

PRODUCT INFORMATION

RADILON S URV600W 339 BK

PRELIMINARY

DESCRIPTION

PA6 60% glass fiber reinforced injection moulding grade. Very high flowability. Heat stabilized. Black colour.

Suitable for parts requiring very high stiffness and high mechanical resistance, as in case of metal replacement applications. Excellent heat ageing properties retention.

ISO 1043: PA6-T GF60

THE CHARACTERISTICS SHOWN HERE MUST BE CONSIDERED PRELIMINARY AND INDICATIVE FOR A PRODUCT AT DEVELOPMENTAL STAGE

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
240 - 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

RADILON S URV600W 339 BK

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density		kg/m ³	1690	
Moulding shrinkage - Parallel / Normal	280 / 90 / 60 ^[1]	%	0.1 / 0.6	
Water Absorption, immersion at 23°C	2mm	%	4.4	
Moisture Absorption 23°C - 50%RH	2mm	%	1.1	
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	MPa	21000	
Stress at Break	5mm/min	MPa	240	
Strain at Break	5mm/min	%	2.4	
Flexural Modulus	2mm/min	MPa	19000	
Flexural Strength	2mm/min	MPa	370	
Charpy Impact Strength	+23°C	kJ/m ²	90	
THERMAL PROPERTIES				
Melting Temperature	10°C/min	°C	220	
Heat Deflection Temperature	1.80 MPa	°C	215	
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	E-6/K	10.7	
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	E-6/K	92	
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	700
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13
Surface Resistivity	500V	IEC 60093	Ohm	1E12

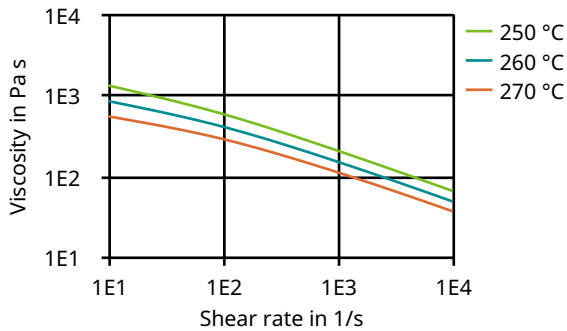
*: DAM = Dry As Moulded state according to ISO 16396-2 **: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

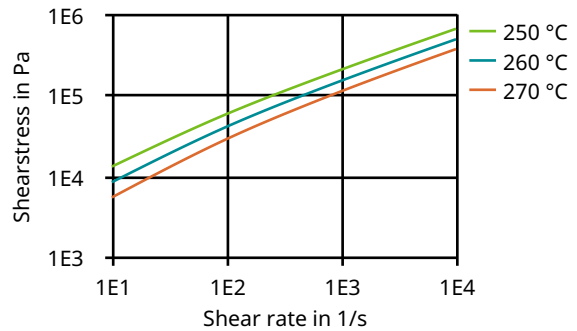
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Diagrams

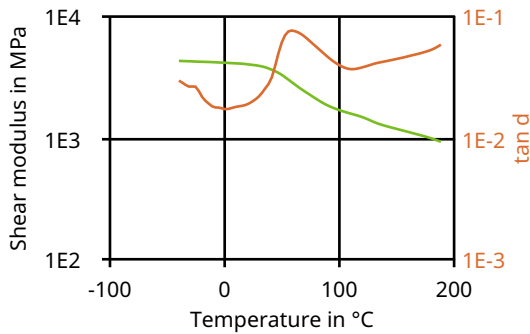
Viscosity-shear rate



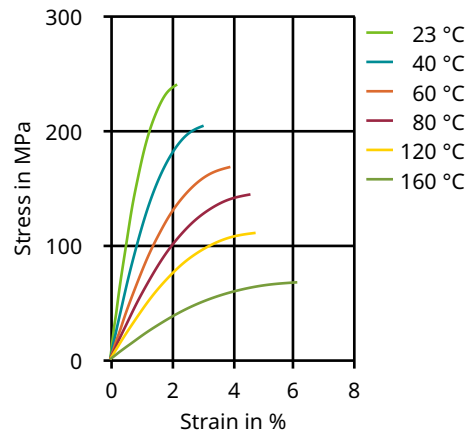
Shearstress-shear rate



Dynamic Shear modulus-temperature (dry)



Stress-strain (dry)



Data are measured according ISO 527-2/1A

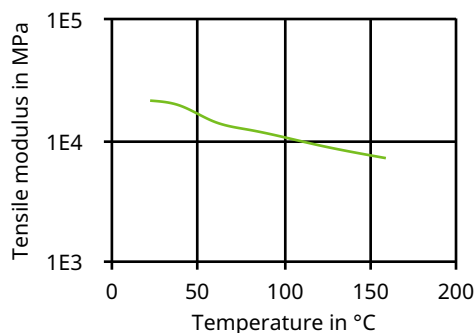
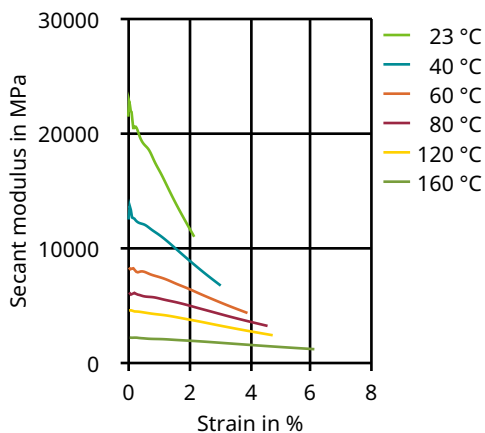
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TECHNICAL DATA SHEET

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Secant modulus-strain (dry)(->RADILON S URV600LW 339 BK)

Tensile modulus-temperature (dry)(->RADILON S URV600LW 339 BK)



Data are measured according ISO 527-2/1A

Coeff. of linear thermal expansion, parallel

