

Polytetrafluoroethylene (PTFE) Resin from the People's Republic of China and India: Antidumping and Countervailing Duty Petitions

A presentation by the PTFE Processors Alliance to:

**US International Trade Commission
500 E St. SW
Washington, DC**

October 19, 2017

Why Would Chemours File this Antidumping Petition?

- Chemours filed this petition in order to raise prices quickly and dramatically
- Despite the fact that this will cause irreparable harm to US processors of PTFE
- It is clear that Chemours is only focused on their short-term results, and not the health of the industry

Key Points for Today

- 1. It is well known and accepted industry knowledge that PTFE Granular, PTFE Fine Powder, and PTFE Aqueous Dispersions are three separate families of PTFE resins that are distinctly different and not interchangeable**
- 2. Within each family there is a range of product grades which are differentiated in uses, and in value, and are not typically interchangeable**
- 3. The recent reduction in Chemours' granular sales is a result of their decision to reduce granular sales in favor of producing other higher value products made from a limited supply of TFE monomer**

1. It is well known and accepted industry knowledge that the three separate families of PTFE resins are distinctly different and not interchangeable

Granular, Fine Powder, and Dispersion Separate and Distinct Families

Families of PTFE Resin	Physical Characteristics	Manufacturing Process	Customers' Expectations
1. Granular	Powder	Suspension polymerization Milling (and methods to manipulate particle size)	Customers mold products
2. Fine Powder	Powder - Shear sensitive - Chemours products shipped refrigerated	Dispersion polymerization Coagulation Drying	Customers paste extrude products
3. Aqueous Dispersion	White Liquid	Dispersion polymerization Concentration	Customers coat and impregnate products

Misleading Table from Chemours Petition

Section II C 4 of the Petition shows the following table:

Table 3 Illustrative Applications for PTFE Forms			
Application	PTFE granular (mold)	PTFE fine powder (extrude)	PTFE dispersion (coat)
Gaskets, seals, and rings for automotive and aerospace applications	X	X	
Gaskets, linings, and packing for chemical applications	X	X	
Film	X	X	X
Insulation	X	X	X
Wire coating, jacketing, and tubing	X	X	
Pipe liners	X	X	
Pipe coating			X
Coating and impregnating woven goods			X

Source: Exhibit I-7.

This misleading table:

1. Deemphasizes the key differences in processing methods of the three types of PTFE
2. Omits revealing information about the typical differences in end uses
3. Misrepresents the interchangeability of the three types of PTFE which, in fact, are rarely interchangeable

Processing Methods*

Fine Powder

"Teflon™ PTFE fine powders are generally converted into usable articles (shapes, wire insulation and tapes, etc) via paste extrusion, followed by post extrusion heating to remove residual hydrocarbon solvents and to increase material density."

Dispersion

"Teflon™ and Zonyl™ liquid dispersion products offer a practical method for PTFE coating or impregnating various materials and substrates to obtain properties typical of fluoroplastics such as, chemical resistance, low coefficient of friction, excellent dielectric and release characteristics and a wide service temperature spectrum."

Granular

"Teflon™ PTFE granular fluoroplastic resins are considered non-melts and are generally converted to finished articles in a three step process. 1) The resin is compression molded into a shape form (rod, tube, sheet). 2) The shape, once removed from the mold, is then sintered above its melting point to form a solid PTFE billet. 3) The solid PTFE billet is then machined into the finished article."

* Excerpted from Fluorogistx web site

(End Use) Applications*

Fine Powder

“Insulation for wire and cable, tubing, pipe liners, films, sintered and unsintered tapes, micro-porous membranes, heat shrink tubing, bushings, push/pull cables, profile shapes and other end use components requiring a high performance fluoroplastic material”

Granular

“Seals, valve seats, gaskets, tank lining, fluid handling components and other end use components requiring a high performance fluoroplastic material”

Dispersion

“PTFE, PFA and FEP aqueous dispersions are generally used in the coating of fabrics and other substrates in various end use applications; Filtration, Architectural Roofing, Electronics, Semiconductor, Food Processing, Packaging and other end use components requiring a high performance fluoroplastic material”

