers and product lines, as well as changes in prices.
2/ Du Pont's unit values for 1987 include shipments in January-September 1987.

Importers' price trends.--Importers' weighted-average prices are shown in tables 20 through 22. Until recent quarters, Ausimont U.S.A.'s delivered prices of imported Italian granular PTFE from Italy * * *. From January-March 1984 to the latest period available, prices of PTFE from Italy * * * for *** of three products. In July-September 1987, Ausimont U.S.A.'s prices for its largest quarterly sales of imported pelletized and fine-cut granular PTFE from Italy were within *** to *** percent of their levels in January-March 1984. However, the importers' price for the presintered product * * * by *** percent from January-March 1984 to July-September 1987 to * * *. Unit values for imported PTFE from Italy showed similar price movements over the period under investigation.

Table 20
Weighted-average delivered prices of unfilled, pelletized granular PTFE (Product 1) produced in the United States and imported from Italy and Japan, based on prices reported by U.S. producers and importers for their largest quarterly sale, and average margins by which imports of this product undersold or (oversold) the U.S.-produced product, by quarters, January 1984-September 1987

* * * * * * *

Table 21
Weighted-average delivered prices of unfilled, fine cut granular PTFE (Product 2) produced in the United States and imported from Italy and Japan, based on prices reported by U.S. producers and importers for their largest quarterly sale, and average margins by which imports of this product undersold or (oversold) the U.S.-produced product, by quarters, January 1984-September 1987

* * * * * * *

Table 22
Weighted-average delivered prices of unfilled, presintered granular PTFE (Product 3) produced in the United States and imported from Italy and Japan, based on prices reported by U.S. producers and importers for their largest quarterly sale, and average margins by which imports of this product undersold or (oversold) the U.S.-produced product, by quarters, January 1984-September 1987

* * * * * * *

Delivered price data for largest quarterly sales of imported granular PTFE from Japan provided by Gunze and Sumitomo suggest that these importers did not follow the general industry price structure of successively higher prices for fine-cut, pelletized, and presintered products in 1984, but that they were pricing in this manner by 1987. Because Sumitomo and Gunze followed similar price trends for the period as a whole, weighted-average prices (weighted by total quarterly shipments to all customers) are used for product prices from Japan. During the period under investigation, weighted-average prices of imported Japanese PTFE from Japan rose for two of three product

categories. From January-March 1984 to July-September 1987, largest sale prices of the imported pelletized and presintered products increased by *** and *** percent, respectively, whereas prices of the fine-cut material fell by *** percent in this period. Unit values for imported PTFE from Japan followed movements similar to those of transaction prices.

Price comparisons.--Delivered price data reported for producers' and importers' largest quarterly sales during January 1984-September 1987 resulted in 88 direct quarterly price comparisons between weighted-average prices of U.S.-produced and imported from Italy and Japan granular PTFE. 1/ These price comparisons, shown in tables 20-22, indicate that weighted-average prices of imported granular PTFE from Italy and Japan were lower than weighted-average prices of U.S.-produced material in 71 of 88 instances. The fewest instances of underselling by importers were in the pelletized product category, where importers' weighted-average prices were higher than those for U.S.-produced PTFE in 13 of 28 instances. Margins of underselling were generally less than or equal to 10 percent for pelletized and fine-cut granular PTFE. The highest margins of underselling occurred for sales of the presintered product, although margins are not consistently high in this category. Because two of the U.S. producers began reporting prices in late 1986, the data do not allow accurate analysis of trends in relative prices of U.S.-produced and imported PTFE. Price comparisons by country-of-origin are discussed separately below.

