

A 3M Company

Dyneon™ Fluoroplastic PVDF 6008/0001

Features and Benefits

- Excellent chemical resistance to a variety of aggressive fluids and solvents
- Good permeation resistance
- Smooth, anti-fouling surfaces
- Injection molding grade
- Excellent strength and dimensional stability
- · Good color stability

Typical Properties (Data not for specification purposes)

	Test Conditions	Test Method	Unit	Value
Form: Pellets				
Density		ISO 1183	g/cm³	1.78
H ₂ O absorption	24hr @ 23°C	ISO 62 (method 1)	%	<0.04
Melt Flow Index	230°C, 5kg	ASTM D 1238	g/10 min	24
	230°C, 2.16kg	ASTM D 1238	g/10 min	8
Tensile stress at yield	23°C, 50mm/min	ASTM D 638	MPa	55
			psi	7975
Tensile stress at break	23°C, 50mm/min	ASTM D 638	MPa	42
			psi	6090
Elongation at yield	23°C, 50mm/min	ASTM D 638	%	7
Elongation at break	23°C, 50mm/min	ASTM D 638	%	35
Flexural modulus	23°C, 2mm/min	ASTM D 790	MPa	2500
			psi	362,500
Melting point (crystallinity by DSC)		ASTM D 3418	°C (°F)	174 (345)
Deflection temperature (4mm thick)	load 0.46 MPa, after annealing	ASTM D 648	°C (°F)	147 (297)
	load 1.82 MPa	ASTM D 648	°C (°F)	112 (234)
Molding shrinkage			%	3
UL - 94 Flammability test		UL - 94	class	V-O
Limiting oxygen index (sheet 3mm thick)		ASTM D 2863	%	44

Introduction

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

Dyneon PVDF 6008/0001 is easily processed under a variety of conventional thermoplastic conversion techniques, being particularly suitable for injection molding. PVDF 6008/0001 is inherently pure and chemically resistant against a variety of aggressive fluids and solvents. PVDF 6008/0001 exhibits excellent dimensional stability, abrasion resistance and high strength, and maintains its mechanical properties at elevated temperature.



Storage and Material Handling

Dyneon™ PVDF 6008/0001 has an unlimited shelf life provided it is stored in a clean, dry place. Dyneon PVDF 6008/0001 is hydrophobic, and generally does not require drying before processing unless high humidity conditions create surface moisture adsorption.

Safety/Toxicology

This is a fluoroplastic material so normal precautions observed with fluoroplastics should be followed. Before processing this product, read the product Material Safety Data Sheet and labels. Follow all directions and handling precautions. 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) after handling these products wash any contacted skin with soap and water.

Technical Information and Test Data

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.

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