RADILON A RV500RKC 106 NT

DESCRIPTION

PA66 50% glass fibre reinforced injection moulding grade. Heat stabilized. Natural colour.

Suitable for parts requiring very high stiffness and mechanical resistance.Good resistance to hydrolysis. Product specifically intended for applications in civil and industrial water management sector. Suitable and approved for drinking water and foodstuff contact.

ISO 1043: PA66-GF50

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 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/EU and following amendments
Underwriters Laboratories Inc. certified materia www.ul.com
Suitable for materials and articles intended to come into contact directly or
indirectly with food in compliance with EU 10/2011 and FDA Title 21 CFR Chapter 1,
part 177.1500
Suitable and approved for drinking water contact.
Please get in contact with our Customer Service for drinking water contact approvals and further information.

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PROPERTY		STANDARD	UNIT	VALUE DAM*	VALUE Cond**
PHYSICAL PROPERTIES					
Density		ISO 1183	kg/m³	1570	
Moulding shrinkage - Parallel / Normal	300/90/60 [1]	ISO 294-4	%	0.2 / 0.7	
Water Absorption, immersion at 23°C	2mm	ISO 62	%	4	
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.1	
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	16600	14300
Stress at Break	5mm/min	ISO 527-2/1A	MPa	250	190
Strain at Break	5mm/min	ISO 527-2/1A	%	3	3.2
Flexural Modulus	2mm/min	ISO 178	MPa	15300	11800
Flexural Strength	2mm/min	ISO 178	MPa	380	305
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m²	110	120
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m²	17	25
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	260	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	250	
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	255	
FLAMMABILITY PROPERTIES					
Flammability	0.8mm	UL 94	class	HB	
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	700	
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0	
ELECTRICAL PROPERTIES					
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12	1E10
Comparative Tracking Index	Sol.A	IEC 60112	V	600	

*: 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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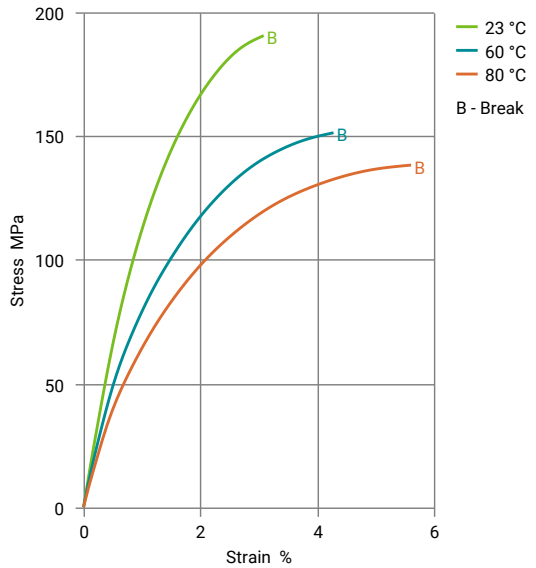
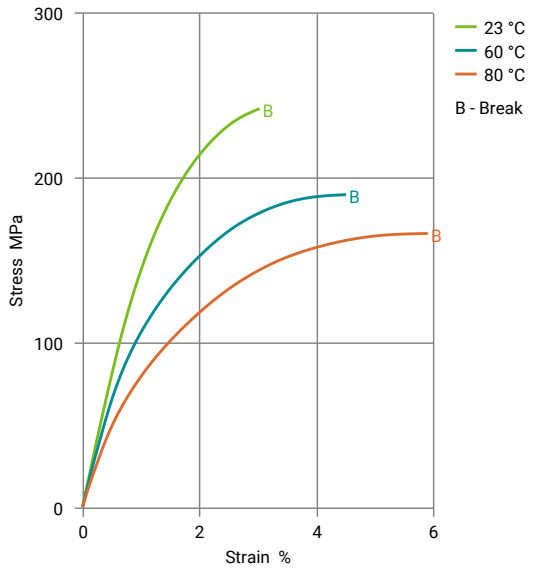
DIAGRAMS

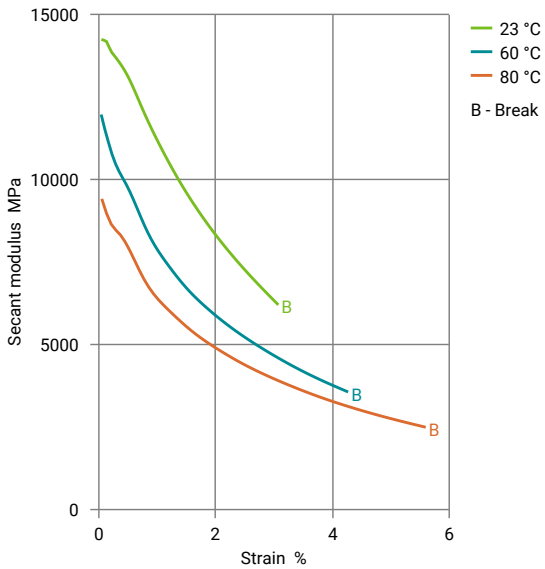
Stress-strain (cond.)



Stress-strain (dry)



Secant modulus-strain (cond.)



Secant modulus-strain (dry)