

## PRODUCT INFORMATION

# RADITER B ERV4008TKB 381 BK

## DESCRIPTION

PBT 30% glass fibre reinforced injection moulding grade. Toughened, hydrolysis-stabilized. Black colour.

Suitable for parts requiring high stiffness, good mechanical strength and hydrolysis resistance. Laser markable grade.

ISO 1043: PBT-IT 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  
265 - 285°C

Mold Temperature  
80 - 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

# RADITER B ERV4008TKB 381 BK

PROPERTY		STANDARD	UNIT	VALUE
<i>PHYSICAL PROPERTIES</i>				
Density		ISO 1183	kg/m <sup>3</sup>	1500
Melt Flow Rate	275/5 <sup>[1]</sup>	ISO 1133	g/10min	13
Moulding shrinkage - Parallel / Normal	280/80/30 <sup>[2]</sup>	ISO 294-4	%	0.6 / 1.3
<i>MECHANICAL PROPERTIES</i>				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	9200
Stress at Break	5mm/min	ISO 527-2/1A	MPa	120
Strain at Break	5mm/min	ISO 527-2/1A	%	3.8
Flexural Modulus	2mm/min	ISO 178	MPa	8200
Flexural Strength	2mm/min	ISO 178	MPa	195
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	80
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	16
<i>THERMAL PROPERTIES</i>				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	225
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	200
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	215
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	200
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	ISO 11359-1/-2	E-6/K	20
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	ISO 11359-1/-2	E-6/K	150
<i>FLAMMABILITY PROPERTIES</i>				
Flammability	1.6mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	700
Automotive Interior Flammability	3mm	ISO 3795	mm/min	<30
<i>ELECTRICAL PROPERTIES</i>				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12
Comparative Tracking Index	Sol.A	IEC 60112	V	450

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