



Zonyl®

Fluoroadditive

ZONYL® MP 1500

Description

ZONYL® MP 1500 fluoroadditive is a free-flowing, white powder designed primarily for use as an additive in other materials. ZONYL® MP 1500 may improve the wear resistance of the host material and enhance its frictional characteristics. When used in elastomeric compounds it can provide improved tensile properties and tear resistance. ZONYL® MP 1500 can be used at temperatures from –190° to 250°C (–310° C to 480°F).

ZONYL® MP 1500 is generally intended to be used as an additive although it has been used alone as a dry lubricant. Its characteristics make this material unsuitable as a moulding or extrusion resin. It is therefore not a replacement for any of the ZONYL® fluoropolymer resins in these applications. Figure 1, a scanning electron photomicrograph, shows typical particles of ZONYL® MP 1500, while typical properties of this material are shown in Table 1.

ZONYL® MP 1500 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.

ZONYL® MP 1500 does not conform to FDA regulations for use in contact with foods.

Typical Applications

Elastomeric compounds containing up to 50% ZONYL® MP 1500 have been prepared with no fibrillation or agglomeration.

Tear strength, abrasion resistance and flex life in an elastomeric compound can be significantly improved by the addition of ZONYL® MP 1500 at levels of about 10 phr or more.

Beneficial effects have been measured with fluoroelastomers, fluorosilicone elastomers, EPDM elastomers, Neoprene elastomers and SBR elastomers.

Safe Handling

Before using ZONYL® MP 1500, read the Material Safety Data Sheet and the detailed information in the DuPont bulletin “TEFLON® Fluoropolymers Resins – Safety in Handling and Use”.

Fig. 1 ZONYL® MP 1500 Fluoroadditive – scanning electron photomicrograph, 1000 x.

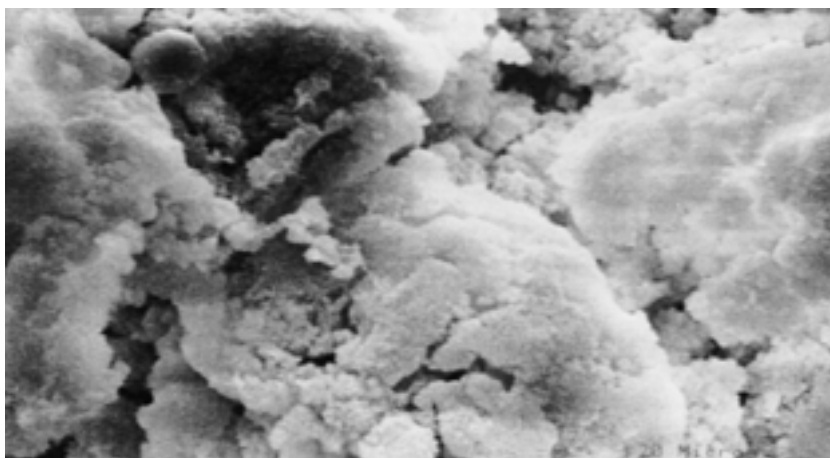


Table 1
Typical Property Data for Zonyl® MP 1500 Fluoroadditive

Property	Test Methode	Units	Value
Average Bulk Density	ASTM D 1457	g/l	350 – 400
Melting Peak Temperature	ASTM D 1457	°C °F	325 ± 10 617 ± 18
Particle Size Distribution (Volume basis)	Laser Microtrac	µm	10% < 10 Avg. 20 90% < 35
Specific Surface Area	Nitrogen Adsorption	m ² /g	11

Open and use containers only in well-ventilated areas. Inhaling fumes liberated during hot processing, or from smoking tobacco or cigarettes contaminated with fluoroadditive, may cause flu-like symptoms (chills, fever, sore throat) that may not occur until several hours after exposure and pass within 36 to 48 hours. Mixtures with some finely divided metals, such as magnesium or aluminium, can be flammable or explosive under some conditions.

Packaging

ZONYL® MP 1500 is packaged in 22.7 kg (50 lb) fibre drums. Eight 22.7 kg drums are packaged on one pallet for ease of shipping, handling, and storage.

Freight Classification

ZONYL® MP 1500 when shipped by rail or express is classified "Plastic, Synthetic, O.T.L., NOIBN." Resin shipped by truck is classified "Plastics, Materials Granules".

