

# RADILON AESTUS T1 RV300RKC 306 BK

PRELIMINARY

## DESCRIPTION

PPA injection moulding grade 30% glass fiber reinforced with high glass transition temperature and high melting point. Black color.

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

ISO 1043: PA-T GF30

*THE CHARACTERISTICS SHOWN HERE MUST BE CONSIDERED PRELIMINARY AND INDICATIVE FOR A PRODUCT AT DEVELOPMENTAL STAGE*

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 0.10%. 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/UE and following amendments

Suitable for use in contact with food and potable water. Please get in contact with our Customer Service for further information.

This material grade meets the requirements of: KTW Guidelines and DVGW-Standard W270 (11/2007), ACS positive lists included in the Circular DGC/VS4 n°2000/232 dated 27 April 2000

## TECHNICAL DATA SHEET

# RADILON AESTUS T1 RV300RKC 306 BK

PROPERTY	STANDARD	UNIT	VALUE	DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>					
Density	ISO 1183	kg/m <sup>3</sup>	1440		
Moulding shrinkage - Parallel / Normal	ISO 294-4	%	0.3 / 0.8		
Water Absorption, 24h immersion at 23°C	ISO 62	%	0.2		
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	ISO 527-2/1A	MPa	11600		
Stress at Break	ISO 527-2/1A	MPa	170		
Strain at Break	ISO 527-2/1A	%	1.8		
Flexural Modulus	ISO 178	MPa	10200		
Flexural Strength	ISO 178	MPa	250		
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	50		
Charpy Impact Strength	ISO 179/1eU	kJ/m <sup>2</sup>	45		
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	8		
Charpy Notched Impact Strength	ISO 179/1eA	kJ/m <sup>2</sup>	7		
<b>THERMAL PROPERTIES</b>					
Melting Temperature	ISO 11357-1/-3	°C	312		
Heat Deflection Temperature	ISO 75/2Af	°C	285		
<b>FLAMMABILITY PROPERTIES</b>					
Flammability	UL 94	class	HB		
<b>ELECTRICAL PROPERTIES</b>					
Volume Resistivity	IEC 60093	Ohm*m	1E13		
Surface Resistivity	IEC 60093	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]