* Excerpted from Fluorogistx web site

Three Different Product Families

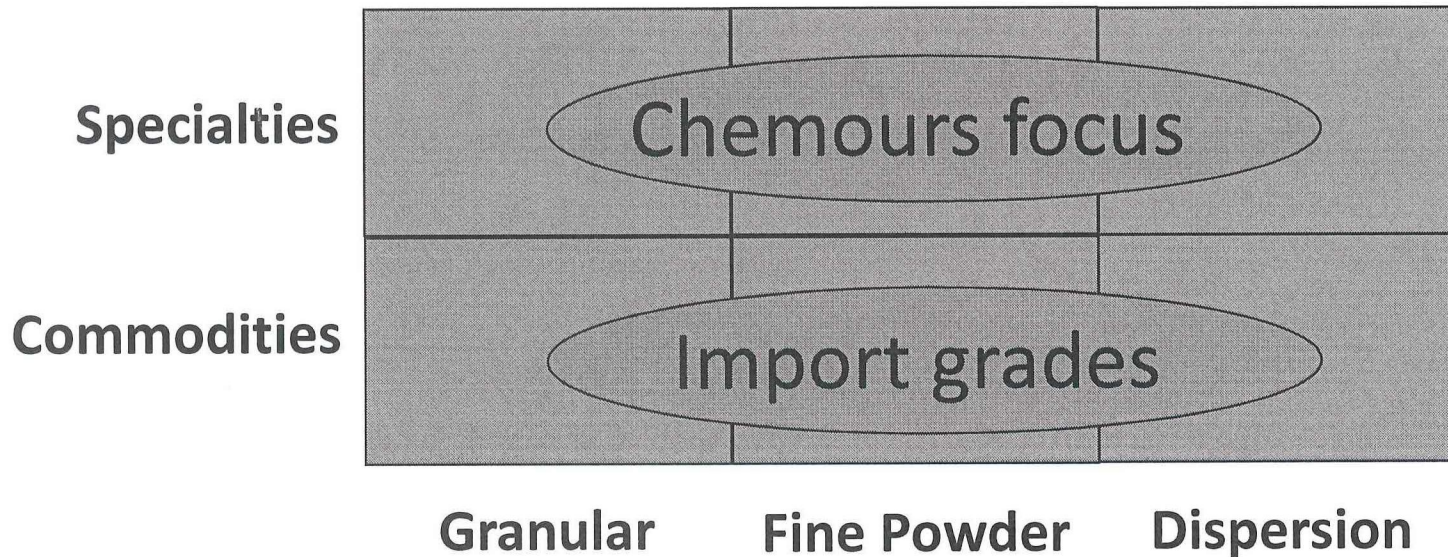
- The Chemours' argument for considering the three families of PTFE to be equivalent and interchangeable is counter to accepted industry knowledge and has been fabricated specifically for this antidumping case. This argument appears to intentionally mislead and misrepresent the facts
- Chemours brought a case exclusively for Granular PTFE, differentiating it from fine powder and aqueous dispersions. In that case they stated the manufacturing methods were different:
 - *Granular Polytetrafluoroethylene Resin from Italy and Japan (August, 1988)*
- *Granular, fine powder and aqueous dispersion PTFE resins are processed differently and used in different applications; therefore, they should be considered separately.*

-
- 2. Within each family there is a range of product grades which are differentiated in uses, and in value, and are not typically interchangeable.**

Product Differentiation within Families

- Clear differentiation, and associated premium pricing, exists within all three families of PTFE resins
- Such specialty products are not available from Chinese suppliers
- So, there is no head-to-head competition from Chinese imports in specialty areas, which represents the majority of Chemours' sales

The Influence of Grades Within Families



- Price comparisons in the questionnaire do not account for major differences in grades within a product family
- Price comparisons based upon the average unit value of HTS 3901.61.00 import statistics commingles both specialty and import grades, filled compounds, *and scrap*

PTFE Aqueous Dispersions

- Polymerization aids (surfactants) are critical in the manufacturing process for aqueous dispersions
- In recent years, Chemours has replaced traditional polymerization aids with newer technologies
- Two types are now offered, one is called “GenX,” whereas the latest one, which is non-fluorinated, is called “LX”
- The new LX products are made at lower raw material cost and are being offered at premium prices. They are clearly differentiated from the products that are imported from China
- According to the Fluoropolymer Division of the Plastics Industry Association, no Chinese products are being imported with old-style polymerization aids
- We do not believe a significant volume, if any, PTFE dispersions are being imported from China
- We request the Commission check the volume of imports of PTFE dispersions from China
- How can Chinese companies be accused of dumping when there are little or no sales of their PTFE dispersions in the USA?

