

# RADILON NeXTreme RV350HHR 3800 BK

## DESCRIPTION

High Temperature polyamide injection moulding grade, 35% glass fibre reinforced. Superior thermal resistance in contact with hot air. Black colour.

Suitable for demanding mechanical applications in very severe temperature conditions, where the parts must endure long term contact with hot air until 220-230 °C. Very good properties retention after ageing. Typical applications in automotive are under bonnet components, like turbo air ducts, intercooler end caps. This material can be processed with water conditioned tools.

ISO 1043: PA\*-GF35

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

Formerly Known As LX19443

## 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  
305 - 315°C

Mold Temperature  
90 - 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



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PROPERTY		STANDARD	UNIT	VALUE DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>					
Density		ISO 1183	kg/m <sup>3</sup>	1410	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%		1.2
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	11500	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	190	
Strain at Break	5mm/min	ISO 527-2/1A	%	3	
Flexural Modulus	2mm/min	ISO 178	MPa	10100	
Flexural Strength	2mm/min	ISO 178	MPa	280	
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	95	
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	70	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	15	
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	12.5	
<b>THERMAL PROPERTIES</b>					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	295	
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	252	
<b>FLAMMABILITY PROPERTIES</b>					
Flammability	0.8mm	UL 94	class		HB
Automotive Interior Flammability	3mm	ISO 3795	mm/min		0
<b>ELECTRICAL PROPERTIES</b>					
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12	1E10

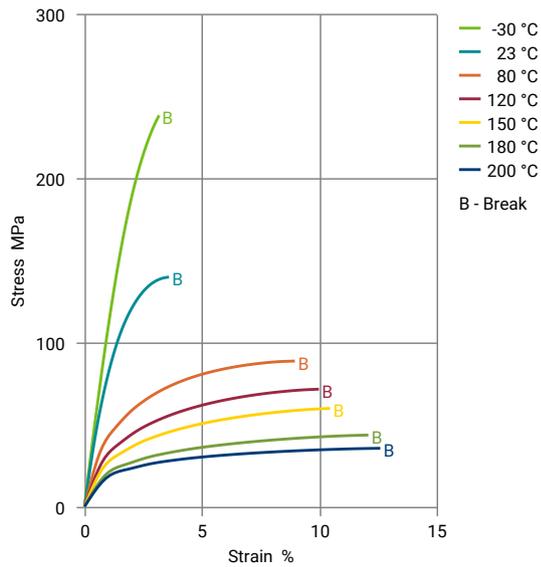
\*: DAM = Dry As Moulded state according to ISO 16396-2, \*\*: Cond = Conditioned state similar to ISO 1110



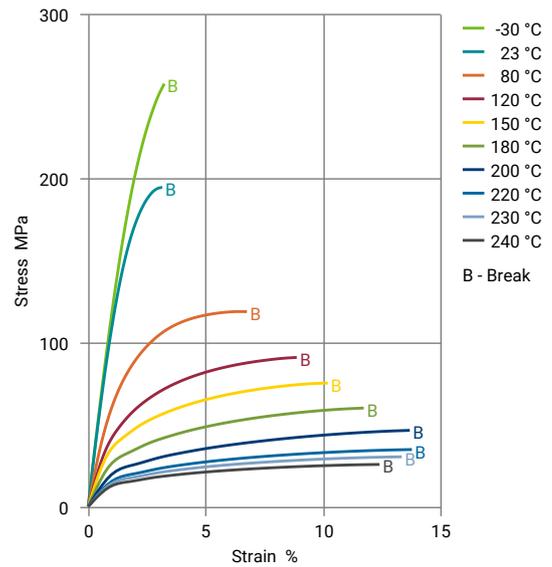
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## DIAGRAMS

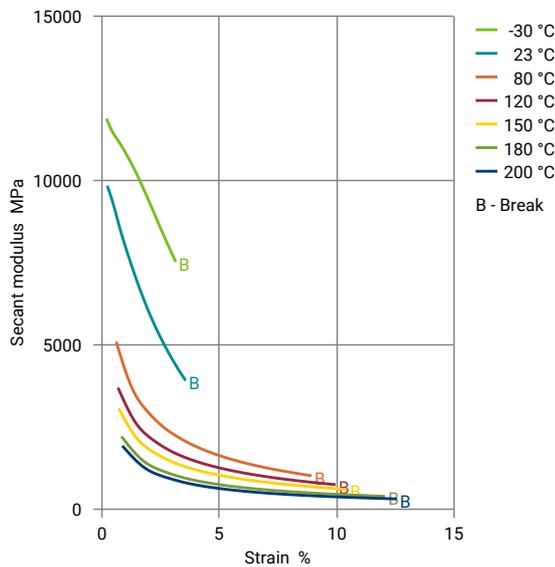
### Stress-strain (cond.)



### Stress-strain (dry)



### Secant modulus-strain (cond.)



### Secant modulus-strain (dry)

