Zonyl™ MP 1000

PTFE Additive

Product Information

Description

Zonyl™ MP 1000 fluoroadditive is a white, free-flowing, PTFE powder designed for use as an additive in other materials or as a dry lubricant. It can be used at temperatures from –190 °C to 250 °C (–310 °F to 480 °F), and is inert to nearly all industrial chemicals and solvents. It is a good electrical insulator, does not absorb water, and is highly resistant to weathering. Its properties are summarized in Table 1.

Zonyl™ MP 1000 can impart:

- Low surface energy
- Improved lubricity and wear in plastics and elastomers
- Improved performance in lubricants under severe conditions

Zonyl™ MP 1000 tends to form clumps of particles, but it can be deagglomerated during mixing and blending operations. Agglomerates of the resin are friable, a characteristic that helps in producing an intimate mixture with host materials. As the resin is dispersed in a solvent for particle size measurement, the agglomerates break down and may approach the 0.2 µm particle size.

Typical Applications

Typical loadings of 5 to 20% by weight are used. Plastics that can benefit in this manner include polyacetals, polyamides, polycarbonates, polyesters, polyimides, polysulfides, and polysulfones; elastomers include acrylates, fluoroelastomers, neoprenes, nitriles, and silicones. Added to high-viscosity specialty lubricants designed for use under high pressure, Zonyl™ MP 1000 may increase lubricity and service life, especially at high temperatures or in corrosive environments. It has been used in silicone, fluorosilicone, and hydrocarbon lubricant bases. Smooth, uniform suspensions can be made using conventional blending methods.

- Provides anti-stick surfaces
- Reduces surface abrasion
- Reduces friction and wear in parts
- Increases lubrication

Food Contact Compliance

Products are generally not recommended for food contact. For details and information, please contact your Chemours representative.

Safety Precautions

Before processing any fluoroplastics, read the Material Safety Data Sheet, available upon request from our Customer Service Group at (844) 773-CHEM/2436 in the U.S. or (302) 773-1000 outside of the U.S. Also read the detailed information in the latest edition of the "Guide to the Safe Handling of Fluoropolymer Resins," published by the Fluoropolymers Division of The Society of the Plastics Industry (www.fluoropolymers.org) or by PlasticsEurope (www.plasticseurope.org).

Packaging

Zonyl™ MP 1000 is packaged in 25-kg (55.1-lb) drums. Eight 25-kg drums are packaged on one pallet for ease of shipping, handling, and storage.

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Table 1. Typical Property Data for Zonyl™ MP 1000 Fluoroadditive

Property	Test Method	Unit	Value
Average Bulk Density	ASTM D4894	g/L	500
Melting Peak Temperature	ASTM D4894	°C (°F)	325 (617)
Average Particle Size (Volume Basis)	ASTM D4464	µm	12
Specific Surface Area	ASTM D4567	m^2/g	5–10

Note: Meets ASTM D5675, Group 1, Class 2, Grade 1 or 2.
Typical properties are not suitable for specification purposes.

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