Zonyl™ MP 1400F
PTFE Additive

Product Information

**Description**

Zonyl™ MP 1400F 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 1400F can impart:
- Low surface energy
- Improved lubricity and wear in plastics
- Improved performance in lubricants under severe conditions

Zonyl™ MP 1400F 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, polycetals, polyamides, polyesters, polysulfides, and polysulfones.

**Typical Applications**

Zonyl™ MP 1400F may be used as a component of articles intended for repeated use in contact with food.
- Provides anti-stick surfaces
- Reduces friction and wear in parts
- Reduces plate-out
- Increases lubrication

**Food Contact Compliance**

Zonyl™ MP 1400F may be used as a component of articles intended for repeated use in contact with food in compliance with European Regulation (EU) No. 10/2011, FDA 21 CFR 177.1550 and other FDA regulations. Zonyl™ MP 1400F can be used as additives in other types of plastic food contact approved materials. For details and information, please contact your Chemours representative.

**Safety Precautions**

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


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 1400F 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 1400F Fluoroadditive

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Unit</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Bulk Density</td>
<td>ASTM D4894</td>
<td>g/L</td>
<td>425</td>
</tr>
<tr>
<td>Melting Peak Temperature</td>
<td>ASTM D4894</td>
<td>°C (°F)</td>
<td>325 (617)</td>
</tr>
<tr>
<td>Average Particle Size</td>
<td>ASTM D4464</td>
<td>µm</td>
<td>10</td>
</tr>
<tr>
<td>Specific Surface Area</td>
<td>ASTM D4567</td>
<td>m²/g</td>
<td>1.5–3</td>
</tr>
</tbody>
</table>

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