PTFE Fine Powder

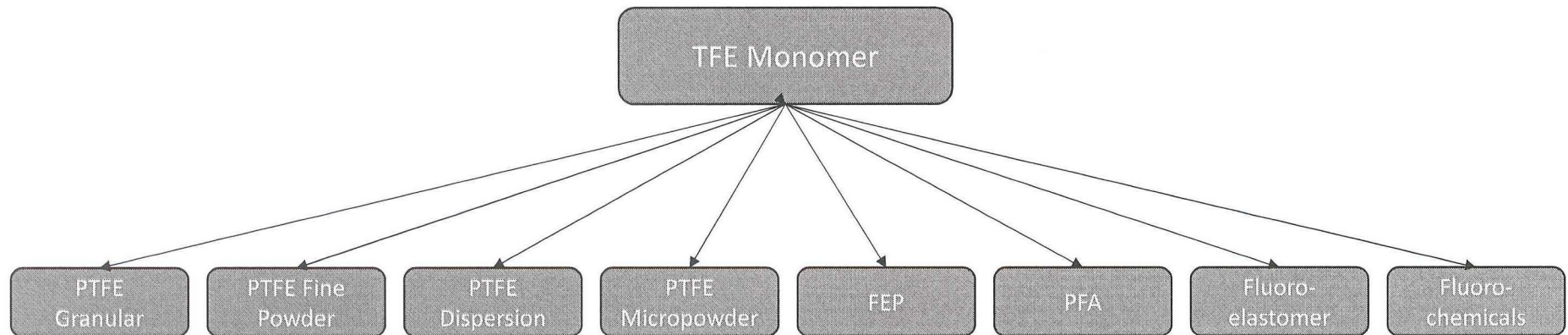
- Fine powder is sometimes known as coagulated dispersion. As is the case with their PTFE dispersions, Chemours makes fine powders that are differentiated using new types of polymerization aids
- In addition, Chemours offers a range of specialty grades, all of which are sold at premium values versus products imported from China. For example:
 - Ultra high molecular weight (e.g., 601X and 602X)
 - Trace-modified (e.g., 6CX, 62X, 62XTX, 613AX, 640XTX, 641XTX, CFP6000X)
- The vast majority of Chemours sales are of these premium, specialty products
- Chemours also offers low value “TE” grades which are broad/out-of-specification grades, or Teflon® 60. The pricing of these grades is what should be compared to imports from China
- There are no competing specialty grades from Chinese suppliers
- Only small quantities of unspecialized grades are imported from China
- The vast majority, if not all, imports from China are not refrigerated during shipment, which substantially lowers their transportation cost in tandem with the value of the product
- As a result, Chinese imports are useful only in the lowest value applications, and have little or no influence on the vast majority of Chemours fine powder sales

PTFE Granular

- Differentiation exists with trace-modified grades of granular resins. These specialty grades are sold at higher prices and designated as “NXT”.
- Differentiation also exists within the following categories, which are differentiated either with downstream specifications or other quality-related factors:
 - Fine cut (i.e., standard flow)
 - Pelletized (i.e., free flow)
- The majority of granular PTFE imports from China are sold into applications that have the least demanding quality requirements along with the lowest prices. These imports are comprised of a mix of scrap, reprocessed, off-spec, wide-spec, as well as some standard grades. The two main examples are:
 - Manufacture of formulated PTFE filled compounds
 - Manufacture of PTFE micropowders
- Chemours also offers low value grades, or broad/out-of-specification grades, for these applications. The pricing of these grades is what should be compared to imports from China
- Chemours decided to reduce its sales of granular PTFE into lower value applications and is instead directing its sales of TFE-containing polymers to higher value applications

3. The recent reduction in Chemours' granular sales is a result of their decision to reduce granular sales in favor of producing other higher value products made from a limited supply of TFE monomer

Competing Outlets for TFE Monomer



Capacity for TFE is fixed and granular PTFE is usually considered the lowest value outlet

TFE Capacity Affects Granular Sales

- We urge the Commission to ask Chemours about their TFE capacity, which appears to be fully utilized throughout 2017
- The assertion that decreased sales is due to dumping of imported granular resin appears to intentionally mislead and misrepresent the facts

Summary

1. PTFE Granular, PTFE fine powder, and PTFE dispersions represent three separate families that are processed differently, are used in different applications, and have a substantially different customer base. Therefore, the data should be considered separately
2. Dispersions from Chemours are clearly differentiated with respect to competitors and also within their own range of grades
3. The majority of Chemours' fine powder sales are premium, specialty products with which the Chinese imports do not compete. Chinese imports have not caused a reduction of prices or volumes from Chemours
4. The reduction of granular sales by Chemours is the result of a strategic decision to sell less granular, and is not due to dumping of granular from China
5. Chemours has increased prices in 2017. This fact is inconsistent with their assertions that they are being injured.