

## 3M™ Dyneon™ Fluoroplastic PFA 8502ESDZ

### Product Description

3M™ Dyneon™ Fluoroplastic PFA 8502ESDZ is an electrostatic dissipative fluorothermoplastic compound consisting of a fully fluorinated PFA base polymer and an electroconductive carbon black. The product has specifically been developed for transfer moulding.

### Special Features

- Electrostatic dissipative
- Wide service temperature range up to 240 °C
- Processing: Transfer moulding

Properties	Test method	Unit	Value*
Specific Gravity	DIN EN ISO 12086	g/cm <sup>3</sup>	2.11
Melting Point	DIN EN ISO 12086	°C	278
Melt Flow Index (372 °C/5 kg)	DIN EN ISO 1133	g/10 min	2
Tensile Strength at Break (23 °C)	ASTM D638	MPa	30
Elongation at Break (23 °C)	DIN EN ISO 527-1	%	290
Volume Resistivity	DIN ICE 93	Ohm x cm	< 10 000

\*typical values, not suitable for specification purposes

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### Typical Properties

3M Dyneon Fluoroplastic PFA 8502ESDZ is a black 3M Dyneon Fluoroplastic PFA compound that is electrostatically dissipative.

### Typical Applications

3M Dyneon Fluoroplastic PFA 8502ESDZ, with a Melt-Flow-Index (372 °C/5 kg) of 2 g/10 min, is a material with a high viscosity and is used in low shear processes. 3M Dyneon Fluoroplastic PFA 8502ESDZ has specifically been developed for transfermoulding, when an electrostatically dissipative product is required.

### Processing Recommendations

3M Dyneon Fluoroplastic PFA 8502ESDZ can be processed according to the known processing methods for thermoplastic polymers. All machine parts coming into contact with the melt or fumes of 3M Dyneon Fluoroplastic PFA 8502ESDZ should be made from highly corrosion resistant materials – usually high-nickel alloys such as Inconel® 625, Haynes® 242, Hastelloy® C, and Reiloy®. Off-gases and decomposition products during processing shall be managed via an appropriate exhaust fume management system, especially at the extruder die. For safe processing of Dyneon PFA please also check safety instructions below.

Typical processing temperatures for 3M Dyneon Fluoroplastic PFA 8502ESDZ lie between 340 °C and 370 °C. 3M Dyneon Fluoroplastic PFA 8502ESDZ has specifically been developed for transfermoulding.

Film extrusion and tube extrusion is also possible. For information on processing details please contact us.

Hastelloy®, Haynes® 242 and Reiloy® are registered Trademarks of Haynes International.

Inconel® is a registered Trademark of Special Metals Corporation.

### Storage and Handling

3M™ Dyneon™ Fluoroplastic PFA 8502ESDZ can be stored for a relatively long period of time provided it is stored in a clean, dry place. It is suggested to dry this product before processing to remove any absorbed moisture.

### Safety Instructions

Follow the normal precautions observed with all fluorothermoplastic 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 PFA 8502ESDZ is delivered in Pellet form.

Packaging sizes are:

50 kg cardboard box, containing two PE-bags with 25 kg content each

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### Important Notice

This Dyneon product is a newly introduced product that has not been fully commercialized. As a result, the formulation, manufacturing process, performance characteristics, and other properties of this product are not guaranteed and are subject to change without notice, provided that the Dyneon product will meet Dyneon's then current product specification. User is responsible for evaluating and determining whether this Dyneon product is suitable and appropriate for a particular use and intended application. The conditions of evaluation, selection, and use of the Dyneon product can vary widely and affect the use and intended application of the Dyneon product. Because many of these conditions are uniquely within the Buyer's knowledge and control, Buyer must evaluate and determine whether the Dyneon product is suitable and appropriate for a particular use and intended application.

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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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