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# **Dyneon**™ TF 2029 Z PTFE

# PTFE Fine Powder for Paste Extrusion

Dyneon™ TF 2029 Z PTFE is an ideal grade for tapes with high mechanical strength, such as electrical tape for wrapped insulations or flat cables. Also ideal for yarn applications, including sewing and weaving yarn for filter and sealing materials.

### **Product Features:**

- High molecular weight
- Designed for low reduction ratios
- · High stretch ratio
- · Processable by standard paste extrusion methods
- · Can be used to extrude pipe liners requiring high green strength
- Meets ASTM D4895-04 Type 1, Grade 1, Class B classification

## **Typical Properties (Not for specification purposes)**

Property	Test Method	Unit	Value	
Powder Properties				
Average particle size	ISO 13320	nm	500	
Bulk density	DIN EN ISO 60	g/l	480	
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Processing				
Range of Reduction Ratios (RR)	Dyneon Method		5:1 to 100:1	
Extrusion pressure @ RR 400:1	ASTM D4895	MPa	50	
Mechanical Properites (measured on sintered sheets according to ISO 12086)				
Tensile strength	DIN EN ISO 527-3	MPa	28	
Elongation at break	DIN EN ISO 527-3	%	340	
Specific gravity	DIN EN ISO 12086	g/cm <sup>3</sup>	2.15	

## **Product Form and Packaging**

Dyneon™ TF 2029 Z PTFE is supplied in moisture and dust-tight plastic drums. Capacity per drum: 25 kg. Order quantity per pallet: 300 kg.



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### **Our Worldwide Commitment to Quality**

Indicative of our commitment, most Dyneon design, development, production and service facilities have achieved global quality management certification. Production facilities have also received certification for their environmental management system. Please see the Dyneon website (www.dyneon.com) for the most up-to-date certification details.

## **Storage and Material Handling**

Dyneon TF 2029 Z PTFE can be stored for 3 years from the date of manufacture provided it is stored in a clean, dry place at a aremperature of less than 19°C to safe gaurd free-flowing properties.

## Safety/Toxicology

This is a PTFE material, so normal precautions observed with PTFE should be followed. Before processing this product, be sure to read and follow all precautions and directions for use contained in the product label and the Material Safety Data Sheet. General handling/processing precautions include: (1) Process only in well-ventilated areas; (2) Do not smoke in areas contaminated with powder/residue from this product; (3) Avoid eye contact; (4) After handling this product wash any contacted skin with soap and water; (5) Avoid contact with hot fluoropolymer. Potential hazards, including evolution of toxic vapors, can exist if processing occurs under excessively high temperature conditions. Appropriate local exhaust ventilation such as vapor extractor units should be installed above processing equipment. When cleaning processing equipment, do not burn off any of this product with an open flame or in a furnace.

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Product Stewardship - Replacement Emulsifier. Dyneon fluoroplastic products identified with a "Z" following the product name indicate products that are made using Dyneon's new replacement emulsifier. The new emulsifier is a polymerization aid used to manufacture certain fluoropolymers and is not an intended ingredient in the polymers. The new emulsifier eliminates the use of the former polymerization aid, APFO (ammonium perfluorooctanoate, the ammonium salt of perfluorooctanoic acid (PFOA)), in the manufacture of these fluoropolymers. The use of the replacement emulsifier in the manufacture of these Dyneon products is consistent with Dyneon's product stewardship principles and our commitment to US EPA's Voluntary PFOA Stewardship Program under which fluoropolymer manufacturers agreed to work towards eliminating PFOA in emissions and product content by the year 2015. Dyneon is pleased to report that we will have completely eliminated the use of APFO in our manufacturing processes by the end of December 2008.

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