

RADILON BGV 30 black

DESCRIPTION

PA6 30% glass fibre reinforced, heat stabilized

This material is suitable for technical application like electrical housing, supports, pedals that required high stiffness and dimensional stability

ISO 1043: PA6-GF30

REGIONAL AVAILABILITY: Europe

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.15%. Typical conditions with a desiccant drier: temperature 80 ° C, dew point -20 ° C or below, time 2-4 h or more. Special care must be taken to avoid moisture absorption and contamination with other polymers when adding regrind material. Colour variation and mechanical properties reduction may occur and should always be carefully monitored.

Injection Molding Processing Parameters

Melt Temperature
250 - 280°C

Mold Temperature
60 - 100°C

Injection Speed
medium-high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments

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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density	ISO 1183	kg/m ³	1360	
Melt Volume-Flow Rate	ISO 1133	cm ³ /10min		42
Melt Flow Rate	ISO 1133	g/10min		50
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.3 / 0.8	
Moisture Absorption 23°C - 50%RH	ISO 62	%		2.1
Viscosity Index (Sulfuric Acid)	ISO 307	ml/g		146
MECHANICAL PROPERTIES				
Tensile Modulus	ISO 527-2/1A	MPa	9500	6000
Stress at Break	ISO 527-2/1A	MPa	170	105
Strain at Break	ISO 527-2/1A	%	3	6
Flexural Modulus	ISO 178	MPa	8500	5100
Flexural Strength	ISO 178	MPa	250	160
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	75	90
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	65	
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	9	15
THERMAL PROPERTIES				
Melting Temperature	ISO 11357-1/-3	°C	220	
Heat Deflection Temperature	ISO 75/2Af	°C	205	
Heat Deflection Temperature	ISO 75/2Bf	°C	210	
FLAMMABILITY PROPERTIES				
Flammability	UL 94	class	HB	
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Automotive Interior Flammability	ISO 3795	mm/min	0	
ELECTRICAL PROPERTIES				
Electric Strength	IEC 60243-1	kV/mm	35	

*: DAM = Dry As Moulded state according to ISO 16396-2, **: Cond = Conditioned state similar to ISO 1110

1: Temperature [°C] / Load [kg]

2: Temperature [°C] / Load [kg]

3: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]