Italy.--Weighted-average prices of granular PTFE from Italy were lower priced than those of U.S.-producers in 32 of 44 direct quarterly price comparisons. For the pelletized product, imported material from Italy was lower-priced than the U.S.-produced material in only 4 of 14 comparisons. In these instances, the importer's prices from Italy were lower than those of U.S. producers by $0.03 to $0.26 per pound, or by 0.6 to 5.8 percent. In 9 quarters, imported pelletized granular PTFE was higher-priced than the domestic product by 0.2 to 10.9 percent. Price comparisons for fine-cut material show the importer's prices lower than those of domestic producers in 14 of 15 quarters, by $0.01 to $0.99 per pound, or 0.3 to 22.2 percent of U.S. producers' prices. Finally, margins of underselling ranged from $0.05 to $0.82 per pound for the presintered category, in which prices of the product from Italy were lower than domestic prices in all but one instance by percentage margins of 1.0 to 16.9 percent.

Japan.--Weighted-average prices of granular PTFE from Japan were lower than prices of U.S. producers in 39 of 44 direct quarterly comparisons. Similar to price comparisons for Italy, the pelletized product category showed the fewest instances of underselling by importers of granular PTFE from Japan. The imported pelletized product from Japan was lower priced than U.S.-produced material in 10 of 14 instances by margins of $0.07 to $0.45 per pound, or by 1.6 to 10.4 percent. In all of the 15 price comparisons for the fine-cut product, material from Japan was lower priced than that produced in the United States, by margins ranging from $0.02 to $0.36 per pound, or by 0.5 to 7.9 percent below producers' prices. For the presintered product category, importers undersold U.S. producers on a weighted-average price basis in 14 of

---

1/ Producers' and importers' quarterly weighted-average prices are calculated using prices reported for the largest quarterly sale and weighting them by the total quantity shipped by each supplier in that quarter.

15 instances, by $0.14 to $1.06 per pound, or by 3.2 to 20.8 percent of U.S. producers' prices. In 1984, imported presintered material from Japan was lower priced than the domestic product by more than $1.00 per pound in 3 of 4 quarters.

Exchange rates

Changes in exchange rates can affect the relative prices of foreign-produced to U.S.-produced goods. For example, assuming that home prices of foreign goods are constant, a depreciation of the U.S. dollar would increase the dollar price of foreign goods. If importers pass on this higher dollar price of foreign goods to purchasers, imports may decrease. An appreciation of the dollar would have the opposite effect on dollar prices and imports. Besides changes in exchange rates, changes in aggregate price levels in the United States and abroad can also affect the relative prices of foreign to U.S.-produced goods; both factors are examined below for the period under investigation.

Table 23 presents nominal- and real-exchange-rate equivalents of the Italian lira and the Japanese yen in U.S. dollars, and producer price indicators for each country. On the basis of dollars per unit of foreign currency, the exchange rate indexes approximate changes in the dollar price of foreign products on an annual basis for 1981-87 and on a quarterly basis from January-March 1984 to July-September 1987. 1/

The annual data show that the nominal values of the lira and yen experienced two major exchange rate movements in 1981-87, first depreciating vis-a-vis the dollar in 1981-85 and then increasing in 1986-87. On the basis of available quarterly data for January-September 1987, the average nominal value of the lira in 1987 is 13 percent below its annual value in 1981, whereas the average value of the yen is 49 percent above its 1981 level.

A closer examination of trends in exchange rates for the period corresponding to the PTFE price data discussed above reveals that the nominal values of the lira and the yen have increased relative to the dollar on a quarterly basis from January-March 1984 (the base period) to July-September 1987, by 25 percent for the lira and 57 percent for the yen.

As a result of varying rates of inflation in Italy, Japan, and the United States, the nominal-exchange-rate indexes do not explain changes in the real values of the subject currencies. Starting in mid-1984, the real values of the lira and the yen, measured in dollars, declined through the first quarter of 1985. As of January-March 1985, the real values of these currencies in dollars were 11 and 10 percent below their base period values, respectively. The real values of these currencies reversed their downward trends against the dollar during April-June 1985, increasing sharply on a quarterly basis against the dollar in 1986-87. In the latest period for which producer price data from Italy are available, April-June 1987, the real value of the lira was 44

1/ Decreasing index numbers suggest that the dollar price of foreign goods purchased with U.S. dollars has declined since the base period; increasing index numbers suggest that the dollar price of foreign goods purchased with U.S. dollars has increased since the base period.

