

Zonyl™ MP 1400

PTFE Additive

Product Information

Description

Zonyl™ MP 1400 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 1400 can impart:

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

Zonyl™ MP 1400 is used as an additive at up to 20% by weight in host materials, such as plastics, to improve nonstick performance and enhance tribological characteristics. Surface blemishes are minimized in injection molded thermoplastic parts. Plastics that can benefit include polycarbonates, polyacetals, polyamides, polyesters, polysulfides, and polysulfones.

Typical Applications

It can be added at up to 30% by weight to base elastomers to improve abrasion resistance and lower the coefficient of friction. At 1-3% by weight, it is an excellent slip enhancer for a variety of water and solvent based inks. It can also be added to plastics, such as polyacetals, polyamides, polycarbonates, polyesters, polyimides, polysulfides, and polysulfones, at 5-20% by weight to reduce friction and wear.

- Provides anti-stick surfaces
- Reduces friction and wear in parts
- Reduces plate-out
- Increases lubrication

Food Contact Compliance

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

Safety Precautions

WARNING! VAPORS CAN BE LIBERATED THAT MAY BE HAZARDOUS IF INHALED.

Before using Zonyl™ fluoroadditives, refer to the Safety Data Sheet and the latest edition of "The Guide to the Safe Handling of Fluoropolymer Resins," published by Plastics Industry Association (www.fluoropolymers.org) or PlasticsEurope (www.plasticseurope.org).

Open and use containers only in well-ventilated areas using local exhaust ventilation (LEV). Vapors and fumes liberated during hot processing of Zonyl™ fluoroadditives should be exhausted completely from the work area. Contamination of tobacco with these polymers must be avoided. Vapors and fumes liberated during hot processing that are not properly exhausted, or from smoking tobacco or cigarettes contaminated with Zonyl™ fluoroadditives, may cause flu-like symptoms, such as chills, fever, and sore throat. This may not occur until several hours after exposure and will typically pass within about 24 hours.

Mixtures with some finely divided metals, such as magnesium or aluminum, can be flammable or explosive under some conditions.

Packaging

Zonyl™ MP 1400 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.

Table 1. Typical Property Data for Zonyl™ MP 1400 Fluoroad additive

Property	Test Method	Unit	Value
Average Bulk Density	ASTM D4894	g/L	425
Melting Peak Temperature	ASTM D4894	°C (°F)	325 (617)
Average Particle Size	ASTM D4464	µm	10
Specific Surface Area	ASTM D4567	m ² /g	1.5-3

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

CAUTION: Do not use or resell Chemours materials in medical applications involving implantation in the human body or contact with internal bodily fluids or tissues unless agreed to by Seller in a written agreement covering such use. For further information, please contact your Chemours representative. For medical emergencies, spills, or other critical situations, call (866) 595-1473 within the United States. For those outside of the United States, call (302) 773-2000.

The information set forth herein is furnished free of charge and based on technical data that Chemours believes to be reliable. It is intended for use by persons having technical skill, at their own discretion and risk. The handling precaution information contained herein is given with the understanding that those using it will satisfy themselves that their particular conditions of use present no health or safety hazards. Because conditions of product use are outside our control, Chemours makes no warranties, express or implied, and assumes no liability in connection with any use of this information. As with any material, evaluation of any compound under end-use conditions prior to specification is essential. Nothing herein is to be taken as a license to operate under or a recommendation to infringe any patents.

NO PART OF THIS MATERIAL MAY BE REPRODUCED, STORED IN A RETRIEVAL SYSTEM OR TRANSMITTED IN ANY FORM OR BY ANY MEANS ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE WITHOUT THE PRIOR WRITTEN PERMISSION OF CHEMOURS.

For more information, visit teflon.com/zonyl

For sales and technical support contacts, visit teflon.com/industrialglobalsupport

© 2018 The Chemours Company FC, LLC. Zonyl™ is a trademark of The Chemours Company FC, LLC. Chemours™ and the Chemours Logo are trademarks of The Chemours Company.

Replaces: K-27010

C-10012 (3/18)