

## PRODUCT INFORMATION

# RADITER B RV300 100 NT

### DESCRIPTION

PBT 30% glass fiber reinforced injection moulding grade. Natural 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/UE and following amendments

## TECHNICAL DATA SHEET

# RADITER B RV300 100 NT

PROPERTY		STANDARD	UNIT	VALUE
<b>PHYSICAL PROPERTIES</b>				
Density		ISO 1183	kg/m <sup>3</sup>	1530
Melt Flow Rate	250/2.16 <sup>[1]</sup>	ISO 1133	g/10min	20
Moulding shrinkage - Parallel / Normal	280/90/60 <sup>[2]</sup>	ISO 294-4	%	0.3 / 1.0
Water Absorption, immersion at 23°C	2mm	ISO 62	%	0.3
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	0.1
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	9950
Stress at Break	5mm/min	ISO 527-2/1A	MPa	140
Strain at Break	5mm/min	ISO 527-2/1A	%	2.9
Flexural Modulus	2mm/min	ISO 178	MPa	8750
Flexural Strength	2mm/min	ISO 178	MPa	210
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	60
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	10
<b>THERMAL PROPERTIES</b>				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	225
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	205
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	220
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	210
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	ISO 11359-1/-2	E-6/K	25
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	ISO 11359-1/-2	E-6/K	90
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	700
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13
Surface Resistivity	500V	IEC 60093	Ohm	1E12
Comparative Tracking Index	Sol.A	IEC 60112	-	450

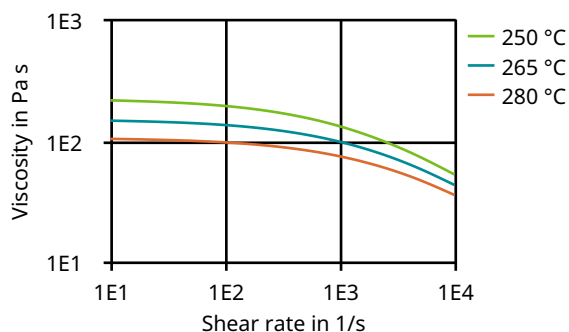
1: Temperature [°C] / Load [kg] 2: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

## TECHNICAL DATA SHEET

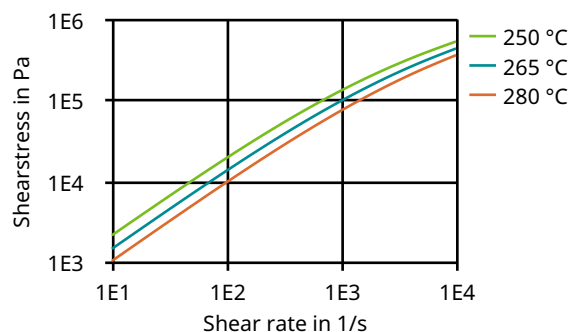
# RADITER B RV300 100 NT

## Diagrams

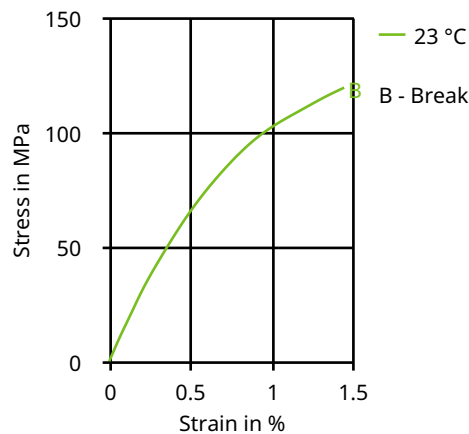
## Viscosity-shear rate



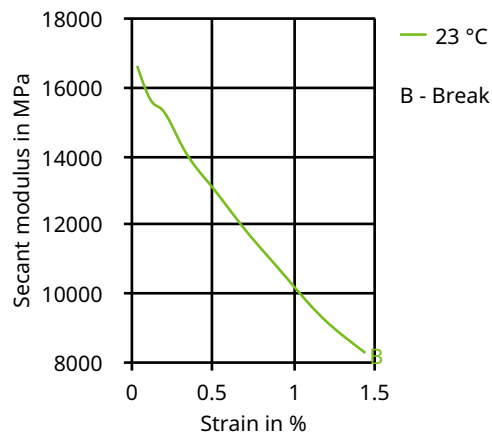
## Shearstress-shear rate



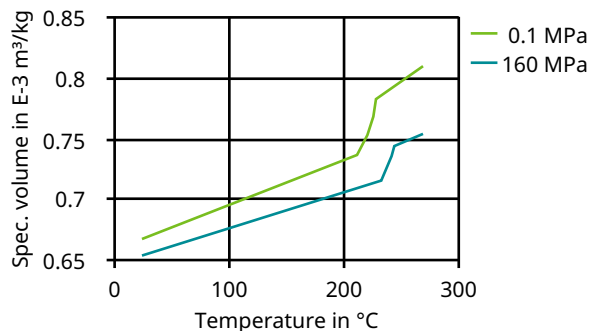
## Stress-strain



## Secant modulus-strain



## Specific volume-temperature (pvT)



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