

# RADILON A LHSX100W 338 BK

## DESCRIPTION

PA66 injection moulding grade. Toughened, good flowability. Black colour.

Suitable for parts requiring high productivity, along with improved impact resistance.

ISO 1043: PA66-I

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  
270 - 290°C

Mold Temperature  
70 - 90°C

Injection Speed  
medium

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet  
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density		kg/m <sup>3</sup>	1130	
Moulding shrinkage - Parallel / Normal	290/70/60 <sup>[1]</sup>	%	1.5 / 1.4	
Water Absorption, immersion at 23°C	2mm	%	7.6	
Moisture Absorption 23°C - 50%RH	2mm	%	2	
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	1mm/min	MPa	3100	1700
Stress at Yield	50mm/min	MPa	77	55
Yield Strain	50mm/min	%	4.5	20
Nominal Strain at Break	50mm/min	%	7	>50
Poisson ratio	-	-		0.4
Flexural Modulus	2mm/min	MPa	2900	1000
Flexural Strength	2mm/min	MPa	110	55
Charpy Notched Impact Strength	+23°C	kJ/m <sup>2</sup>	7.5	14
Charpy Notched Impact Strength	-30°C	kJ/m <sup>2</sup>	5	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	10°C/min	°C	260	
Heat Deflection Temperature	1.80 MPa	°C	65	
Heat Deflection Temperature	0.45 MPa	°C	200	
Vicat Softening Temperature	50°C/h 50N	°C	240	
Coeff. of Linear Therm. Expansion	parallel, 23°C-55°C	E-6/K	85	
Coeff. of Linear Therm. Expansion	normal, 23°C-55°C	E-6/K	85	
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	650
Automotive Interior Flammability	3mm	ISO 3795	mm/min	<30
<b>ELECTRICAL PROPERTIES</b>				
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

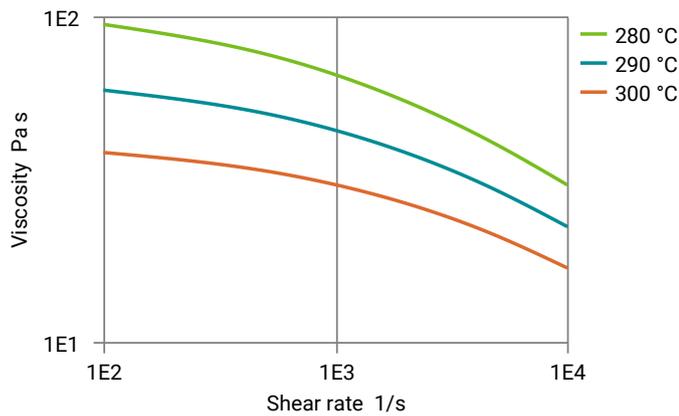
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



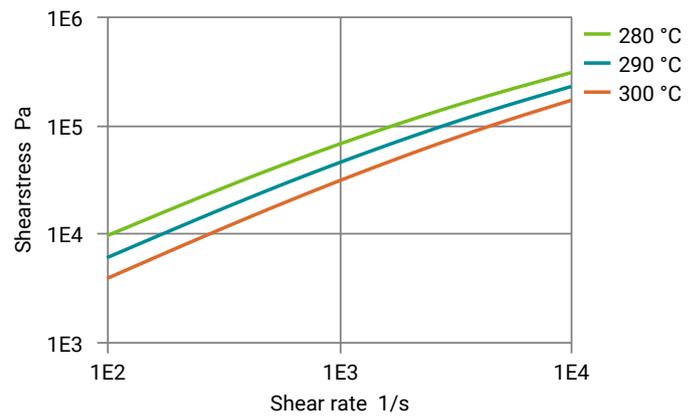
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DIAGRAMS