Table 23.--Exchange rates: 1/ Nominal-exchange-rate equivalents of selected currencies in U.S. dollars, real-exchange-rate equivalents, and producer price indicators in specified countries, 2/ indexed by years, 1981-87, and indexed by quarters, January 1984-September 1987

Period	U.S. Producer Price Index	Italy			Japan		
		Producer Price Index	Nominal-exchange-rate index	Real-exchange-rate index	Producer Price Index	Nominal-exchange-rate index	Real-exchange rate index
			--US dollars/lira--			---US dollars/yen--	
(1981=100)							
1981.....	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1982.....	102.0	113.9	84.0	93.8	101.8	88.5	88.3
1983.....	103.3	125.0	74.8	90.5	99.5	92.9	89.4
1984.....	105.8	137.9	64.7	84.4	99.3	92.9	87.2
1985.....	105.3	148.0	59.5	83.7	98.1	92.5	86.1
1986.....	102.2	146.8	76.3	109.5	89.0	130.1	113.2
1987.....	3/	3/	4/86.6	3/	3/	4/149.4	3/
(Jan.-Mar. 1984=100)							
1984:							
Jan.-Mar...	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Apr.-June..	100.7	102.2	99.2	100.7	99.9	100.6	99.8
July-Sept..	100.4	103.5	92.4	95.2	100.7	94.9	95.1
Oct.-Dec...	100.2	105.5	87.9	92.6	100.4	93.9	94.1
1985:							
Jan.-Mar...	100.0	108.4	82.3	89.1	100.8	89.6	90.4
Apr.-June..	100.1	110.7	84.4	93.3	100.1	92.1	92.1
July-Sept..	99.4	110.7	87.7	97.6	99.0	96.8	96.4
Oct.-Dec...	100.0	111.7	95.0	106.1	96.7	111.6	107.9
1986:							
Jan.-Mar...	98.5	111.1	104.0	117.3	94.4	123.0	117.8
Apr.-June..	96.6	109.1	108.0	122.0	90.4	135.8	127.1
July-Sept..	96.2	108.3	115.8	130.3	87.9	148.3	135.6
Oct.-Dec...	96.5	109.0	119.6	135.1	86.6	144.1	129.2
1987:							
Jan.-Mar...	97.7	110.7	127.3	144.2	86.2	150.8	133.1
Apr.-June..	99.3	111.7	127.9	143.9	85.8	161.9	139.8
July-Sept..	100.3	3/	125.0	3/	86.9	157.2	136.1

1/ Exchange rates are expressed in U.S. dollars per unit of foreign currency.
2/ The real exchange rate indexes are derived from nominal exchange rates adjusted by the producer price index for the United States and for the specified countries.
3/ Not available.
4/ Figure is calculated using an average of quarterly exchange rates for January-September 1987.

Source: International Monetary Fund, International Financial Statistics, November 1987.

percent above its value in January-March 1984. As of July-September 1987, the real value of the yen was 36 percent higher vis-a-vis the dollar than in the base period.

Lost sales and lost revenues

The Commission received allegations of lost sales and lost revenues due to price competition from imported granular PTFE from Italy and Japan from * * * and * * *. * * *. 1/

* * * and * * * named eight customers in instances of sales lost to lower-priced imports of granular PTFE from Japan or Italy. Alleged lost sales of domestic producers during January 1984-September 1987 totaled *** pounds valued at around ***. These producers also named 25 customers in 38 allegations of revenues lost because price competition from imported material from Italy or Japan suppressed or reduced prices. Alleged lost revenues of domestic producers in 1984-87 totaled approximately ***. * * *.

