

3M™ Dyneon™

Fluoroplastic PVDF 60120000

Product Description

Polyvinylidene Fluoride (PVDF) is ideal for multiple applications across a wide array of industries. Widely used in the chemical processing, wire and cable, semiconductor, and oil and gas industries. PVDF is also gaining recognition in automotive, building, electronics, food processing, pharmaceutical and battery applications.

PVDF 60120000 is inherently pure and chemically resistant against a variety of aggressive media.

Special Features

- Excellent chemical resistance to a variety of aggressive fluids and solvents
- Excellent strength and dimensional stability
- Good permeation resistance
- Extrusion or compression moulding grade

Properties	Test method	Unit	Value
Density	ISO 1183	g/cm ³	1.78
H ₂ O Absorption	ISO 62 (Method 1, 24 hr @ 23 °C)	%	< 0.04
Melt Flow Index	ASTM D1238 (230 °C, 5 kg)	g/10 min	1.5
	ASTM D1238 (230 °C, 2.16 kg)	g/10 min	0.5
Tensile Strength at Yield	ASTM D638 (23 °C, 50 mm/min)	MPa	55
Tensile Strength at Break	ASTM D638 (23 °C, 50 mm/min)	MPa	42
Elongation at Yield	ASTM D638 (23 °C, 50 mm/min)	%	7
Elongation at Break	ASTM D638 (23 °C, 50 mm/min)	%	35
Flexural Modulus	ASTM D790 (23 °C, 2 mm/min)	MPa	2,100
Melting Point	ASTM D3418	°C	173
Deflection Temperature (4mm thick)	ASTM D3418 (Load 0.46 MPa, after annealing)	°C	148
Limiting Oxygen Index (LOI) (sheet 3 mm thick)	ASTM D2863	%	44

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Typical Properties

PVDF 60120000 exhibits excellent thermal and dimensional stability, high strength, and maintains its mechanical properties at elevated temperatures.

Typical Applications

PVDF 60120000 is ideal for pipes, tubes, sheets, and slabs.

Processing Recommendations

PVDF 60120000 is a high molecular weight homopolymer, suitable for extrusion or compression moulding.

Storage and Handling

PVDF 60120000 has an extended shelf life provided it is stored in a clean, dry place in the original unopened container received from 3M. The Material 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 PVDF 60120000 is delivered in granular form.

Packaging size is:

- 25 kg cardboard box, 1050 kg per pallet

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



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