



## PRODUCT INFORMATION

# RADILON A RV350W 333 BK

#### DESCRIPTION

PA66 35% glass fiber reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts requiring high stiffness, good mechanical resistance and excellent heat ageing properties retention.

ISO 1043: PA66-T GF35

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 TemperatureMold TemperatureInjection Speed280 - 300°C80 - 100°Cmedium-high

## PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet ROHS compliant 2011/65/UE and following amendments

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PROPERTY		STANDARD	UNIT	VALUE DAM* Cond**
PHYSICAL PROPERTIES				
Density Moulding shrinkage – Parallel / Normal Water Absorption, immersion at 23°C Moisture Absorption 23°C – 50%RH	300 /90 /60 <sup>[1]</sup> 2mm 2mm	ISO 1183 ISO 294-4 ISO 62 ISO 62	kg/m³ % % %	1400 0.3 / 1.0 5.5 1.5
MECHANICAL PROPERTIES				
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	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 179 ISO 179/1eU ISO 179/1eU ISO 179/1eA ISO 179/1eA	MPa MPa % MPa MPa kJ/m² kJ/m² kJ/m²	11000 8000 190 125 3 5 10000 7000 285 230 85 95 70 12 19 11
THERMAL PROPERTIES				
Melting Temperature Heat Deflection Temperature Vicat Softening Temperature Coeff. of Linear Therm. Expansion Coeff. of Linear Therm. Expansion	10°C/min 1.80 MPa 50°C/h 50N parallel, 23°C-55°C normal, 23°C-55°C	ISO 11357-1/-3 ISO 75/2Af ISO 306 ISO 11359-1/-2 ISO 11359-1/-2	°C °C °C E-6/K E-6/K	260 250 250 24 97
FLAMMABILITY PROPERTIES				
Flammability Glow Wire Flammability Index Automotive Interior Flammability	0.8mm 2mm 3mm	UL 94 IEC 60695-2-1/2 ISO 3795	class °C mm/min	HB 700 0
ELECTRICAL PROPERTIES				
Volume Resistivity Surface Resistivity	500V 500V	IEC 60093 IEC 60093	Ohm*m Ohm	1E13 1E11 1E12 1E10

<sup>\*:</sup> DAM = Dry As Moulded state according to ISO 16396-2 \*\*: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [\*C] / Mold Temperature [\*C] / Cavity Pressure [MPa]

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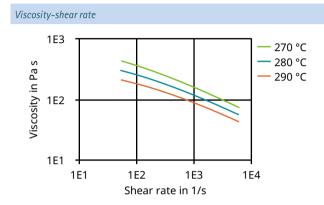
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### Diagrams



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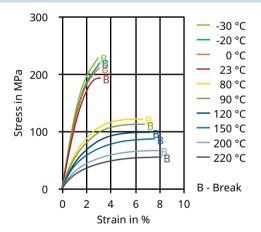
Shear rate in 1/s

1E3

1E4

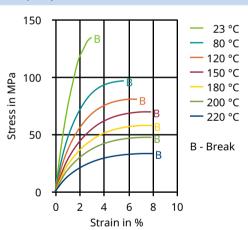
1E2

### Stress-strain (dry)



### Stress-strain (cond.)

1E1



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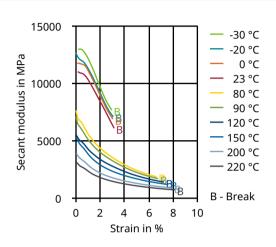
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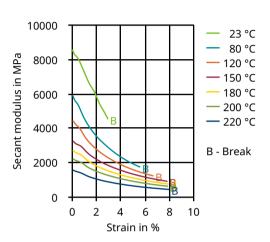


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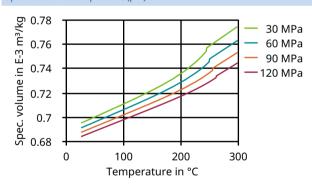
# Secant modulus-strain (dry)



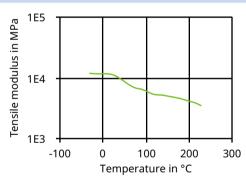
## Secant modulus-strain (cond.)



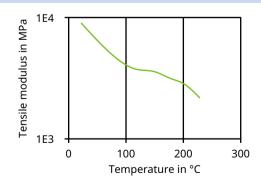
### Specific volume-temperature (pvT)



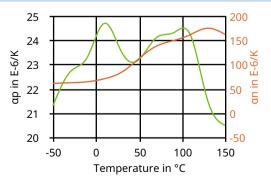
### Tensile modulus-temperature (dry)



### Tensile modulus-temperature (cond.)



Coeff. of linear thermal expansion, parallel



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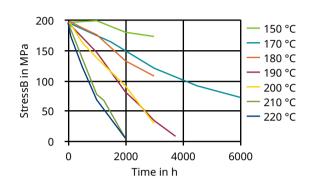
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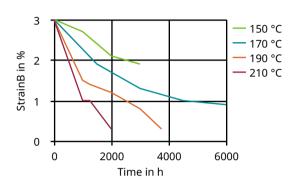


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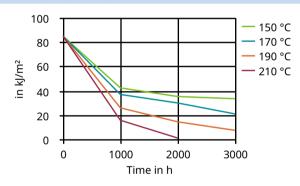
# LTHA-Stress at Break 4mm



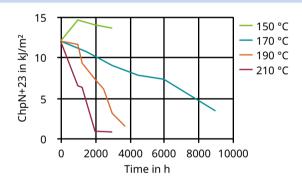
#### LTHA-Strain at Break 4mm



#### LTHA-Charpy Impact Strength (23°C) 4mm



#### LTHA-Charpy Notched Impact Strength (23°C) 4mm (dry)



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