

CRP Technology Windform® GF 2.0 Polyamide-Aluminum-Glass Composite

Category : Polymer , Rapid Prototyping Polymer , Thermoplastic , Nylon , Nylon 12

Material Notes:

Processed by selective laser sintering (SLS). Windform® GF 2.0 is the evolutionary substitute for Windform GF, our first generation material. Windform® GF 2.0 is a composite material made of polyamide filled with glass and aluminium, which presents an improvement in both the thermal and mechanical properties, and the aesthetics of the product. In terms of performance, Windform® GF 2.0 shows a significant improvement in the HDT (almost +8%), that is, the heat deflection temperature as well as an increase in the values of tensile strength and elongation strength, therefore offering greater ductility than the previous version, Example Applications: Objects of design and functional aesthetic reproduction, intake manifolds (intake and cooling ducts, air inlet systems), hydraulic ducts (fluid temperature further elevated up to 134°C), fuel systems and household appliances. Information provided by CRP Technology.

Order this product through the following link:

http://www.lookpolymers.com/polymer_CRP-Technology-Windform-GF-20-Polyamide-Aluminum-Glass-Composite.php

Physical Properties	Metric	English	Comments
Density	1.41 g/cc	0.0509 lb/in ³	

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	50.6 MPa	7340 psi	UNI EN ISO 527-1(97) and UNI EN ISO 527-2(97)
Elongation at Break	4.6 %	4.6 %	UNI EN ISO 527-1(97) and UNI EN ISO 527-2(97)
Tensile Modulus	4.304 GPa	624.3 ksi	UNI EN ISO 527-1(97) and UNI EN ISO 527-2(97)
Flexural Strength	80.2 MPa	11600 psi	UNI EN ISO 14125: 2000
Flexural Modulus	3.43 GPa	497 ksi	UNI EN ISO 14125: 2000
Charpy Impact Unnotched	2.185 J/cm ²	10.40 ft-lb/in ²	ISO 179-1:2007
Charpy Impact, Notched	0.472 J/cm ²	2.25 ft-lb/in ²	ISO 179-1:2007

Thermal Properties	Metric	English	Comments
Melting Point	179.6 °C	355.3 °F	ISO 11357-2
Deflection Temperature at 1.8 MPa (264 psi)	134.3 °C	273.7 °F	ASTM D648
Vicat Softening Point	168.7 °C	335.7 °F	10 N; ASTM D1252

Electrical Properties	Metric	English	Comments
Volume Resistivity	1e+13 ohm-cm	1e+13 ohm-cm	ASTM D257-93

Surface Resistance Electrical Properties	9.1e+13 ohm Metric	9.1e+13 ohm English	ASTM D257-93 Comments
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Descriptive Properties	Value	Comments
Color	Aluminum	
Surface Finish	1.8 Ra μm	After Finishing
	6.0 Ra μm	After SLS Process

Contact Songhan Plastic Technology Co.,Ltd.

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