



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 $80 \, ^{\circ}$ C, dew point $-20 \, ^{\circ}$ C or below, time $2-4 \, \text{h}$ 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: $280 \div 310 \,^{\circ}\text{C}$ $80 \div 100 \,^{\circ}\text{C}$ 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

PROVISIONAL

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PROPERTY		STANDARD	UNIT	VALUE DAM* Cond**
Physical Properties				
Density Moulding shrinkage – Parallel / Normal Moisture absorption 23°C – 50%RH Water absorption, immersion at 23°C Melt Flow Rate Melt Volume Rate Viscosity Index (Sulfuric Acid) Mechanical Properties	300/90/60*** 2mm thk 2mm thk 275°C / 5kg 275°C / 5kg	ISO 1183 ISO 294-4 ISO 62 ISO 62 ISO 1133 ISO 1133	Kg/m ³ % % % % g/10' cm ³ /10' ml/g	1580 0,2 / 0,7 1,1 4 8,2 6,1 152
Tensile Modulus Stress at Break Strain at Break Flexural Modulus Flexural Strength Charpy Impact Strength Charpy Impact Strength Charpy Notched Impact Strength Charpy Notched Impact Strength Thermal Properties	1mm/min 5mm/min 5mm/min 2mm/min 2mm/min +23°C -30°C +23°C -30°C	ISO 527-2/1A ISO 527-2/1A ISO 527-2/1A ISO 178 ISO 178 ISO 179/1 eU ISO 179/1 eU ISO 179/1 eA ISO 179/1 eA	MPa MPa % MPa MPa KJ/m² KJ/m² KJ/m²	17400 14250 245 190 2,7 3 16450 15400 385 305 105 112 102 18 25 16
Melting Temperature Heat Deflection Temperature Heat Deflection Temperature Vicat Softening Temperature Thermal Conductivity Flammability Properties Flammability Glow Wire Flammability Index Glow Wire Ignition Temperature Automotive interior flammability	10°C/min 1.8 MPa 8 MPa 50°C/h 23°C 0.8mm 1mm / 2mm 1mm / 2mm 3mm thk	ISO 11357-1-3 ISO 75/2 A f ISO 75/2 C f ISO 306/B50 50N ASTM E1461 UL 94 IEC 60695-2-12 IEC 60695-2-13 ISO 3795	°C °C °C W/mK class °C/mm °C/mm mm/min	260 255 215 255 0,37 HB 700 / 700 725 / 725
Volume resistivity Surface resistivity Comparative Tracking Index	500V 500V Sol.A	IEC 60093 IEC 60093 IEC 60112	ohm · m ohm -	1 E+13 1 E+11 1 E+12 1 E+10 >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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