Hyflon® PFA P130X

Perfluoroalkoxy

Solvay Specialty Polymers

Message:

Hyflon® PFA is a unique family of semi-crystalline, melt processable perfluoropolymers which combine excellent mechanical characteristics to unique properties such as chemical inertness, heat resistance, inherent flame resistance, low surface energy, and exceptional dielectric properties. Hyflon® PFA resins have been designed to retain their properties over a wide range of temperatures from cryogenic to 300°C (572°F)* and are the material of choice in applications such as linings in the chemical process industry, specialty cables, semiconductor industry, aerospace, and other challenging industries. Hyflon® PFA P130X is designed for enhanced creep resistance, higher long-term pressure resistance, and excellent thermal stability. It is a ASTM D 3307 Type XVII.

* For rating at 300°C (572°F) contact your Solvay Representative.

General Information				
Features	Semicrystallization			
	Low liquidity			
	Heat resistance, high			
	Flame retardancy			
Uses	Semiconductor molding compound			
	Lining			
	Cable sheath			
	Piping system			
	Pipe fittings			
	Aerospace applications			
Agency Ratings	ASTM D 3307 Type XVII			
Forms	Particle			
Processing Method	Extrusion			
Physical	Nominal Value	Unit	Test Method	
Melt Mass-Flow Rate (MFR) (372°C/5.0 kg)	5.0 - 9.0	g/10 min	ASTM D1238	
Density	2.120 - 2.170	g/cm³	ASTM D792	
Heat of crystallization	28.0 - 38.0	J/g	ASTM D4591	
Heat of Fusion	28.0 - 38.0	J/g	ASTM D4591	
Linear expansion coefficient	1.2E-4 - 2.0E-4	cm/cm/°C	ASTM D696	
Hardness	Nominal Value	Unit	Test Method	
Durometer Hardness (Shore D)	55 - 60		ASTM D2240	
Mechanical	Nominal Value	Unit	Test Method	
Tensile Modulus ¹ (23°C)	500 - 600	MPa	ASTM D1708	
Tensile Strength (Break, 23°C)	> 22.0	MPa	ASTM D1708	
Tensile Elongation (Break, 23°C)	> 300	%	ASTM D1708	
Impact	Nominal Value	Unit	Test Method	
Charpy Notched Impact Strength (23°C)	No Break		ASTM D256	

Thermal	Nominal Value	Unit	Test Method
Melting Temperature	310 - 316	°C	ASTM D4591
Peak Crystallization Temperature (DSC)	285 - 295	°C	ASTM D4591
Specific Heat (23°C)	900 - 1100	J/kg/°C	ASTM E1269
Thermal Conductivity (40°C)	0.15 - 0.25	W/m/K	ASTM C177
Flammability	Nominal Value	Unit	Test Method
Oxygen Index	95	%	ASTM D2863
Additional Information			

PROCESSINGBecause PFA is corrosive in the melt, machinery used to process Hyflon® should be lined with corrosion resistant alloys.HEALTH SAFETY AND ENVIRONMENTHyflon® PFA P130X is a very inert polymer and it is not harmful if used and handled according to standard processing procedures.If handled inappropriately, it may release harmful toxic chemicals. Please refer to the Material Safety Data Sheets for more information on

handling and safety.PACKAGING AND STORAGEHyflon® PFA P130X resin is available in 25 kg (55 lbs) and 600 kg (1323 lbs) packaging. Though it has an indefinite shelf life, it is recommended to store it in a clean area, protected from direct sunlight, and possible contamination.

NOTE

1. 1.0 mm/min

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