

RADILON A RV500HHR 3800 NER 02058

Material code

Colour code

PROVISIONAL

DESCRIPTION

PA66 50% glass fiber reinforced injection molding grade with enhanced thermal resistance in contact with hot air. High improvement of mechanical properties retention versus standard polyamide 66 after heat ageing. Black colour.

Alternative to special high temperature polymers in automotive applications like turbo air ducts, CAC tanks, EGR housing. High stiffness and mechanical resistance. Continuous use temperature until 210 °C in air.

ISO 1043 : PA66-T GF50

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.

Processing Parameters

Melt Temperature:	Mold Temperature:	Injection Speed:
280 ÷ 300 °C	80 ÷ 100 °C	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

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PROPERTY		STANDARD	UNIT	VALUE	
				DAM*	Cond**
Physical Properties					
Density		ISO 1183	Kg/m ³	1550	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	16500	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	230	
Strain at Break	5mm/min	ISO 527-2/1A	%	3,2	
Flexural Modulus	2mm/min	ISO 178	MPa	16000	
Flexural Strength	2mm/min	ISO 178	MPa	375	
Charpy Impact Strength	+23°C	ISO 179/1 eU	KJ/m ²	100	
Charpy Impact Strength	-30°C	ISO 179/1 eU	KJ/m ²	110	
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m ²	20	
Charpy Notched Impact Strength	-30°C	ISO 179/1 eA	KJ/m ²	17	
Thermal Properties					
Melting Temperature	10°C/min	ISO 11357-1-3	°C	255	
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	250	
Heat Deflection Temperature	0.45 MPa	ISO 75/2 B f	°C	255	
Flammability Properties					
Flammability	0.8mm	UL 94	class	HB	
Electrical Properties					
Volume resistivity	500V	IEC 60093	ohm · m	1 E+13	1 E+11
Surface resistivity	500V	IEC 60093	ohm	1 E+12	1 E+10

The characteristics shown here must be considered purely provisional and indicative for a product at developmental stage.

*DAM = Dry As Moulded state **Cond = Conditioned state similar to ISO 1110 ***Melt Temp [°C] / Mold Temp [°C] / Cavity press [MPa]