For these preliminary investigations, the Commission staff was able to investigate 10 of the largest lost sale or lost revenue allegations, involving 5 purchasers. Their responses to these allegations appear below.

Purchaser 1.--* * * was cited by * * * in *** lost sales allegations that totaled ***. * * * claimed that these sales were lost to competition from lower priced PTFE from Italy and Japan in * * *. * * *, a spokesman for * * *, could not confirm these allegations but stated that although price is a consideration, it is not the most important determinant. * * * stated that * * *'s purchasing decision is often based on the use of the granular PTFE. According to * * *, PTFE from some suppliers works better in some applications than others, and * * * will purchase the PTFE that is best in that particular application. * * * added that * * * purchases granular PTFE that is produced in the United States, Germany, Italy, and Japan. * * * commented that the quality and price of PTFE from these four countries have been comparable during the past 3 years. In addition to price and quality, technical service is also considered when choosing a supplier.

Purchaser 2.--* * * named * * * in *** lost revenue allegations that totaled ***. According to * * *, lower priced granular PTFE offered by suppliers from Italy and Japan in * * * forced * * * to reduce its prices to * * *. * * *, a spokesman for * * *, confirmed that prices for domestic PTFE were reduced in these periods. He stated that these price reductions were necessary so that * * * could offer competitively priced products. * * * stated that at least *** percent of the granular PTFE that * * * purchases is supplied by domestic producers, with approximately *** percent being purchased from * * *. * * * stated that price and delivery are very important in the firm's purchasing decisions.

In addition to the * * * allegations described above, * * * named * * * in a lost sale allegation involving *** pounds of imported granular PTFE from Italy allegedly purchased in * * * because it was *** per pound lower in

1/ Ausimont U.S.A., however, did submit some information concerning three customers to which it believed it lost sales to Du Pont in recent periods.

price than * * *'s offer of *** per pound. * * * denied this allegation, stating that it has never purchased that much imported PTFE in any order.

Purchaser 3.--* * * named * * * in a lost revenue allegation totaling *** and a lost sale allegation totaling ***. The lost revenue allegation involved price reductions to compete with lower priced * * * in * * *. The lost sale allegation involved * * * believed to be purchased in * * *. A spokesman for * * * could not recall the circumstances alleged by * * * but stated that * * * purchases mainly from * * *. In addition, a small amount of granular PTFE is purchased from suppliers of PTFE from West Germany. This spokesman stated that price is the main determinant; however, some customers require that the PTFE be purchased from a specific producer, usually Du Pont, and * * * will therefore purchase from that supplier. This representative commented that technical advice from the supplier is also a purchasing consideration and that * * * has had difficulties receiving assistance from * * * in the past.

Purchaser 4.--* * * named * * * in a lost revenue allegation involving price competition from imported material from Italy on *** pounds of * * * granular PTFE purchased in * * *. * * * alleged that it reduced its price from *** per pound to *** per pound to * * *.

* * *'s spokesman, * * *, denied * * *'s allegation and stated that * * * would never purchase *** pounds (a ***-month supply) in one order. Further, he stated that no suppliers were charging anywhere near *** per pound in that period, and he suggested that the price * * *. * * * purchases granular PTFE from domestic suppliers, such as ICI and Du Pont, and also purchases imported material from Italy, Japan, and West Germany. In * * *, U.S.-produced and imported PTFE were competitively priced at around $4.00 per pound, with the sole exception of Du Pont, whose prices were slightly higher. This company is generally not willing to pay a premium for any supplier's material because its own customers are very cost conscious. The spokesman said that it cannot recall aggressive price leadership by domestic or foreign firms in recent years. Price reductions to meet competitive offers have been about $.05 per pound. The purchaser reported that it is still purchasing from * * *.

