

Solvay Specialty Polymers Ixef® 1027 Polyarylamide (PARA) (Unverified Data**)

Category : Polymer , Thermoplastic , Polyarylamide (PAA) , Polyarylamide, Glass Fiber Filled

Material Notes:

Ixef 1027 is a 50% glass-fiber reinforced, heat stabilized polyarylamide, which exhibits very high strength and rigidity, outstanding surface gloss, and excellent creep resistance. - Black: Ixef 1027/9000 - natural: Ixef 1027/0008
Injection Notes: Hot Runners: 250°C to 260°C (482°F to 500°F) Drying The material as supplied is ready for molding without drying. However, If the bags have been open for longer than 24 hours, the material needs to be dried. When using a desiccant air dryer with dew point of -28°C (-18°F) or lower, these guidelines can be followed: 0.5-1.5 hour at 120°C (248°F), 1-3 hours at 100°C (212°F), or 1-7 hours at 80°C (176°F). Injection Molding IXEF 1027 compound can be readily injection molded in most screw injection molding machines. A general purpose screw is recommended, with minimum back pressure. The measured melt temperature should be about 280°C (536°F), and the barrel temperatures should be around 250°C to 260°C (482°F to 500°F) in the rear zone, gradually increasing to 260°C to 290°C (500°F to 554°F) in the front zone. If hot runners are used, they should be set to 250°C to 260°C (482°F to 500°F). To maximize crystallinity, the temperature of the mold cavity surface must be held between 120°C and 140°C (248°F and 284°F). Molding at lower temperatures will produce articles that may warp, have poor surface appearance, and have a greater tendency to creep. Set injection pressure to give rapid injection. Adjust holding pressure and hold time to maximize part weight. Transfer from injection to hold pressure at the screw position just before the part is completely filled (95%-99%). Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Ixef-1027-Polyarylamide-PARA-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.64 g/cc	0.0592 lb/in ³	ISO 1183
Filler Content	50 %	50 %	Glass Fiber Reinforcement
Water Absorption	0.16 % @Temperature 23.0 °C, Time 86400 sec	0.16 % @Temperature 73.4 °F, Time 24.0 hour	ISO 62
Moisture Absorption at Equilibrium	1.5 %	1.5 %	65% RH; Internal Method
Linear Mold Shrinkage	0.0010 - 0.0030 cm/cm	0.0010 - 0.0030 in/in	Internal Method

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	235 MPa @Temperature 23.0 °C	34100 psi @Temperature 73.4 °F	ISO 527-2
Elongation at Break	1.8 %	1.8 %	ISO 527-2
Tensile Modulus	20.0 GPa	2900 ksi	ISO 527-2
Flexural Strength	360 MPa	52200 psi	ISO 178

Mechanical Properties	@Temperature 23.0 °C Metric	@Temperature 73.4 °F English	Comments
Flexural Modulus	18.5 GPa	2680 ksi	ISO 178
Izod Impact, Notched	0.900 J/cm	1.69 ft-lb/in	ASTM D256
	7.20 J/cm	13.5 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	17.0 µm/m-°C	9.44 µin/in-°F	ISO 11359-2
Deflection Temperature at 1.8 MPa (264 psi)	220 °C	428 °F	Annealed; ISO 75-2/A
Flammability, UL94	HB	HB	UL 94
Oxygen Index	25 %	25 %	ISO 4589-2

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	IEC 60093
Dielectric Constant	4.6 @Frequency 110 Hz	4.6 @Frequency 110 Hz	IEC 60250
Dielectric Strength	28.0 kV/mm	711 kV/in	IEC 60243-1
Comparative Tracking Index	600 V	600 V	IEC 60112

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	250 - 260 °C	482 - 500 °F	
Front Barrel Temperature	260 - 290 °C	500 - 554 °F	
Melt Temperature	280 °C	536 °F	
Mold Temperature	120 - 140 °C	248 - 284 °F	
Drying Temperature	120 °C	248 °F	
Dry Time	0.500 - 1.50 hour	0.500 - 1.50 hour	

Descriptive Properties	Value	Comments
Additive	Heat Stabilizer	
Appearance	Black	
Automotive Specifications	GM GM7001M PAMXD6(A4,A22,A42,A64,BA651,G30,MS1650,NS335) Color: 9000 Black	

Availability Descriptive Properties	Africa & Middle East Value	Comments
	Asia Pacific	
	Europe	
	North America	
	South America	
Features	Good Chemical Resistance	
	Good Creep Resistance	
	Good Dimensional Stability	
	Heat Stabilized	
	High Flow	
	High Strength	
	Low Moisture Absorption	
	Outstanding Surface Finish	
	Ultra High Stiffness	
Forms	Pellets	
Generic	PARA	
Injection Rate	Fast	
Processing Method	Injection Molding	
RoHS Compliance	RoHS Compliant	
Uses	Appliance Components	
	Appliances	
	Automotive Applications	
	Business Equipment	
	Furniture	
	Gears	
	Industrial Applications	
	Lawn and Garden Equipment	
	Machine/Mechanical Parts	

Descriptive Properties	Value Replacement	Comments
	Power/Other Tools	

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