

# RADILON A RV350HHR 3800 NER 5375

Material code      Colour code

PROVISIONAL

## DESCRIPTION

PA66 35% 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.

Alternative to PPA and PA4.6 grades in automotive applications like turbo air ducts, CAC tanks, EGR housing. Continuous use temperature until 210 °C in air.

ISO 1043 : PA66-T GF35

## 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



Underwriters Laboratories Inc. certified material. File number: E116324 [www.ul.com](http://www.ul.com)

RoHS compliant 2011/65/UE and following amendments

## Technical data sheet

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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>Physical Properties</b>				
Density	ISO 1183	Kg/m <sup>3</sup>	1390	
Moisture absorption 23°C – 50%RH	2mm thk ISO 62	%	1.5	
Water absorption, immersion at 23°C	2mm thk ISO 62	%	6.3	
<b>Mechanical Properties</b>				
Tensile Modulus	1mm/min ISO 527-2/1A	MPa	10500	7700
Stress at Break	5mm/min ISO 527-2/1A	MPa	175	125
Strain at Break	5mm/min ISO 527-2/1A	%	3.7	6.5
Flexural Modulus	2mm/min ISO 178	MPa	9600	7200
Flexural Strength	2mm/min ISO 178	MPa	275	200
Charpy Impact Strength	+23°C ISO 179/1 eU	KJ/m <sup>2</sup>	100	95
Charpy Impact Strength	-30°C ISO 179/1 eU	KJ/m <sup>2</sup>	100	
Charpy Notched Impact Strength	+23°C ISO 179/1 eA	KJ/m <sup>2</sup>	17	20
Charpy Notched Impact Strength	-30°C ISO 179/1 eA	KJ/m <sup>2</sup>	14	
<b>Thermal Properties</b>				
Melting Temperature	10°C/min ISO 11357-1-3	°C	260	
Heat Deflection Temperature	1.8 MPa ISO 75/2 A f	°C	240	
<b>Flammability Properties</b>				
Flammability	0.8mm UL 94	class	HB	
Glow Wire Flammability Index	2mm IEC 60695-2-12	°C/mm	700	
<b>Electrical Properties</b>				
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
Comparative Tracking Index	Sol.A IEC 60112	-	350	

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

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