The company's major purchasing determinants are price and delivery. While there are no available substitutes for the granular PTFE used in * * *'s operations, the spokesman stated that his customers' need for PTFE-derived products is a more relevant explanation for the lack of substitutes than * * *'s processing equipment. The spokesman reported that it always purchases granular PTFE from several suppliers at a time to avoid supply disruptions like the "supply crunch" in 1974.

Purchaser 5.--* * * was cited in *** lost revenue allegations regarding price reductions to meet prices of imported granular PTFE from Italy. * * * alleged that, in * * *, it reduced its prices to * * * from *** per pound to *** per pound on *** pounds of * * *, and from *** per pound to *** per pound on *** pounds of * * *.

* * * operates a wide range of processing operations that produce PTFE products including * * *. * * * could not confirm * * *'s allegations. The company purchases more than *** percent of its granular PTFE from domestic suppliers, including Du Pont and ICI. * * * purchases imported PTFE from

Italy, Japan, and West Germany, but * * * denied actively soliciting price reductions due to offers from foreign suppliers. * * *. The spokesman recalls paying approximately $4.00 per pound for granular PTFE from all suppliers in * * *, and he could not recall * * *. The spokesman reported having paid higher prices for imported material from Italy or Japan in instances where a particular grade of PTFE from a foreign supplier is ideally suited for a certain application.

The spokesman recalled that U.S.-produced and imported granular PTFE have been comparably priced near $4.00 per pound for several years. The spokesman acknowledged that announced price increases in recent years have not been maintained but has heard that new price increases from several suppliers will take effect in 1988.

The spokesman stated that there are no other products that can be substituted for granular PTFE in * * *'s operations. He went on to clarify that reprocessed granular PTFE can be substituted for virgin granular PTFE for certain limited applications. The firm's major purchasing determinant is quality, not price, according to the spokesman, who cited * * * as important quality characteristics. The purchaser said that quality problems with U.S.-produced or imported material are rare but recalled * * *. As a result of this experience, it has * * *.

APPENDIX A

THE COMMISSION'S FEDERAL REGISTER NOTICE

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 731-TA-385 and 386 (Preliminary)]

Granular Polytetrafluoroethylene Resin From Italy and Japan

AGENCY: United States International Trade Commission.

ACTION: Institution of preliminary antidumping investigations and scheduling of a conference to be held in connection with the investigations.

SUMMARY: The Commission hereby gives notice of the institution of preliminary antidumping investigations Nos. 731-TA-385 and 386 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Italy and Japan of granular polytetrafluoroethylene resin (hereafter granular PTFE),[1] provided for in item 445.54 of the Tariff Schedules of the United States, that are alleged to be sold in the United States at less than fair value. As provided in section 733(a), the Commission must complete preliminary antidumping investigations in 45 days, or in this case by December 21, 1987.

For further information concerning the conduct of these investigations and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, Subparts A and B (19 CFR Part 207), and Part 201, subparts A through E (19 CFR Part 201).

EFFECTIVE DATES: November 6, 1987.

FOR FURTHER INFORMATION CONTACT: Jennifer Hinshaw (202-523-6620), Office of Investigations, U.S. International Trade Commission, 701 E Street NW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-724-0002. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-523-0161.

SUPPLEMENTARY INFORMATION:

Background: These investigations are being instituted in response to a petition filed on November 6, 1987, by E.I. Du Pont de Nemours & Co. Inc., Wilmington, DE.

Participation in the investigations: Persons wishing to participate in these investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than seven (7) days after publication of this notice in the **Federal Register**. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service List: Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to these investigations upon the expiration of the period for filing entries of appearance. In accordance wtih §§ 201.16(c) and 207.3 of the rules (19 CFR 201.16(c) and 207.3), each document filed by a party to the investigations must be served on all other parties to the investigations (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate or service.

