

## PRODUCT INFORMATION

# RADISTRONG A RV600W 333 BK

PROVISIONAL

### DESCRIPTION

Special PA 60% glass fiber reinforced, injection moulding grade. Heat stabilized. Black colour

Product with enhanced mechanical properties, suitable for demanding applications as in case of metal replacement.

ISO 1043: PA-T GF60

Formerly known as RADISTRONG A X7957 BK.

*THE CHARACTERISTICS SHOWN HERE ARE PROVISIONAL AND REFLECT THE AVERAGE VALUES OF PROPERTIES MEASURED OVER A LIMITED NUMBER OF PRODUCTION CAMPAIGNS*

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 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  
280 - 300°C

Mold Temperature  
90 - 120°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

# RADISTRONG A RV600W 333 BK

PROPERTY	STANDARD	UNIT	VALUE	DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>					
Density	ISO 1183	kg/m <sup>3</sup>	1730		
Moulding shrinkage - Parallel / Normal	290 / 100 / 60 <sup>[1]</sup>	ISO 294-4	%	0.1 / 0.3	
Water Absorption, immersion at 23°C	2mm	ISO 62	%	3.2	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	0.8	
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	22100	17000
Stress at Break	5mm/min	ISO 527-2/1A	MPa	275	190
Strain at Break	5mm/min	ISO 527-2/1A	%	2.3	2.3
Flexural Modulus	2mm/min	ISO 178	MPa	20400	17000
Flexural Strength	2mm/min	ISO 178	MPa	415	320
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	95	95
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	88	90
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	17	18
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	15	16
<b>THERMAL PROPERTIES</b>					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	255	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	245	
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	ISO 11359-1/-2	E-6/K	13	
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	ISO 11359-1/-2	E-6/K	73	
<b>ELECTRICAL PROPERTIES</b>					
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 60093	Ohm	1E12	1E10

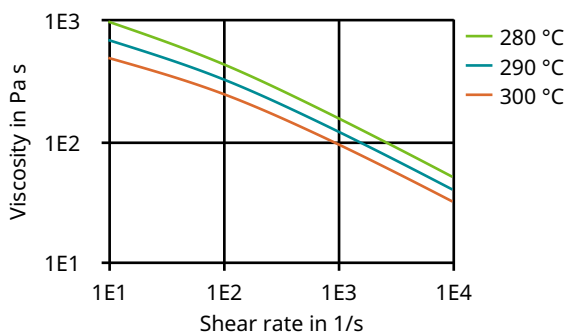
\*: DAM = Dry As Moulded state according to ISO 16396-2 \*\*: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

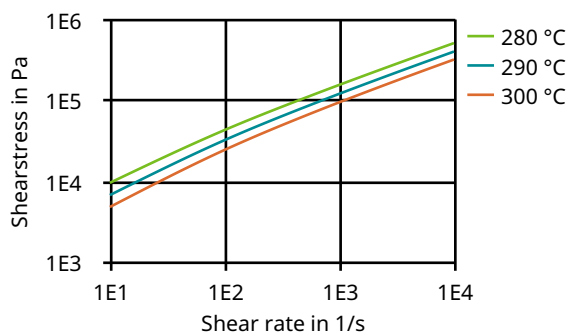
# RADISTRONG A RV600W 333 BK

Diagrams

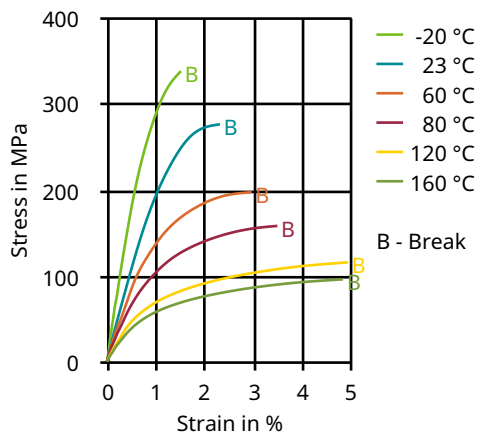
Viscosity-shear rate



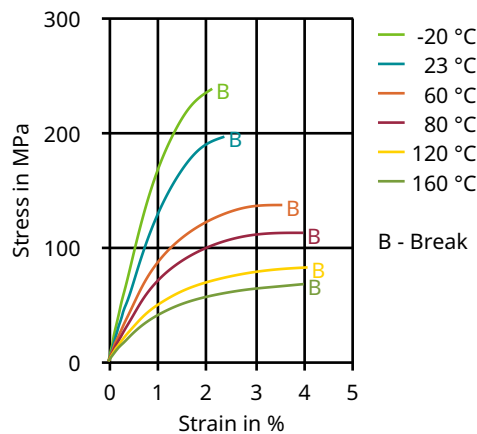
Shearstress-shear rate



Stress-strain (dry)



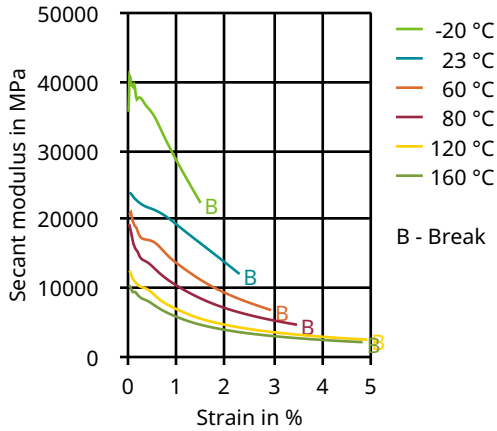
Stress-strain (cond.)



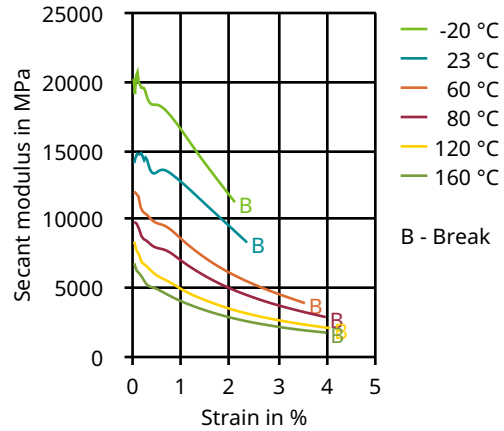
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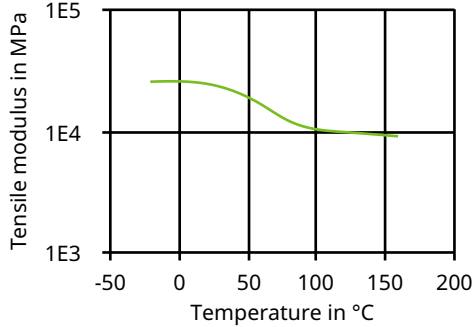
Secant modulus-strain (dry)



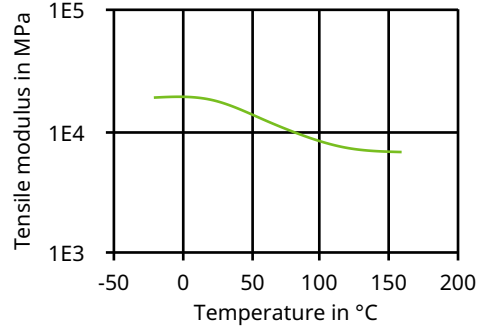
Secant modulus-strain (cond.)



Tensile modulus-temperature (dry)



Tensile modulus-temperature (cond.)



Coeff. of linear thermal expansion, parallel

