

RADISTRONG A RV600W 333 BK

DESCRIPTION

Special PA 60% glass fibre 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: (PA66+PA*)-GF60

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

Formerly Known As RADISTRONG A X7957 BK

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
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density		kg/m ³	1730	
Moulding shrinkage - Parallel / Normal	290/100/60 ^[1]	%	0.1 / 0.3	
Water Absorption, immersion at 23°C	2mm	%	3.2	
Moisture Absorption 23°C - 50%RH	2mm	%	0.8	
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	MPa	22500	17600
Stress at Break	5mm/min	MPa	265	200
Strain at Break	5mm/min	%	2	2.4
Flexural Modulus	2mm/min	MPa	21300	16400
Flexural Strength	2mm/min	MPa	415	310
Charpy Impact Strength	+23°C	kJ/m ²	95	105
Charpy Impact Strength	-30°C	kJ/m ²	85	95
Charpy Notched Impact Strength	+23°C	kJ/m ²	17	18
Charpy Notched Impact Strength	-30°C	kJ/m ²	15	16
THERMAL PROPERTIES				
Melting Temperature	10°C/min	°C	255	
Heat Deflection Temperature	1.80 MPa	°C	245	
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	E-6/K	13	
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	E-6/K	73	
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12

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

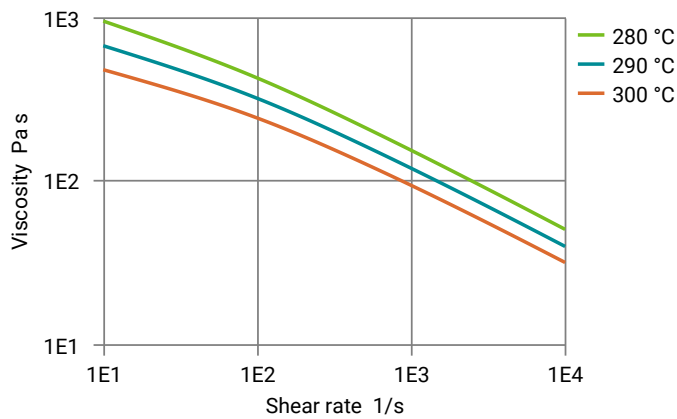
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



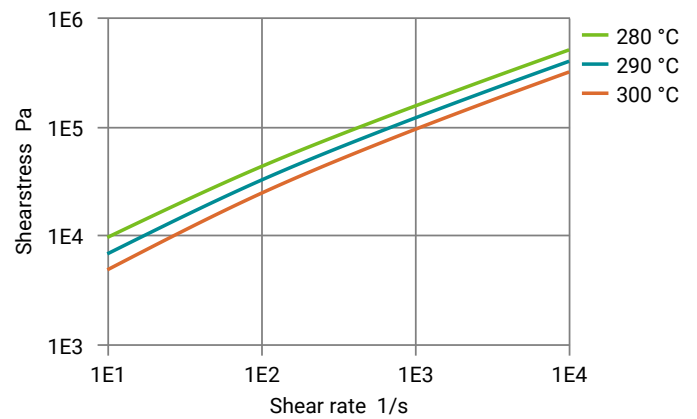
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DIAGRAMS

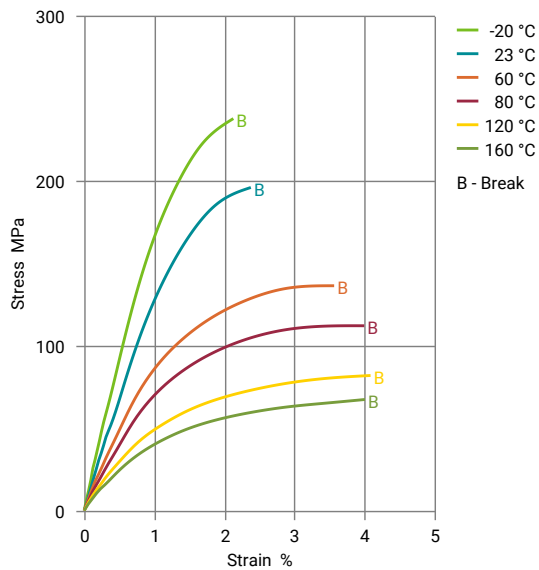
Viscosity-shear rate



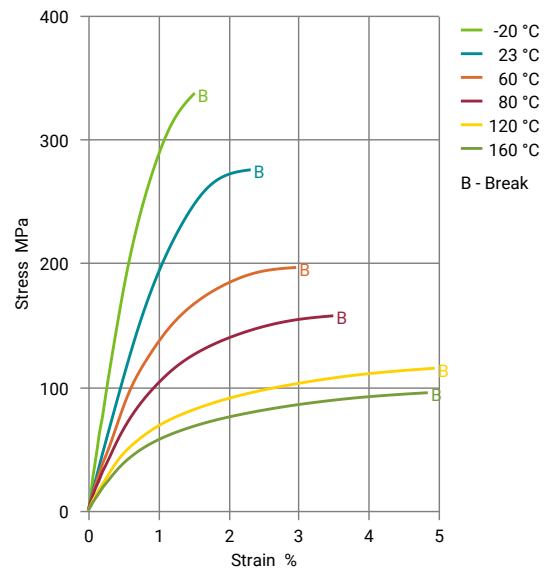
Shearstress-shear rate



Stress-strain (cond.)

