

## PRODUCT INFORMATION

# RADILON DT RV500RKC2 306 BK

PRELIMINARY

### DESCRIPTION

PA612, 50% glass fiber reinforced injection moulding grade. Heat stabilized, improved flowability. Black colour.

Suitable for parts requiring very high stiffness and high mechanical resistance in direct contact with drinking water and food. Excellent dimensional stability, improved hydrolytic stability and chemical resistance to disinfectants up to 60°C. Product developed for applications in civil and industrial water management as well as appliances.

ISO 1043: PA612-T GF50

*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 80 ° C, dew point -20 ° C or below, time 2-4 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  
240 - 280°C

Mold Temperature  
80 - 90°C

Injection Speed  
medium

### 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

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PROPERTY	STANDARD	UNIT	VALUE	DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>					
Density		kg/m <sup>3</sup>	1510		
Moulding shrinkage - Parallel / Normal	280 / 90 / 60 <sup>[1]</sup>	%	0.2 / 0.6		
Water Absorption, immersion at 23°C	2mm	%	1.5		
Moisture Absorption 23°C - 50%RH	2mm	%	0.6		
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	1mm/min	MPa	15000		
Stress at Break	5mm/min	MPa	200		
Strain at Break	5mm/min	%	2.7		
Flexural Modulus	2mm/min	MPa	13100		
Flexural Strength	2mm/min	MPa	295		
Charpy Impact Strength	+23°C	kJ/m <sup>2</sup>	83		
Charpy Impact Strength	-30°C	kJ/m <sup>2</sup>	78		
Charpy Notched Impact Strength	+23°C	kJ/m <sup>2</sup>	16		
Charpy Notched Impact Strength	-30°C	kJ/m <sup>2</sup>	16		
<b>THERMAL PROPERTIES</b>					
Melting Temperature	10°C/min	°C	220		
Heat Deflection Temperature	1.80 MPa	°C	200		
<b>FLAMMABILITY PROPERTIES</b>					
Flammability	-mm	UL 94	class		HB
<b>ELECTRICAL PROPERTIES</b>					
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13	1E11

\*: 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]