

Solvay Specialty Polymers Ixef® 1032 Polyarylamide (PARA) (Unverified Data**)

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

Material Notes:

Ixef 1032 is a 60% glass-fiber reinforced, general purpose polyarylamide compound which exhibits very high strength and rigidity, outstanding surface gloss, and excellent creep resistance. - Natural: Ixef 1032/0008 - Black: Ixef 1032/9008 - Custom Colorable Injection Notes: Injection time: 0.5 to 2.5 sec Holding time: 3e sec Cooling time: 2.5e² sec (e= wall thickness in mm) 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 1032 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 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%). Data is presented for dry polymer unless noted as 'conditioned'. Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Ixef-1032-Polyarylamide-PARA-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.77 g/cc	0.0639 lb/in ³	ISO 1183
Filler Content	60 %	60 %	Glass Fiber Reinforcement
Water Absorption	0.13 % @Temperature 23.0 °C, Time 86400 sec	0.13 % @Temperature 73.4 °F, Time 24.0 hour	ISO 62
Moisture Absorption at Equilibrium	1.3 %	1.3 %	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	250 MPa	36300 psi	Conditioned; ISO 527-2
	280 MPa	40600 psi	ISO 527-2
Elongation at Break	1.8 %	1.8 %	ISO 527-2
	2.0 %	2.0 %	Conditioned; ISO 527-2

Tensile Modulus Mechanical Properties	23.0 GPa Metric	3340 ksi English	Conditioned; ISO 527-2 Comments
	24.0 GPa	3480 ksi	ISO 527-2
Flexural Strength	400 MPa	58000 psi	ISO 178
Flexural Modulus	23.5 GPa	3410 ksi	ISO 178
Izod Impact, Notched	1.20 J/cm	2.25 ft-lb/in	ASTM D256
	9.00 J/cm	16.9 ft-lb/in	ASTM D256

Thermal Properties	Metric	English	Comments
CTE, linear	14.0 $\mu\text{m}/\text{m}\cdot^\circ\text{C}$	7.78 $\mu\text{in}/\text{in}\cdot^\circ\text{F}$	ISO 11359-2
Deflection Temperature at 1.8 MPa (264 psi)	230 $^\circ\text{C}$	446 $^\circ\text{F}$	Unannealed; ISO 75-2/A
Flammability, UL94	HB	HB	UL 94
Oxygen Index	25 %	25 %	ISO 4589-2
Glow Wire Test	775 $^\circ\text{C}$ @Thickness 1.50 mm	1430 $^\circ\text{F}$ @Thickness 0.0591 in	Glow Wire Flammability Index; IEC 60695-2-12
	775 $^\circ\text{C}$ @Thickness 0.800 mm	1430 $^\circ\text{F}$ @Thickness 0.0315 in	Glow Wire Flammability Index; IEC 60695-2-12
	800 $^\circ\text{C}$ @Thickness 0.800 mm	1470 $^\circ\text{F}$ @Thickness 0.0315 in	Glow Wire Ignition Temperature; IEC 60695-2-13
	800 $^\circ\text{C}$ @Thickness 1.50 mm	1470 $^\circ\text{F}$ @Thickness 0.0591 in	Glow Wire Ignition Temperature; IEC 60695-2-13
	825 $^\circ\text{C}$ @Thickness 3.00 mm	1520 $^\circ\text{F}$ @Thickness 0.118 in	Glow Wire Ignition Temperature; IEC 60695-2-13
	960 $^\circ\text{C}$ @Thickness 3.00 mm	1760 $^\circ\text{F}$ @Thickness 0.118 in	Glow Wire Flammability Index; IEC 60695-2-12

Electrical Properties	Metric	English	Comments
Volume Resistivity	1.00e+13 ohm-cm	1.00e+13 ohm-cm	IEC 60093
Dielectric Constant	4.5	4.5	IEC 60250
	@Frequency 110 Hz	@Frequency 110 Hz	
Dielectric Strength	24.0 kV/mm	610 kV/in	IEC 60243-1

Electrical Properties	0.0090 Metric	0.0090 English	Comments
	@Frequency 110 Hz	@Frequency 110 Hz	
Comparative Tracking Index	600 V	600 V	IEC 60112

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	250 - 260 °C	482 - 500 °F	
Middle Barrel Temperature	260 - 270 °C	500 - 518 °F	
Front Barrel Temperature	270 - 280 °C	518 - 536 °F	
Nozzle Temperature	260 - 290 °C	500 - 554 °F	
Melt Temperature	280 °C	536 °F	
Mold Temperature	120 - 140 °C	248 - 284 °F	
Drying Temperature	80.0 °C	176 °F	
Dry Time	12.0 hour	12.0 hour	
Moisture Content	0.30 %	0.30 %	
Injection Pressure	50.0 - 150 MPa	7250 - 21800 psi	
Hold Pressure	75.0 MPa	10900 psi	
Back Pressure	0.000 - 1.00 MPa	0.000 - 145 psi	

Descriptive Properties	Value	Comments
Appearance	Black	
	Colors Available	
	Natural Color	
Automotive Specifications	ASTM D6779 PA111G60	
	GM GM7001M	
	GM GM7001M PAMXD6 A4 A22 A64 BA661 DC1770 G30 KS2400 MS1800 NS340 RT7 SS225 Color: 0008 Natural	
	GM GM7001M PAMXD6 A4 A22 A64 BA661 DC1770 G30 KS2400 MS1800 NS340 RT7 SS225 Color: 9008 Black	
Availability	Africa & Middle East	
	Asia Pacific	

Descriptive Properties	Europe Value	Comments
	North America	
	South America	
Features	Good Chemical Resistance	
	Good Creep Resistance	
	Good Dimensional Stability	
	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	
Screw L/D Ratio	15.0:1.0 to 20.0:1.0	
Uses	Automotive Applications	
	Automotive Electronics	
	Automotive Interior Parts	
	Furniture	
	High Gloss Applications	
	Metal Replacement	
	Sporting Goods	

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