Conference: The Director of Operations of the Commission has scheduled a conference in connection with these investigations for 9:30 a.m. on December 1, 1987, at the U.S. International Trade Commission Building, 701 E Street NW., Washington, DC. Parties wishing to participate in the conference should contact Jennifer Hinshaw (202-523-6620) not later than November 25, 1987, to arrange for their appearance. Parties in support of the imposition of antidumping duties in these investigations and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

Written submissions: Any person may submit to the Commission on or before December 3, 1987, a written statement of information pertinent to the subject of the investigations, as provided in § 207.15 of the Commission's rules (19 CFR 207.15). A signed original and fourteen (14) copies of each submission

[1] Imports of PTFE fine powders and PTFE aqueous dispersions are not covered by these investigations.

must be filed with the Secretary of the Commission in accordance with § 201.8 of the rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired must be submittted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submisssions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6).

Authority: These investigations are being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules (19 CFR 207.12).

By order of the Commission.

Kenneth R. Mason,

Secretary.

Issued: November 10, 1987.

[FR Doc. 87-26453 Filed 11-16-87; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

CALENDAR OF THE PUBLIC CONFERENCE

CALENDAR OF THE PUBLIC CONFERENCE

Investigations Nos. 731-TA-385 and 386 (Preliminary)

GRANULAR POLYTETRAFLUOROETHYLENE RESIN FROM ITALY AND JAPAN

Those persons listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigations on December 1, 1987, in the Hearing Room of the U.S. International Trade Commission, 701 E Street, NW, Washington, DC.

In support of the imposition of antidumping duties

Wilmer, Cutler & Pickering--Counsel
Washington, DC
on behalf of--

E.I. Du Pont de Nemours & Co., Inc.

E. Robert Hill
Senior Marketing Programs Manager, Fluoropolymers
Bob Bonczek
Legal Counsel
Chuck Singleton
Industry Sales Manager, Fluoropolymers
Cory Krupp
Economist

John Greenwald)--OF COUNSEL

In opposition to the imposition of antidumping duties

Steptoe & Johnson--Counsel
Washington, DC
on behalf of--

Ausimont U.S.A., Inc.

Elliot Barber
Vice President of Corporate Planning

Olin Wethington)--OF COUNSEL
Gracia Berg)--OF COUNSEL

O'Melveny & Meyers--Counsel
Washington, DC
on behalf of--

Daikin Industries Ltd.

Amanda DeBusk)--OF COUNSEL

APPENDIX C

COMMERCE'S FEDERAL REGISTER NOTICE

[A-475-703]

Initiation of Antidumping Duty Investigation; Granular Polytetrafluoroethylene Resin From Italy

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of granular polytetrafluoroethylene resin (granular PTFE resin) from Italy are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may

determine whether imports of this product materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before December 21, 1987, and we will make ours on or before April 14, 1988.

EFFECTIVE DATE: December 3, 1987.

FOR FURTHER INFORMATION CONTACT: Mary S. Clapp or Brian H. Nilsson, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230, telephone (202) 377-1769 or 377-5332.

SUPPLEMENTARY INFORMATION:

The Petition

On November 6, 1987, we received a petition filed in proper form by E.I. Du Pont de Nemours & Co., Inc., on behalf of the U.S. industry producing granular PTFE resin. In compliance with the filing requirements of § 353.36 of the Commerce Regulations (19 CFR 353.36), the petitioner alleges that imports of granular PTFE resin from Italy are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930 (the Act), as amended (19 U.S.C. 1673) (1982), and that these imports materially injure, or threaten material injury to, a U.S. industry.

Petitioner's estimate of United States price was based on an Italian manufacturer's delivered prices to two customers in the United States. Petitioner made adjustments for ocean freight, U.S. inland freight, Italian inland freight, and warehousing, credit and selling expense, U.S. duty, and export packing.

Petitioner cited Italian home market price information based on transactions prices for the same manufacturer's granular PTFE resin. Petitioner made adjustments for credit and selling, freight, and warehousing expenses.

Based on a comparision of United States price and foreign market value, petitioner alleges a dumping margin of 55 percent.

