



RAMOFIN PPH300G4

Polyram Ram-On Industries - Polypropylene Homopolymer

Monday, August 04, 2008

General Information

Product Description

20% GLASS-FIBER REINFORCED POLYPROPYLENE FOR INJECTION MOULDING APPLICATION.

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America • South America
Filler / Reinforcement	• Glass Fiber Reinforcement, 20 % Filler by Weight		
RoHS Compliance	• RoHS Compliant		
Processing Method	• Injection Molding		

ASTM and ISO Properties ¹

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Specific Gravity	1.01 to 1.07	1.01 to 1.07	ASTM D792
Density	1.01 to 1.07 g/cm ³	1.01 to 1.07 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ASTM D1238
Melt Mass-Flow Rate (MFR) (230°C/2.16 kg)	5.0 g/10 min	5.0 g/10 min	ISO 1133
Molding Shrinkage (Flow)	0.0020 to 0.0050 in/in	0.20 to 0.50 %	ASTM D955
Molding Shrinkage	0.20 to 0.50 %	0.20 to 0.50 %	ISO 2577
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Modulus	696000 psi	4800 MPa	ASTM D638
Tensile Modulus	696000 psi	4800 MPa	ISO 527-2
Tensile Strength (Yield)	10200 psi	70.0 MPa	ASTM D638
Tensile Stress (Yield)	10200 psi	70.0 MPa	ISO 527-2
Tensile Elongation (Break)	3.0 %	3.0 %	ASTM D638
Tensile Strain (Break)	3.0 %	3.0 %	ISO 527-2
Flexural Modulus	464000 psi	3200 MPa	ASTM D790
Flexural Modulus	464000 psi	3200 MPa	ISO 178
Flexural Strength	14500 psi	100.0 MPa	ASTM D790
Flexural Strength	14500 psi	100.0 MPa	ISO 178
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Notched Izod Impact (73 °F (23 °C))	1.78 ft-lb/in	95.0 J/m	ASTM D256
Notched Izod Impact Strength (73 °F (23 °C))	4.28 ft-lb/in ²	9.00 kJ/m ²	ISO 180

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Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load 66 psi (0.45 MPa), Unannealed	307 °F	153 °C	ASTM D648
Heat Deflection Temperature 66 psi (0.45 MPa), Unannealed	307 °F	153 °C	ISO 75-2/B
Deflection Temperature Under Load 264 psi (1.8 MPa), Unannealed	293 °F	145 °C	ASTM D648
Heat Deflection Temperature 264 psi (1.8 MPa), Unannealed	293 °F	145 °C	ISO 75-2/A
Melting Temperature	329 °F	165 °C	ASTM D3418
Melting Temperature (DSC)	329 °F	165 °C	ISO 11357
Maximum Use Temperature Short Peaks Operation	140 °C	140 °C	
Maximum Use Temperature	110 °C	110 °C	

Flammability	Nominal Value (English)	Nominal Value (SI)	Test Method
Flame Rating - UL (0.118 in (3.00 mm))	HB	HB	UL 94

Processing Information

Injection	Nominal Value (English)	Nominal Value (SI)
Rear Temperature	374 to 428 °F	190 to 220 °C
Middle Temperature	392 to 437 °F	200 to 225 °C
Front Temperature	401 to 446 °F	205 to 230 °C
Mold Temperature	86.0 to 149 °F	30.0 to 65.0 °C
Injection Pressure	10200 to 15200 psi	70.0 to 105 MPa
Holding Pressure	5080 to 10200 psi	35.0 to 70.0 MPa
Back Pressure	50.8 to 102 psi	0.350 to 0.700 MPa
Screw Speed	60 to 90 rpm	60 to 90 rpm

Injection Notes

Fill Speed: 25 to 50 mm/sec

Notes

¹ Typical properties: these are not to be construed as specifications.