ZONYL® fluoroadditives distributors:

Belgium

N.V. Sepulchre S.A.
19, Av. des Nenuphars, Bte 6
B-1160 Brussels
Tel.: +32-2-672 23 35
Fax: +32-2-673 67 82
E-mail: kees.sliedrecht@sepulchre.be

France

Société de Produits Chimiques Industriels
3, Rue de Bordeaux
F-69007 Lyon
Tel.: +33-478-72 66 65
Fax: +33-478-72 47 90
E-mail: spcilyon@compuserve.com

Germany

C.H. Erbslöh
Düsseldorfer Straße 103
D-47809 Krefeld
Postfach 9005
D-47747 Krefeld
Tel.: +49-2151-525 00
Fax: +49-2151-525 106
www.cherbsloeh.de

Great Britain & Republic of Ireland

Univar PLC
Argyle House, Epsom Ave, Stanley Green
Industrial Estate, Handforth
Wilmslow, Cheshire SK9 3RN
Tel.: +44-161-482 60 02
Fax: +44-161-482 60 37

Israël

Gadot
Chemical Terminals Ltd.
22, Shalom Aleichem Street
Il-633 43 Tel Aviv
Tel.: +972-3-526 42 52/240
Fax: +972-3-528 27 17
E-mail: dyahav@gadot.com

Italy

Eigenmann & Veronelli S.p.A.
Via della Mosa 6
I-20017 Rho (Milano)
Tel.: +39-02-93 53 91
Fax: +39-02-93 53 93 20

Netherlands

Sepulchre B.V.
Ceresstraat 35
NL-4811 CB Breda
Tel.: +31-76-52 00 000
Fax: +31-76-52 00 197
E-mail: ks@sepulchre.bc

Portugal

Mario Coelho, LDA
Rua do Campo Alegre 672
1º Esq.
P-4150 Porto
Tel.: +351-2-609 24 25
Fax: +351-2-600 02 07
E-mail: m.coelho@mail.telepac.pt

Spain

Quimidroga S.A.
Tuset, 26
E-08006 Barcelona
Tel.: +34-93-236 36 36
Fax: +34-93-416 05 12
E-mail: esoler@quimidroga.com

South Africa

Advanced Polymers
P.O. Box 9452
Edenglen, 1613
Tel.: +27-11-397 79 79
Fax: +27-11-397 34 35
Mr. Grant Brooklyn
Mr. Allan Paterson
Mr. Philipa Hopleson
E-mail: advpoly@global.co.za

Sweden, Denmark, Finland

Fluortek A.B.
P.O. Box 37
S-74121 Knivsta
Tel.: +46-18-34 90 55
Fax: +46-18-34 92 50
Mr. Christer Stahl
E-mail: ptfe@fluortek.se

Switzerland

Dolder AG
Immengasse 9
Postfach
CH-4004 Basel
Tel.: +41-61-326 66 00
Fax: +41-61-322 47 81
E-mail: plastics@dolderag.ch

Asia Pacific

DuPont Asia Pacific Ltd.
P.O. Box TST 98851
1122 New World Office Bldg.
East Wing, Salisbury Road
Kowloon, Hong Kong
Tel.: +852-734 53 45
Fax: +852-724 44 58

Latin America

DuPont Fluoroproducts
Latin America Regional Office
P.O. Box 80711
Wilmington, DE 19880-0711
Tel.: (302) 999 35 82
Fax: (302) 999 39 21

USA

E.I. du Pont de Nemours & Co. Inc.
DuPont Fluoroproducts
P.O. Box 80713
Wilmington, DE 19880-0713
Tel.: 1 800 262 2745
Fax: (302) 999 3921
www.teflon.com

Requests for further information for countries not listed above should be sent to:

DuPont de Nemours International S.A.

Fluoropolymers
2, chemin du Pavillon
P.O. Box 50
CH-1218 Le Grand-Saconnex
Geneva – Switzerland
Tel.: +41-22-717 50 94
Fax: +41-22-717 54 11
E-mail: laurent.dubois-2@che.dupont.com
Visit: www.teflon.com

The information provided in this documentation corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits nor used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.

Caution: Do not use this product in medical applications involving permanent implantation in the human body. For other medical applications see "DuPont Medical Caution Statement", H-50102.



Zonyl®
Fluoroad additive