After analysis of petitioner's allegation and supporting data, we conclude that a formal investigation is warranted.

Initiation of Investigation

Under section 732(c) of the Act, we must determine, within 20 days after a petition is filed, whether it sets forth the allegations necessary for the initiation of an antidumping duty investigation, and whether it contains information reasonably available to the petitioner supporting the allegations.

We examined the petition on granular PTFE from Italy and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of granular PTFE resin from Italy are being, or are likely to be, sold in the United States at less than fair value. If our investigation proceeds normally, we will make our preliminary determination by April 14, 1988.

Scope of Investigation

The product in this investigation is granular polytetrafluoroethylene resin, filled and unfilled, provided for in item 445.54 of the *Tariff Schedules of the United States* (TSUS) and currently classifiable under Harmonized System (HS) item number 3904.61.00. Polytetrafluoroethylene dispersions in water and fine powders are not covered by this investigation.

The United States has developed a system of tariff classification based on the international harmonized system of customs nomenclature. Congress is considering legislation to convert the United States to this harmonized system by January 1, 1988. In view of this, we will be providing both the appropriate TSUS item numbers and the appropriate HS item numbers with our product descriptions on a test basis, pending Congressional approval. As with the TSUS, the HS item numbers are provided for convenience and customs purposes. The written description remains dispositive as to the scope of the product coverage.

We are requesting petitioners to include the appropriate HS item numbers as well as the TSUS item numbers in all new item petitions filed with the Department. A reference copy of the proposed Harmonized System schedule is available for consultation in the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230.

Additionally, all customs offices have references copies, and petitioners may contact the Import Specialist at their local customs office to consult the schedule.

Notification of ITC

Section 732(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information in our files, provided it confirms in writing that it will not disclose such information either publicly or under an administrative protective order without the written consent of the Acting Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by December 21, 1987, whether there is a reasonable indication that imports of granular PTFE resin from Italy materially injure, or threaten material injury to, a U.S. industry. If its determination is negative the investigation will terminate; otherwise it will proceed according to the statutory and regulatory procedures.

This notice is published pursuant to section 732(c)(2) of the Act.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

November 27, 1987.

[FR Doc. 87-27798 Filed 12-2-87; 8:45 am]

BILLING CODE 3510-DS-M

[A-588-707]

Initiation of Antidumping Duty Investigation; Granular Polytetrafluoroethylene Resin From Japan

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of granular polytetrafluoroethylene resin (granular PTFE resin) from Japan are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of this product materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before December 21, 1987, and we will make ours on or before April 14, 1988.

EFFECTIVE DATE: December 3, 1987.

FOR FURTHER INFORMATION CONTACT: Mary S. Clapp or Michael Ready, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230, telephone (202) 377-1769 or 377-2613.

SUPPLEMENTARY INFORMATION:

The Petition

On November 6, 1987, we received a petition filed in proper form by E.I. Du Pont de Nemours & Co., Inc., on behalf of the U.S. industry producing granular PTFE resin. In compliance with the filing requirements of § 353.36 of the Commerce Regulations (19 CFR 353.36), the petitioner alleges that imports of granular PTFE resin from Japan are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

Petitioner's estimate of United States price was based on a Japanese manufacturer's delivered prices to three customers in the United States. Petitioner made adjustments for ocean freight, U.S. inland freight, commission, Japanese inland freight, warehousing, credit expense, U.S. duty, and export packing.

Petitioner cited Japanese home market price information based on transaction prices for the same manufacturer's granular PTFE resin. Petitioner made adjustments for commissions, and credit, freight, and warehousing expenses.

Petitioner also provided information concerning the Japanese manufacturer's cost of production. The cost information is based on the petitioner's costs adjusted for known differences between the petitioner's and the Japanese manufacturer's costs. On this basis, the home market price is below the cost of production.

Therefore, petitioner based foreign market value on constructed value which it calculated by adding the statutory minimum of eight percent profit to the cost of production.

