

Solvay Specialty Polymers Ixef® GS-1022 Polyarylamide (PARA) (Unverified Data**)

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

Material Notes:

Ixef GS-1022 is a 50% glass-fiber reinforced grade of polyarylamide (PARA) available in several colors. Parts molded from these colored resins can withstand high-energy gamma radiation without significant change in appearance and physical properties. Ixef GS-1022 resins demonstrate no evidence of cytotoxicity, sensitization, intracutaneous reactivity or acute systemic toxicity, based on biocompatibility testing as defined by ISO 10993-1. This resin offers superior strength and stiffness combined with outstanding surface gloss and exceptional flow and is well suited for medical applications, such as single use surgical instruments and structural device housings, and applications in food service equipment. Colors available: - Brown: GS-1022 BN01 - Blue: GS-1022 BU01 - Green: GS-1022 GN01 - Grey: GS-1022 GY01 - Grey: GS-1022 GY02 - Grey: GS-1022 GY51 - White: GS-1022 WH01 - Black: 1022/9006
 Additional Information: Property values for individual batches will vary within specification limits. Values shown are typical of Ixef GS-1022/WH01 resin; other colorants may alter values. There will be a shift in color when comparing pre-gamma sterilization and postgamma sterilization colors. It is also expected that the colors will revert to some degree, back toward the as-molded color. Lighter colors may display the greatest variation.
 Injection Notes:
 Hot runners: 250° to 260°C (482° to 500°F)
 Data is presented for dry polymer. Information provided by Solvay Specialty Polymers.

Order this product through the following link:

http://www.lookpolymers.com/polymer_Solvay-Specialty-Polymers-Ixef-GS-1022-Polyarylamide-PARA-nbspUnverified-Data.php

Physical Properties	Metric	English	Comments
Density	1.78 g/cc	0.0643 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	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	265 MPa	38400 psi	ISO 527-2
Elongation at Break	1.8 %	1.8 %	ISO 527-2
Tensile Modulus	22.0 GPa	3190 ksi	ISO 527-2
Flexural Strength	380 MPa	55100 psi	ISO 178
Flexural Modulus	22.0 GPa	3190 ksi	ISO 178
Izod Impact, Unnotched (ISO)	50.0 kJ/m ²	23.8 ft-lb/in ²	ISO 180

Thermal Properties	Metric	English	Comments
CTE, linear	15.0 $\mu\text{m}/\text{m}\cdot^{\circ}\text{C}$	8.33 $\mu\text{in}/\text{in}\cdot^{\circ}\text{F}$	ISO 11359-2
Deflection Temperature at 1.8 MPa (264 psi)	230 $^{\circ}\text{C}$	446 $^{\circ}\text{F}$	Unannealed; ISO 75-2/A

Processing Properties	Metric	English	Comments
Rear Barrel Temperature	250 - 260 $^{\circ}\text{C}$	482 - 500 $^{\circ}\text{F}$	
Front Barrel Temperature	260 - 290 $^{\circ}\text{C}$	500 - 554 $^{\circ}\text{F}$	
Nozzle Temperature	260 - 290 $^{\circ}\text{C}$	500 - 554 $^{\circ}\text{F}$	
Melt Temperature	280 $^{\circ}\text{C}$	536 $^{\circ}\text{F}$	
Mold Temperature	120 - 140 $^{\circ}\text{C}$	248 - 284 $^{\circ}\text{F}$	
Drying Temperature	120 $^{\circ}\text{C}$	248 $^{\circ}\text{F}$	
Dry Time	0.500 - 1.50 hour	0.500 - 1.50 hour	

Descriptive Properties	Value	Comments
Additive	Gamma Stabilizer	
Agency Ratings	ISO 10993	
	ISO 10993-Part 1	
Appearance	Black	
	Colors Available	
Availability	Africa & Middle East	
	Asia Pacific	
	Europe	
	North America	
	South America	
Features	Biocompatible	
	E-beam Sterilizable	
	Ethylene Oxide Sterilizable	
	Good Chemical Resistance	
	Good Creep Resistance	

Descriptive Properties	Value	Comments
	Good Dimensional Stability	
	Good Sterilizability	
	High Flow	
	High Strength	
	Low Moisture Absorption	
	Outstanding Surface Finish	
	Radiation (Gamma) Resistant	
	Radiation Sterilizable	
	Radiotranslucent	
	Ultra High Stiffness	
Forms	Pellets	
Generic	PARA	
Injection Rate	Fast	
Processing Method	Injection Molding	
Uses	Dental Applications	
	Hospital Goods	
	Medical Appliances	
	Medical/Healthcare Applications	
	Surgical Instruments	

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