

RADITER B RV300 333 BK

DESCRIPTION

PBT 30% glass fibre reinforced injection moulding grade. Black colour.

Suitable for parts requiring high stiffness and good mechanical resistance.

ISO 1043: PBT-GF30

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging. It is important to dry the material prior to processing: maximum recommended water content is 0.02%. Typical conditions with a desiccant drier: temperature 120 ° C, dew point -40 ° 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
80 - 90°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



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PROPERTY	STANDARD	UNIT	VALUE
PHYSICAL PROPERTIES			
Density	ISO 1183	kg/m ³	1530
Melt Flow Rate	ISO 1133	g/10min	15
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.3 / 1.0
Water Absorption, immersion at 23°C	ISO 62	%	0.3
Moisture Absorption 23°C - 50%RH	ISO 62	%	0.1
MECHANICAL PROPERTIES			
Tensile Modulus	ISO 527-2/1A	MPa	9600
Stress at Break	ISO 527-2/1A	MPa	135
Strain at Break	ISO 527-2/1A	%	2.7
Flexural Modulus	ISO 178	MPa	9100
Flexural Strength	ISO 178	MPa	215
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	55
Charpy Impact Strength	ISO 179/1eU	kJ/m ²	48
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	10
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m ²	6.5
THERMAL PROPERTIES			
Melting Temperature	ISO 11357-1/-3	°C	225
Heat Deflection Temperature	ISO 75/2Af	°C	205
Heat Deflection Temperature	ISO 75/2Bf	°C	220
Vicat Softening Temperature	ISO 306	°C	210
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	27
Coeff. of Linear Therm. Expansion	ISO 11359-1/-2	E-6/K	125
FLAMMABILITY PROPERTIES			
Flammability	UL 94	class	HB
Glow Wire Flammability Index	IEC 60695-2-12	°C	700
Automotive Interior Flammability	ISO 3795	mm/min	<50
ELECTRICAL PROPERTIES			
Volume Resistivity	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	IEC 62631-3-2	Ohm	1E12
Comparative Tracking Index	IEC 60112	V	350

1: Temperature [°C] / Load [kg]

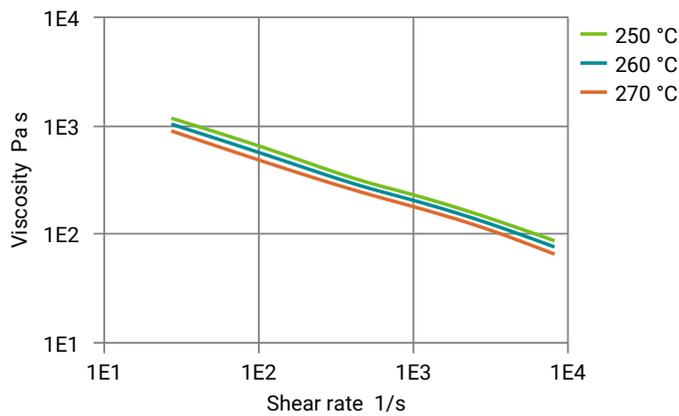
2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



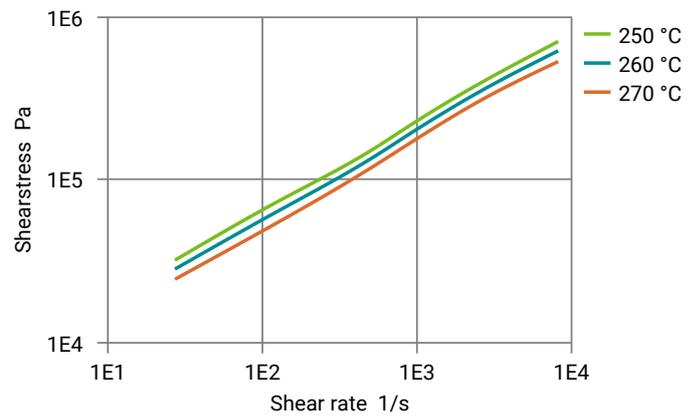
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DIAGRAMS

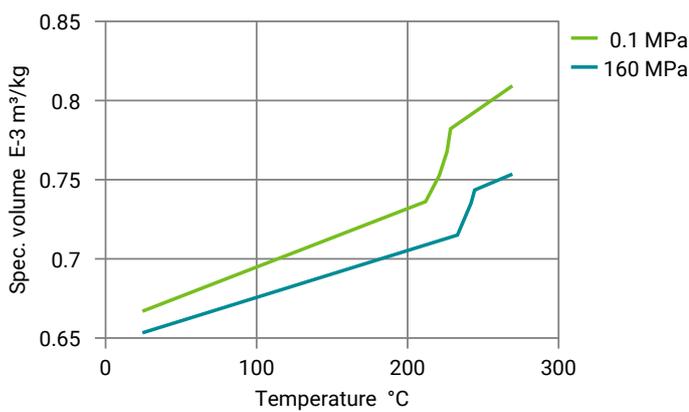
Viscosity-shear rate



Shearstress-shear rate



Specific volume-temperature (pvT)



Thermal expansion

