

# 3M™ Dyneon™

## Fluoroplastic FEP 6322PZ

### Product Description

3M™ Dyneon™ Fluoroplastic Powder FEP 6322PZ is a super micronized powder of a fully fluorinated FEP polymer. The super fine powder is supporting optimal distribution, when using this material in dry blends or coating formulations.

### Special Features

- High thermal stability
- Wide processing window
- Excellent chemical resistance
- Good non-stick performance
- Low friction

Properties	Test method	Unit	Value
Melt Flow Index (372 °C/5 kg)	ASTM D1238	g/10 min	22
Specific Gravity	ASTM D792	g/cm <sup>3</sup>	2.15
Melting Point	ASTM D4591	°C	252
Tensile Strength at Break (23 °C)	ASTM D638	MPa	20
Elongation at Break (23 °C)	ASTM D638	%	300
Flexural Modulus	ASTM D790	MPa	580
Limiting Oxygen Index	ASTM D2863	%	> 95
Average Particle Size	DIN ISO 13320	μ	5

### 3M™ Dyneon™ Fluoroplastic FEP 6322PZ

#### Typical Properties

Due to the very fine particle average size and the very tight particle distribution, 3M™ Dyneon™ Fluoroplastic Powder FEP 6322PZ shows excellent distribution in mixtures and formulations. The high thermal and chemical resistance typical for FEP polymer gives a wide range of application window as binder or coating additive.

#### Typical Applications

3M™ Dyneon™ Fluoroplastic Powder FEP 6322PZ is designed to provide outstanding performance as a binder of fine particle size powders like graphite or carbon black. Furthermore, it can be used to formulate non-stick coating formulations.

#### Processing Recommendations

3M™ Dyneon™ Fluoroplastic Powder FEP 6322PZ can be added into coating formulations of primer materials to improve metal bonding and barrier performance of such layers. The material will be fully compatible with other fluoropolymers like PTFE or PFA.

Used as binder for powder materials, 3M™ Dyneon™ Fluoroplastic Powder FEP 6322PZ can be mixed in dry blends and will show an excellent distribution within the powder matrix.

To generate final films or plates, curing well above the melting point will be necessary. Recommended are curing temperatures of 280 – 320 °C to guarantee a fully melting of the polymer.

For safety reason check and follow the APME guide of safe handling fluoropolymers (see link under "Important notice").

#### Storage and Handling

FEP 6322PZ has a 3 year shelf life provided it is stored in a clean, dry place. FEP 6322PZ is hydrophobic, and generally does not require drying before processing unless high humidity conditions create surface moisture adsorption.

#### Safety Instructions

Follow the normal precautions observed with all fluoropolymer materials.

Please consult the Material Safety Data Sheet and Product Label for information regarding the safe handling of the material. By following all precautions and safety measures, processing these products poses no known health risks. General handling/processing precautions include: 1) Process only in well-ventilated areas. 2) Do not smoke in areas contaminated with powder/residue from these products. 3) Avoid eye contact. 4) If skin comes into contact with these products during handling, wash with soap and water afterwards. 5) Avoid contact with hot fluoropolymer.

Potential hazards, including release of toxic vapours, can arise if processing occurs under excessively high temperature conditions. Vapour extractor units should be installed above processing equipment. When cleaning processing equipment, do not burn off any of this product with a naked flame or in a furnace.

#### Delivery Form

3M™ Dyneon™ Fluoroplastic FEP 6322PZ is delivered in powder form.

Packaging sizes are:

- 15.9 kg box with a moisture and dust-proof PE liner
- 81.6 kg fibre drum with a moisture and dust-proof PE liner

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### Important Notice

All information set forth herein is based on our present state of knowledge and is intended to provide general notes regarding products and their uses. It should not therefore be construed as a guarantee of specific properties of the products described or their suitability for a particular application. 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 quality of our products is warranted under our General Terms and Conditions of Sale as now are or hereafter may be in force.

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.

General recommendations on health and safety in processing, on work hygiene and on measures to be taken in the event of accident are detailed in our material safety data sheets.

You will find further notes on the safe handling of fluoropolymers in the brochure "[Guide for the safe handling of Fluoropolymers Resins](#)" (download link) by PlasticsEurope, Box 3, B-1160 Brussels, Tel. +32 (2) 676 17 32.

You can also download it with your smartphone using the QR code below.



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Web Site: [www.dyneon.eu](http://www.dyneon.eu)

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