

A 3M Company

# **Dyneon**ä TF 2071 PTFE / TF 2072 PTFE

# fine powders for tubing and wire & cable

### **Features and Benefits**

- Processable by standard paste extrusion method
- TF 2071 and TF 2072 have a wide processing range because of high maximum allowable reduction ration
- TF 2071 is recommended for high quality tubing and wire & cable insulation processed by paste extrusion method at reduction ratio up to 1600:1
- TF 2072 is recommended for thin-wall, small-diameter tubing and wire & cable insulation, processed by paste extrusion method at reduction ratio up to 3000:1
- High reduction ratios allow more cost-effective extrusion because larger preforms can be used

### Typical Properties (Data not for specification purposes)

### **Powder properties**

	TF 2071 PTFE	TF 2072 PTFE	
Bulk density	510 kg/m³	500 kg/m³	ISO 12086
Average particle size	500 μm	600 µm	ISO 12086
Extrusion pressure	53 Mpa	40 Mpa	ISO 12086
(reduction ratio 1600)	7685 psi	5800 psi	
Reduction ratio range	20-1600:1	50-3000:1	Internal
			Dyneon method

### Mechanical properties\*, measured at 23°C (73°F)

	TF 2071 PTFE	TF 2072 PTFE	
Tensile strength	28 MPa	28 Mpa	ISO 12086
	4060 psi	4060 psi	
Elongation at break	360 %	360 %	ISO 12086
Density	2,16 g/cm <sup>3</sup>	2,16 g/cm <sup>3</sup>	ISO 12086
	•	•	

<sup>\*</sup> average values, measured according to ISO 12086 on 1.6mm (0.06") sintered sheets.

# Dyneon™ TF 2071 PTFE / TF 2072 PTFE



### Recommended processing procedures

Dyneon TF 2071 PTFE and TF 2072 PTFE can be processed by standard paste extrusion methods. The fine powder is mixed with a suitable lubricant and compacted into a preform, which is then extruded through a die on a ram extruder to produce tubing or insulated wire or cable. The lubricant is then evaporated and the tube or insulated wire is sintered. TF 2072 typically requires less lubricant than TF 2071 (1-2 parts by weight)

### **Packaging**

Dyneon TF 2071 PTFE and TF 2072 PTFE are supplied in moisture and dust-tight plastic drums.

Capacity per drum: 25 kg (55 lbs.)
Order quantity per pallet: 300 kg (661 lbs.)

### **Storage**

Dyneon TF 2071 PTFE and TF 2072 can be stored for a relatively long period of time. They should be stored and mixed (addition of lubricant) in a clean, dry place at a temperature of less than 19°C (66°F) to retain free-flowing properties. Before processing, it is advisable to store the material in a sealed container for at least 24 hours in the production area to eliminate the risk of condensation in the powder. This is particularly important when ambient temperature is low, in such cases the material should be conditioned for up to 72 hours in the production area.

### Management systems

Dyneon has achieved ISO 9001 registration for its worldwide locations and ISO 14001 registration for its Gendorf facility located in Germany. Dyneon has achieved A2LA accreditation for its US operations located in Aston, PA.

Important Notice: Because conditions of product use are outside Dyneon's control and vary widely, user must evaluate and determine whether a Dyneon product will be suitable for user's intended application before using it. The following is made in lieu of all express and implied warranties (including warranties of merchantability and fitness for a particular purpose): If a Dyneon product is proved to be defective, Dyneon's only obligation, and user's only remedy, will be, at Dyneon's option, to replace the quantity of product shown to be defective when user received it or to refund user's purchase price. In no event will Dyneon be liable for any direct, indirect, special, incidental, or consequential loss or damage, regardless of legal theory, such as breach of warranty or contract, negligence, or strict liability.

**Technical Information and Test Data:** Technical information, test data, and advice provided by Dyneon personnel are based on information and tests we believe are reliable and are intended for persons with knowledge and technical skills sufficient to analyze test types and conditions, and to handle and use raw polymers and related compounding ingredients. No license under any Dyneon or third party intellectual rights is granted or implied by virtue of this information.

## A 3M Company

### **Dyneon LLC**

Application and Product Development 50 Milton Drive Aston, PA, USA 19014-2293

Dyneon Technical Service
Phone: +1 800 554 6782
Fax: +1 610 497-7050

Dyneon Customer Service
Phone: +1 800 810 8499
Fax: +1 800 635 8061

Houston Office: 16727 Aldine Westfield Houston, Tx, USA 77032-1349 Phone: +1 281 821-4490

+1 281 821-2525

### Dyneon GmbH

Fax:

Marketing PTFE and Monomers Werk Kelsterbach D-65444 Kelsterbach, Germany Phone: +49 (6107) 772-516

Fax: +49 (6107) 772-517

Dyneon Customer Service in Europe

Phone: 00 800 396 366 27 Fax: 00 800 396 366 39 (Toll free in Europe)

Application and Product
Development PTFE
Werk Gendorf
D-84504 Burgkirchen, Germany
Phone: +49 (8679) 7-3636
Fax: +49 (8679) 3992

Please contact us if you wish to know the address of any of our sales offices worldwide or you may visit us on the web at <a href="http://www.dyneon.com">http://www.dyneon.com</a>

98-0504-0470-0 Issued: 6/00

© Dyneon 2000 Printed in USA All Rights Reserved Dyneon is a Trademark of Dyneon