Solvay Specialty Polymers HyflonÂ® PFA P455 Perfluoroalkoxy (PFA)

Category : Polymer , Thermoplastic , Fluoropolymer , PFA

Material Notes:

HyflonÂ® 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. HyflonÂ® PFA resins have been designed to retain their properties over a wide range of temperatures from cryogenic to 250-260Â°C (482-500Â°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. HyflonÂ® PFA P455 is a low molecular weight, high melt flow rate multi purpose resin designed for cable extrusion and injection molding. HyflonÂ® PFA P455 is an ASTM D3307 - Type IV resin.Features: Flame Retardant; High Flow; High Heat Resistance; Low Molecular Weight; Semi CrystallineUses: Aerospace Applications; Cable Jacketing; Liners; Semiconductor Molding CompoundsAdditional Properties: Crystallization Heat - DSC 25.0 to 35.0 J/g; Flex Life - ASTM D2176 (300.0 Âµm): 1.5E+3 to 5.5E+3 Cycles; Heat of Fusion - DSC 25.0 to 35.0 J/gInformation provided by Solvay Specialty Polymers.

Order this product through the following link:
http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Hyflon-PFA-P455-Perfluoroalkoxy-PFA.php

Physical Properties	Metric	English	Comments
Density	2.13 - 2.18 g/cc	0.0770 - 0.0788 lb/inÂ³	ASTM D792
Melt Flow	22 - 28 g/10 min @Load 5.00 kg, Temperature 372 Â°C	22 - 28 g/10 min @Load 11.0 lb, Temperature 702 Â°F	ASTM D1238

Mechanical Properties	Metric	English	Comments
Hardness, Shore D	55 - 60	55 - 60	ASTM D2240
Tensile Strength at Break	>= 22.0 MPa	>= 3190 psi	ASTM D638
Elongation at Break	>= 280 %	>= 280 %	ASTM D638
Tensile Modulus	0.500 - 0.600 GPa	72.5 - 87.0 ksi	1.0 mm/min; ASTM D638
Izod Impact, Notched	NB	NB	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear, Parallel to Flow	120 - 200 Âµm/m-Â°C	66.7 - 111 Âµin/in-Â°F	
Specific Heat Capacity	0.900 - 1.10 J/g-Â°C	0.215 - 0.263 BTU/lb-Â°F	ASTM C351
Thermal Conductivity	0.200 W/m-K @Temperature 40.0 Â°C	1.39 BTU-in/hr-ftÂ²-Â°F @Temperature 104 Â°F	ASTM C177

Thermal Properties	Metric	English	Comments
Melting Point	279 - 310 Â°C	534 - 590 Â°F	DSC
Crystallization Temperature	279 - 289 Â°C	534 - 552 Â°F	Peak; ASTM D3418
Maximum Service Temperature, Air	260 Â°C	500 Â°F	Continuous Use
Flammability, UL94	V-0	V-0	
Oxygen Index	95 %	95 %	ASTM D2863

Electrical Properties	Metric	English	Comments
Volume Resistivity	>= 1.00e+17 ohm-cm	>= 1.00e+17 ohm-cm	ASTM D257
Surface Resistance	>= 1.00e+17 ohm	>= 1.00e+17 ohm	ASTM D257
Dielectric Constant	2.1 @Frequency 100000 Hz	2.1 @Frequency 100000 Hz	ASTM D150
	2.1 @Frequency 50.0 Hz	2.1 @Frequency 50.0 Hz	ASTM D150
Dielectric Strength	35.0 - 40.0 kV/mm	889 - 1020 kV/in	ASTM D149
Dissipation Factor	<= 0.00050 @Frequency 100000 Hz	<= 0.00050 @Frequency 100000 Hz	ASTM D150
	<= 0.00050 @Frequency 50.0 Hz	<= 0.00050 @Frequency 50.0 Hz	ASTM D150

Descriptive Properties	Value	Comments
Agency Ratings	ASTM D 3307 Type IV	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	Latin America	
	North America	
Form	Pellets	
Processing Technique	Extrusion; Injection Molding	

Contact Songhan Plastic Technology Co.,Ltd.

Website : www.lookpolymers.com
Email : sales@lookpolymers.com
Tel : +86 021-51131842
Mobile : +86 13061808058
Skype : lookpolymers
Address : United North Road 215,Fengxian District, Shanghai City,China