Based on a comparison of United States price and foreign market value, petitioner alleges a dumping margin of 103 percent.

Initiation of Investigation

Under section 732(c) of the Act, we must determine, within 20 days after a petition is filed, whether it sets forth the allegations necessary for the initiation of an antidumping duty investigation, and whether it contains information reasonably available to the petitioner supporting the allegations.

We examined the petition on granular PTFE from Japan and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of granular PTFE resin from Japan are being, or are likely to be, sold in the United States as less than fair value. We are also investigating the allegation of sales below the cost of production. If our investigation proceeds normally, we will make our preliminary determination by April 14, 1988.

Scope of Investigation

The product covered by this investigation is granular polytetrafluoroethylene resin, filled and unfilled, provided for in item 445.54 of the *Tariff Schedules of the United States* (TSUS) and currently classifiable under Harmonized System (HS) item number 3904.61.00. Polytetrafluoroethylene dispersions in water and polytetrafluoroethylene fine powders are not covered by this investigation.

The United States has developed a system of tariff classification based on the international harmonized system of customs nomenclature. Congress is considering legislation to convert the United States to this harmonized system by January 1, 1988. In view of this, we will be providing both the appropriate TSUS item numbers and the appropriate HS item numbers with our product descriptions on a test basis, pending Congressional approval. As with the TSUS, the HS item numbers are provided for convenience and customs purposes. The written description remains dispositive as to the scope of the product coverage.

We are requesting petitioners to include the appropriate HS item numbers as well as the TSUS item numbers in all new petitions filed with the Department. A reference copy of the proposed Harmonized System schedule is available for consultation in the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

Additionally, all customs offices have reference copies, and petitioners may contact the Import Specialist at their local customs office to consult the schedule.

Notification of ITC

Section 732(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information in our files, provided it confirms in writing that it will not disclose such information either publicly or under an administrative protective order without the written consent of the Acting Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by December 21, 1987, whether there is a reasonable indication that imports of granular PTFE resin from Japan materially injure, or threaten material injury to, a U.S. industry. If its determination is negative the investigation will terminate; otherwise it will proceed according to the statutory and regulatory procedures.

This notice is published pursuant to section 732(c)(2) of the Act.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 87-27799 Filed 12-2-87; 8:45 am]

BILLING CODE 3510-DS-M

APPENDIX D

LIST OF U.S. COMPANIES PRODUCING FILLED GRANULAR PTFE

Major corporations producing filled granular PTFE

Ausimont U.S.A., Metuchen, NJ

LNP Corp., Malvern, PA
(a subsidiary of ICI Americas)

Minor corporations producing granular PTFE

Whitford Polymers, Ltd., North Chicago, IL
and Lessport, PA

Custom Compounds, Inc., Aston, PA

APPENDIX E

UNIT VALUES FOR U.S. PRODUCERS' AND IMPORTERS' SHIPMENTS OF GRANULAR PTFE

Table E-1
Unit values of unfilled, pelletized granular PTFE (Product 1) produced in the United States and imported from Italy and Japan, based on the total quantity and the total value of shipments reported by U.S. producers and importers, by companies and by quarters, January 1984-September 1987

* * * * * * *

Table E-2
Unit values of unfilled, fine cut granular PTFE (Product 2) produced in the United States and imported from Italy and Japan, based on the total quantity and the total value of shipments reported by U.S. producers and importers, by companies and by quarters, January 1984-September 1987

* * * * * * *

Table E-3
Unit values of unfilled, presintered granular PTFE (Product 3) produced in the United States and imported from Italy and Japan, based on the total quantity and the total value of shipments reported by U.S. producers and importers, by companies and by quarters, January 1984-September 1987

* * * * * * *

Table E-4
Unit values for Du Pont's total sales of U.S.-produced unfilled granular PTFE, by types and by years, 1981-87

* * * * * * *