Hyflon® PFA P220

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 250-260°C (482-500°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 220X is a low melt flow rate resin designed for blow molding applications, where very high viscosity and melt strength are needed. It also has significantly lower permeability to gasses than standard PFAs.

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 II		
Forms	Particle		
Processing Method	Extrusion		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density	2.120 - 2.170	g/cm³	ASTM D792
Melt flow-(372°C, 5 Kg)	2.50 - 5.00	g/10 min	ASTM D1238
Tensile fracture strength (280°C)	4.60	MPa	ASTM D1708
Tensile Modulus (280°C)	49.0	MPa	ASTM D1708
Heat of crystallization	35.0 - 45.0	J/g	DSC
Heat of Fusion	35.0 - 45.0	Jg	DSC
Linear expansion coefficient	1.2E-4 - 2.0E-4	cm/cm/°C	ASTM D696
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus [1] (23°C, 1.00 mm)	600	MPa	ASTM D1708
Tensile Strength (Break, 23°C)	14.5	MPa	ASTM D1708
Tensile Elongation (Break, 23°C)	> 210	%	ASTM D1708
Thermal	**Nominal Value**	**Unit**	**Test Method**
Melting Temperature	309 - 312	°C	ASTM D3307

Peak Crystallization Temperature (DSC)	295	°C	DSC
Specific Heat (23°C)	0.900 - 1.10	J/kg/°C	DSC
Thermal Conductivity (40°C)	0.20	W/m/K	ASTM C177

Additional Information

PROCESSING
Because PFA is corrosive in the melt, machinery used to process Hyflon® should be lined with corrosion resistant alloys. Clean, reworked material can be used up to 25% in weight.
HEALTH SAFETY AND ENVIRONMENT
Hyflon® PFA 220X 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 STORAGE
Hyflon® PFA 220X resin is available in 25kg (55lbs) and 600kg (1323bs) 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

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection.All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China