

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 is a good option 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/cm³	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

Dyneon fluoroplastic PFA 8502ESDZ is a black compound that is electrostatically dissipative.

Typical Applications

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. Dyneon fluoroplastic PFA 8502ESDZ is a good option for transfer moulding, where an electrostatically dissipative product is required.

Processing Recommendations

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 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 follow the safety instructions below.

Typical processing temperatures for Dyneon fluoroplastic PFA 8502ESDZ lie between 340 °C and 370 °C. Dyneon fluoroplastic PFA 8502ESDZ is a good option for transfer moulding.

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

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

PFA is a fluoropolymer, so standard precautions observed with fluoropolymers should be followed. Read and follow all precautions and directions for use. Additional safe handling information can be found on the process safety section on this data sheet, the product label, Safety Data Sheet, and in published industry guides. General handling/processing precautions include, but are not limited to: (1) Processing and equipment cleaning only in well ventilated areas; (2) Do not smoke in areas contaminated with powder/residue from these products; (3) Avoid eye contact; (4) After handling these products wash any contacted skin with soap and water. Potential hazards, including evolution of toxic vapors, can exist when processing occurs under typical temperature conditions. Appropriate exhaust ventilation such as vapor extractor units should be installed above processing equipment. When cleaning processing equipment: do so under proper ventilation, use the lowest temperature possible and never use open flame as a heat source

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

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. User is solely responsible for ensuring compliance of their products with all applicable regulations.

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 analyse test types and conditions, and to handle and use raw polymers and related compounding ingredients. Testing in accordance with DIN, ISO and ASTM.

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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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We will gladly supply further contact details for our full network of global sales offices. Alternatively, find them [here](#).



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