

Ixef® 3012

Polyarylamide

Solvay Specialty Polymers

Message:

Ixef 3008 is a 30% carbon fiber reinforced polyaramide compound with very high strength and rigidity, good surface gloss, excellent creep resistance, and lower density than glass fiber reinforced engineering resin. Black: Ixef 3008/9008

General Information	
Filler / Reinforcement	Glass and carbon fiber reinforced materials, 55% filler by weight
Features	Super rigidity
	Good dimensional stability
	Excellent appearance
	Low hygroscopicity
	High strength
	Good creep resistance
	High liquidity
	Good chemical resistance
Uses	Lawn and Garden Equipment
	Bushing
	Gear
	Electrical/Electronic Applications
	Electrical appliances
	Power/other tools
	Industrial application
	Machine/mechanical parts
	Home appliance components
	Furniture
	Metal substitution
	Parts under the hood of a car
	Automotive Electronics
	Application in Automobile Field
	Mobile phone
RoHS Compliance	Cam
	Camera application
	Contact manufacturer
Appearance	Black
Forms	Particle
Processing Method	Injection molding

Physical	Dry	Conditioned	Unit	Test Method
Specific Gravity ¹	1.57	--	g/cm ³	ISO 1183
Water Absorption (24 hr)	0.24	--	%	ASTM D570
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	38500	36500	MPa	ISO 527-2
Tensile Stress	290	235	MPa	ISO 527-2
Tensile Strain (Break)	1.1	0.90	%	ISO 527-2
Flexural Modulus	36000	35000	MPa	ISO 178
Flexural Stress	440	365	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179
-40°C, complete fracture	6.4	6.0	kJ/m ²	ISO 179
-30°C, complete fracture	6.4	--	kJ/m ²	ISO 179
23°C, complete fracture	6.7	6.3	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength				ISO 179
-40°C, complete fracture	50	30	kJ/m ²	ISO 179
-30°C, complete fracture	50	--	kJ/m ²	ISO 179
23°C, complete fracture	60	35	kJ/m ²	ISO 179
Notched Izod Impact	7.5	--	kJ/m ²	ISO 180
Unnotched Izod Impact Strength	45	--	kJ/m ²	ISO 180
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	230	--	°C	ISO 75-2/A
Linear thermal expansion coefficient				ISO 11359-2
Flow: 0 to 80°C	4.0E-6	--	cm/cm/°C	ISO 11359-2
Flow: 130 to 200°C	2.2E-6	--	cm/cm/°C	ISO 11359-2
Horizontal: 0 to 50°C	4.3E-5	--	cm/cm/°C	ISO 11359-2
Horizontal: 100 to 150°C	9.0E-5	--	cm/cm/°C	ISO 11359-2
Horizontal: 150 to 200°C	1.0E-4	--	cm/cm/°C	ISO 11359-2
Flammability	Dry	Conditioned		Test Method
Flame Rating ²	HB	--		UL 94
Additional Information	Dry	Conditioned	Unit	
Water content-Saturation 50% RH	--	1.1	%	
调节后的 Conditioned to 50% RH in accordance with ISO 1110-1995 E Method 4.1				
Injection	Dry	Unit		
Drying Temperature	120		°C	
Drying Time	0.50 - 1.5		hr	
Rear Temperature	250 - 260		°C	

Front Temperature	260 - 290	°C
Processing (Melt) Temp	280	°C
Mold Temperature	120 - 160	°C

Injection instructions

热流道系统:250 °C~260 °C (482°F~500 °F) 射出压力:快速

干燥:所提供的成型用材料无需干燥处理.但是,如果袋已被打开超过24小时,必须先干燥材料.如果使用的除湿空气干燥机露点为-28 ° C (-18 ° F)或更低,应遵循以下规则:120 ° C(248 °F)温度下 0.5~1.5小时, 100°C C(212°F)温度下1~3个小时,或80 °C(176 °F)温度下1-7个小时. 注塑成型:

IXEF30080混合物在大多数螺杆注塑机上均可以很容易地注射成型.建议采用通用螺杆,背压取最低值. 测得的熔融温度应该在280°C (536°F),左右,机筒后端温度应该在250~260°C (482~500°F)左右,前端逐渐增至260 °C~280°C (500~554 °F).如果使用热流道,温度应设置为250~260 °C(482~500 ° F) . 为了最大限度地提高结晶度,模腔表面温度必须保持在120和140°C(248和284°F)之间.成型温度低,容易使产品产生翘曲,外观不良,并极可能产生蠕变.射出压力应确保快速射出.调整保压压力和时间,尽可能提高零件的重量.部件正好完全填充完毕(95-99%)前,将注塑件从射出部位转移到螺杆位置进行保压.

NOTE

1.	Method A
	These flammability ratings do not represent the risk of these materials or any other materials in actual fire situations.
2.	

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