

# RADILON BGV 50 natural

## DESCRIPTION

PA6 50% glass fibre reinforced, heat stabilized

The material is suitable for industrial and automotive parts where excellent stability and rigidity is required like brackets, mounting supports, holder

ISO 1043: PA6-GF50

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 - 290°C

Mold Temperature  
70 - 100°C

Injection Speed  
medium-high

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet  
ROHS compliant 2011/65/EU and following amendments

## TECHNICAL DATA SHEET

# RADILON BGV 50 natural

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1550	
Moisture Absorption 23°C - 50%RH	ISO 62	%	1.5	
Viscosity Index (Sulfuric Acid)	ISO 307	ml/g	146	
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	16500 11000
Stress at Break	5mm/min	ISO 527-2/1A	MPa	230 155
Strain at Break	5mm/min	ISO 527-2/1A	%	2.5 5
Flexural Modulus	2mm/min	ISO 178	MPa	14500 8900
Flexural Strength	2mm/min	ISO 178	MPa	315 235
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	100 110
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	91
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	20 30
<b>THERMAL PROPERTIES</b>				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	220
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	215
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	220
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	1.6mm	UL 94	class	HB
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
<b>ELECTRICAL PROPERTIES</b>				
Surface Resistivity	500V	IEC 60093	Ohm	0.2

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