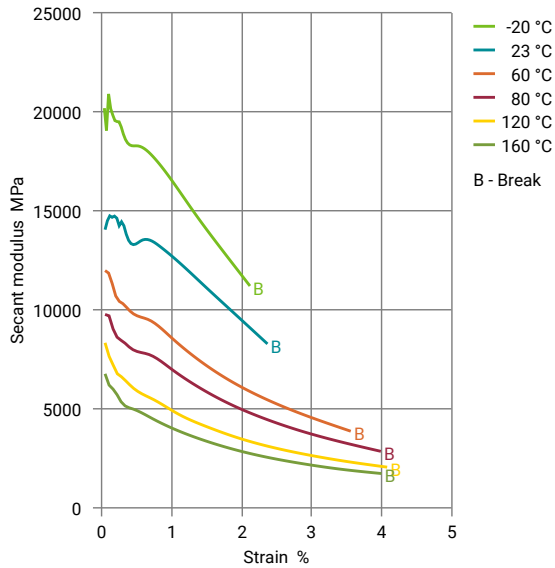


Stress-strain (dry)

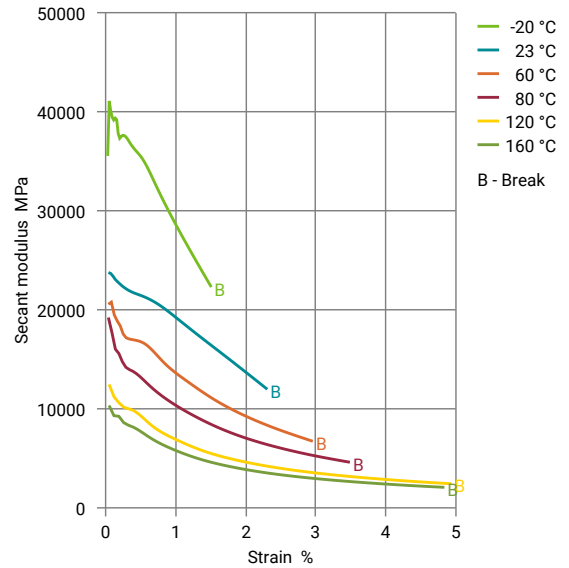


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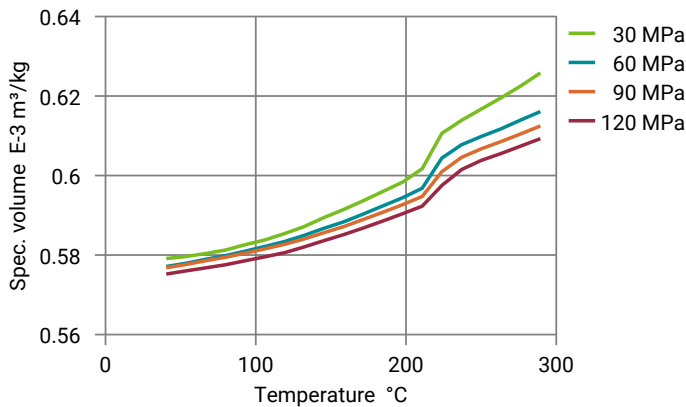
Secant modulus-strain (cond.)



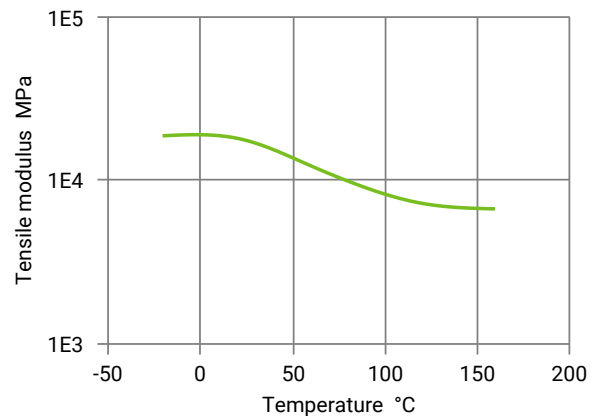
Secant modulus-strain (dry)



Specific volume-temperature (pvT)



Tensile modulus-temperature (cond.)



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Tensile modulus-temperature (dry)

Thermal expansion

