

3M™ Dyneon™ Fluoroplastic Granules PFA 6502TZ

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
- Transfer molding and extrusion

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

Typical Properties

Property	Test Method	
Melting Point	ASTM D4591	310°C (590°F)
Melt Index 372°C/5 kg	ASTM D1238	2 g/10 min
Specific Gravity	ASTM D792	2.15 g/cc
Tensile Strength @ 23°C	ASTM D638	30 MPa (4,350 psi)
Ultimate Elongation @ 23°C	ASTM D638	380%
Hardness Shore D	ASTM 2240	60
Limiting Oxygen Index	ASTM D2863	>95%
Flexural Modulus	ASTM D790	550 MPa (80,000 psi)

Product Description

3M™ Dyneon™ PFA 6502TZ is a fluorothermoplastic resin for transfer molding applications and extrusion of claddings and linings. Dyneon PFA 6502TZ allows for easy processing under low shear rates, with a wide processing window and excellent color stability. This material can be used in tough environments, such as chemical industry applications, where high strength and extreme thermal and chemical resistance are required.

Product Form

PFA 6502TZ is supplied in pellet form in moisture and dust-proof 25 kg (55 lb) polyethylene bags.

Storage and Material Handling

PFA 6502TZ has an extended shelf life provided it is stored in a clean, dry place in its original, unopened container. PFA 6502TZ is hydrophobic, and generally does not require drying before processing unless high humidity conditions create surface moisture adsorption. Opened containers should be tightly resealed to prevent dust contamination from static charge accumulation and moisture ingress.

Safety/Toxicology

This is a fluoroplastic material, so normal precautions observed with fluoroplastics should be followed. Before processing this product, be sure to read and follow all precautions and directions for use contained in the product label and the Material Safety Data Sheet and follow all label directions and handling precautions. General handling/processing precautions include: (1) Process only in well-ventilated areas; (2) Do not smoke in areas contaminated with powder/residue from this product; (3) Avoid eye contact; (4) After handling this product wash any contacted skin with soap and water. Potential hazards, including evolution of toxic vapors, can exist if processing occurs under excessively high temperature conditions. Appropriate local exhaust ventilation such as vapor extractor units should be installed above processing equipment. When cleaning processing equipment, do not burn off any of these products with an open flame or in a furnace.

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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