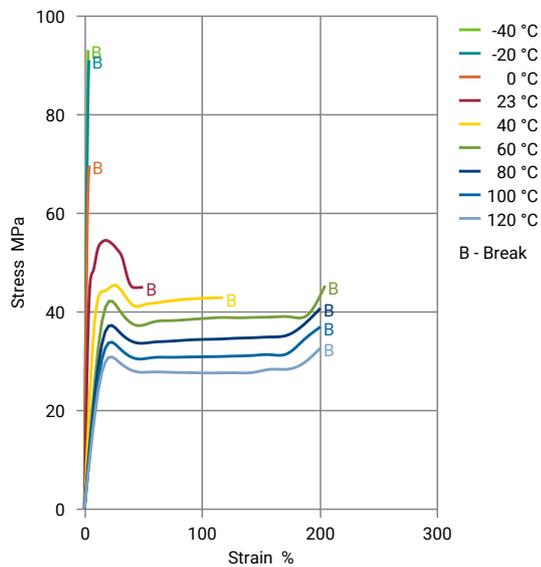
Viscosity-shear rate



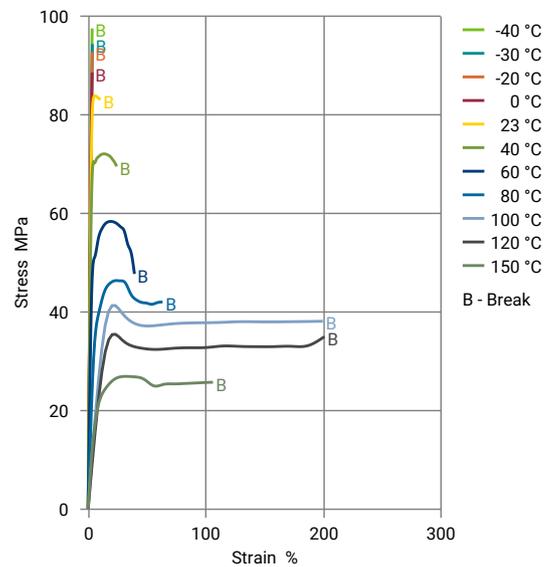
Shearstress-shear rate



Stress-strain (cond.)

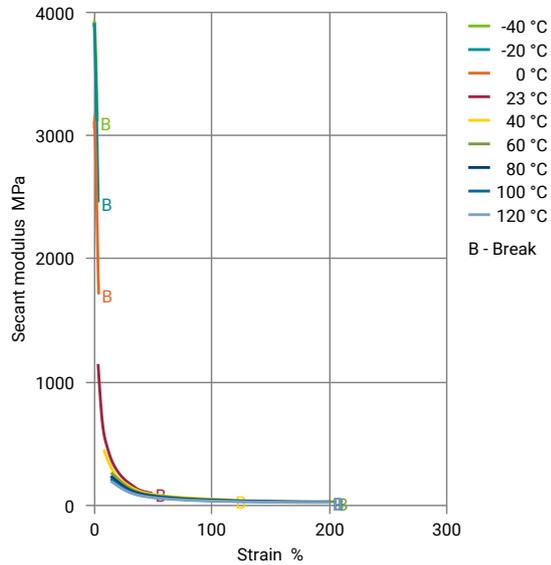


Stress-strain (dry)

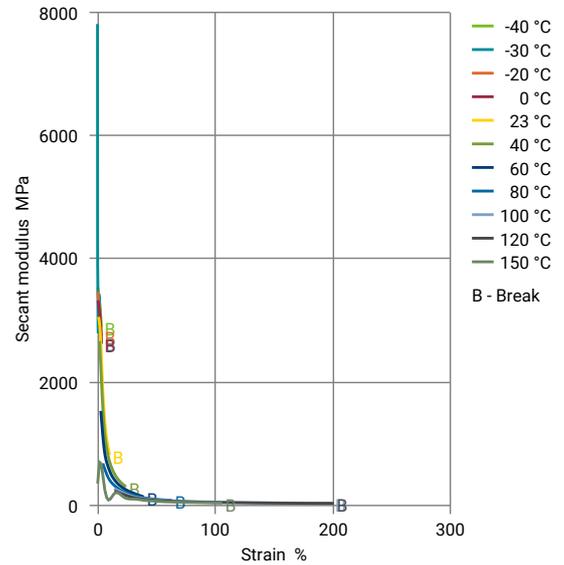


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Secant modulus-strain (cond.)



Secant modulus-strain (dry)



Specific volume-temperature (pvT)

