

3M™ Dyneon™ Fluoroplastic Granules PFA 6505TZ

Features and Benefits

- Wide service temperature range
- Excellent, almost universal resistance to solvents and chemicals
- High transparency
- Extremely high weathering resistance and UV stability
- Smooth surfaces
- Broad processing window
- High limiting oxygen index: does not support combustion
- Good non-stick characteristics
- Excellent electrical insulation properties
- Excellent mold release
- Good low friction properties
- Excellent stress crack resistance

Note: Data in this document are not for specification purposes.

Typical Properties

Property	Test Method	6505TZ
Melting Point	ASTM D4591	308°C (586°F)
Melt Index 372°C/5 kg	ASTM D1238	5 g/10 min
Specific Gravity	ASTM D792	2.15 g/cc
Tensile Strength at Break @ 23°C	ASTM D638	32 MPa (4,640 psi)
Elongation at Break @ 23°C	ASTM D638	410%
Hardness Shore D	ASTM 2240	60
Limiting Oxygen Index (LOI)	ASTM D2863	>95%
Flexural Modulus @ 23°C Injection Molded Bars (0.5" x .125" x 5")	ASTM D790	550 MPa (80,000 psi)
Vertical Burn	UL Bulletin 94	V-0

Product Description

3M™ Dyneon™ Fluoroplastic Granules PFA 6505TZ (a fully fluorinated copolymer of tetrafluoroethylene and perfluorovinylether) has exceptional temperature resistance, excellent electrical properties and excellent chemical inertness and weather resistance. It is used in molded valves, pumps, tanks, filters, pipes, and in wire and cable applications.

Product Form

Dyneon PFA 6505TZ is supplied as pellets in moisture and dust-proof polyethylene bags. Container size:

- 50 kg (110 lb) cardboard carton containing two 25 kg (55 lb) PE bags
- Large carton containing 25 kg (55 lb) PE bags to a total weight of 800-1000 kg (1760-2200 lb), depending on batch size.

Storage and Material Handling

PFA 6505TZ can be stored for 3 years from the date of manufacture provided it is stored in a clean, and dry place. This fluorothermoplastic is hydrophobic and generally does not require drying before processing unless high humidity conditions create surface moisture adsorption.

Food Contact/FDA Regulatory Status

These 3M products comply with 21 C.F.R. 177.1550 (perfluorocarbon resins) under paragraph (a)(2) and may be used as coatings or components of coatings for articles intended for repeated food contact use, subject to the provisions, including specifications, conditions of use, and limitations, if any, in this regulation.

3M makes no recommendation about the suitability of these 3M products in the user's intended application. It is user's responsibility to determine whether its use of 3M products in a particular application is suitable and will comply with applicable laws and regulations. As appropriate, the user is also responsible for testing its finished product(s) made with 3M products to ensure compliance with any applicable specifications, conditions of use, and limitations (including extractives limitations) under applicable laws and regulations such as 21 C.F.R. 177.1550.



Product Stewardship—Replacement Emulsifier: Dyneon™ and Dynamar™ fluoroplastic products identified with a “Z” at the end of the product name indicate products that are made using a replacement emulsifier. This emulsifier, which Dyneon began using in the manufacturing processes for these products in 2008, is a polymerization aid used to manufacture certain fluoropolymers and is not an intended ingredient in the polymers. The new emulsifier eliminates the use of the former polymerization aid, APFO (ammonium perfluorooctanoate, the ammonium salt of perfluorooctanoic acid (PFOA)), in the manufacture of these fluoropolymers. The use of the replacement emulsifier in the manufacture of these products is consistent with our product stewardship principles and our commitment to US EPA’s Voluntary PFOA Stewardship Program under which fluoropolymer manufacturers agreed to work towards eliminating PFOA in emissions and product content by the year 2015. **We are pleased to report that Dyneon completely eliminated the use of APFO in its manufacturing processes in December 2008.**

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