

RADILON AESTUS T1 RV500RKC 306 BK

PROVISIONAL

DESCRIPTION

PPA injection moulding grade 50% glass fibre reinforced with high glass transition temperature and high melting point. Black colour.

Suitable for parts requiring very high stiffness and strength. High resistance to hot water contact, suitable for drinking water contact.

ISO 1043: PA6T/6I-GF50

REGIONAL AVAILABILITY: North America, Europe, Asia Pacific, South and Central America, Near East/Africa

THE CHARACTERISTICS SHOWN HERE ARE PROVISIONAL AND REFLECT THE AVERAGE VALUES OF PROPERTIES MEASURED OVER A LIMITED NUMBER OF PRODUCTION CAMPAIGNS

MATERIAL HANDLING AND PROCESSING

The material is delivered in moisture-proof packaging ready for processing. Maximum recommended water content for best processing is 0.10%. Typical conditions with a desiccant drier: temperature 120° C, dew point -20 ° C or below, time 4 h or more. Avoid excessive shear rates and high thermal stresses for better processing. 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
320 - 340°C

Mold Temperature
130 - 160°C

Injection Speed
high

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

ROHS compliant 2011/65/EU and following amendments

Suitable for materials and articles intended to come into contact directly or indirectly with food in compliance with EU 10/2011

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*	Cond**
PHYSICAL PROPERTIES				
Density	ISO 1183	kg/m ³	1630	
Moulding shrinkage - Parallel / Normal	330/140/60 ^[1]	ISO 294-4	%	0.1 / 0.5
Water Absorption, 24h immersion at 23°C	2mm	ISO 62	%	0.1
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.1
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	18200
Stress at Break	5mm/min	ISO 527-2/1A	MPa	255
Strain at Break	5mm/min	ISO 527-2/1A	%	2
Flexural Modulus	2mm/min	ISO 178	MPa	18700
Flexural Strength	2mm/min	ISO 178	MPa	395
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	85
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	13
Izod Notched Impact Strength	+23°C	ISO 180/1A	kJ/m ²	10
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	310
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	280
FLAMMABILITY PROPERTIES				
Flammability	0.8mm	UL 94	class	HB
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12

*: 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]

