

PRODUCT INFORMATION

RADILON NeXTreme RV350HHR 3800 BK

PRELIMINARY

DESCRIPTION

High Temperature polyamide injection molding grade, 35% glass fiber 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-T GF35

Formerly known as LX19443.

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
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/UE and following amendments

TECHNICAL DATA SHEET

RADILON NeXTreme RV350HHR 3800 BK

PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
PHYSICAL PROPERTIES					
Density		ISO 1183	kg/m ³	1390	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.2	
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	12050	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	194	
Strain at Break	5mm/min	ISO 527-2/1A	%	3.1	
Flexural Modulus	2mm/min	ISO 178	MPa	10000	
Flexural Strength	2mm/min	ISO 178	MPa	300	
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	101	
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m ²	70	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	15	
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m ²	12.5	
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	295	
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	252	
FLAMMABILITY PROPERTIES					
Flammability	0.8mm	UL 94	class	HB	
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0	
ELECTRICAL PROPERTIES					
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