

RADILON A RV500RW 339 NER 5398

*Material code**Colour code*

PROVISIONAL

DESCRIPTION

PA66 50% glass fiber reinforced injection moulding grade. Heat stabilized. Deep black colour.

Suitable for technical parts requiring very high stiffness and high mechanical resistance. Excellent heat ageing properties retention, improved welding lines strength. Especially fit for demanding metal replacement applications.

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 ÷ 310 °C	80 ÷ 100 °C	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	1580	
Moulding shrinkage – Parallel / Normal	300/90/60***	ISO 294-4	%	0,2 / 0,7	
Moisture absorption 23°C – 50%RH	2mm thk	ISO 62	%	1,1	
Water absorption, immersion at 23°C	2mm thk	ISO 62	%	4	
Melt Flow Rate	275°C / 5kg	ISO 1133	g/10'	8,2	
Melt Volume Rate	275°C / 5kg	ISO 1133	cm ³ /10'	6,1	
Viscosity Index (Sulfuric Acid)		ISO 307	ml/g	152	
Mechanical Properties					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	17400	14250
Stress at Break	5mm/min	ISO 527-2/1A	MPa	245	190
Strain at Break	5mm/min	ISO 527-2/1A	%	2,7	3
Flexural Modulus	2mm/min	ISO 178	MPa	16450	15400
Flexural Strength	2mm/min	ISO 178	MPa	385	305
Charpy Impact Strength	+23°C	ISO 179/1 eU	KJ/m ²	105	112
Charpy Impact Strength	-30°C	ISO 179/1 eU	KJ/m ²	102	
Charpy Notched Impact Strength	+23°C	ISO 179/1 eA	KJ/m ²	18	25
Charpy Notched Impact Strength	-30°C	ISO 179/1 eA	KJ/m ²	16	
Thermal Properties					
Melting Temperature	10°C/min	ISO 11357-1-3	°C	260	
Heat Deflection Temperature	1.8 MPa	ISO 75/2 A f	°C	255	
Heat Deflection Temperature	8 MPa	ISO 75/2 C f	°C	215	
Vicat Softening Temperature	50°C/h	ISO 306/B50 50N	°C	255	
Thermal Conductivity	23°C	ASTM E1461	W/mK	0,37	
Flammability Properties					
Flammability	0.8mm	UL 94	class	HB	
Glow Wire Flammability Index	1mm / 2mm	IEC 60695-2-12	°C/mm	700 / 700	
Glow Wire Ignition Temperature	1mm / 2mm	IEC 60695-2-13	°C/mm	725 / 725	
Automotive interior flammability	3mm thk	ISO 3795	mm/min	0	
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
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]

