

## PRODUCT INFORMATION

# RADILON D RV600RKC 306 BK

PROVISIONAL

**DESCRIPTION**

PA610 60% glass fiber reinforced injection moulding grade. Heat stabilized. Black colour.

Suitable for parts requiring very high stiffness and good 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. This grade is partially renewably-sourced (60% of base polymer by weight).

ISO 1043: PA610 GF60

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

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-high

**PRODUCT SAFETY AND APPROVALS**

For safety instruction please refer to Material Safety Data Sheet

ROHS compliant 2011/65/UE and following amendments

Suitable to be in contact with foodstuff. Please, get in contact with our Customer Service for further information

This material grade meets the requirements of KTW Guidelines

This material grade meets the requirements of ACS DGS/SD7A n°571 Nov 25, 2002

Das Material erfüllt die Anforderungen der DVGW-Standard W270 (11/2007)

## TECHNICAL DATA SHEET

# RADILON D RV600RKC 306 BK

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density		kg/m <sup>3</sup>	1660	
Moulding shrinkage - Parallel / Normal	280 / 90 / 60 <sup>[1]</sup>	%	0.2 / 0.3	
Water Absorption, immersion at 23°C	2mm	%	1.3	
Moisture Absorption 23°C - 50%RH	2mm	%	0.5	
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	1mm/min	MPa	19000	17200
Stress at Break	5mm/min	MPa	210	190
Strain at Break	5mm/min	%	2.9	3
Flexural Modulus	2mm/min	MPa	17000	15400
Flexural Strength	2mm/min	MPa	340	320
Charpy Impact Strength	+23°C	kJ/m <sup>2</sup>	100	105
Charpy Notched Impact Strength	+23°C	kJ/m <sup>2</sup>	18	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	10°C/min	°C	220	
Heat Deflection Temperature	1.80 MPa	°C	215	
Heat Deflection Temperature	8.00 MPa	°C	190	
Vicat Softening Temperature	50°C/h 50N	°C	215	
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	-mm	UL 94	class	HB
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13 1E11
Surface Resistivity	500V	IEC 60093	Ohm	1E12

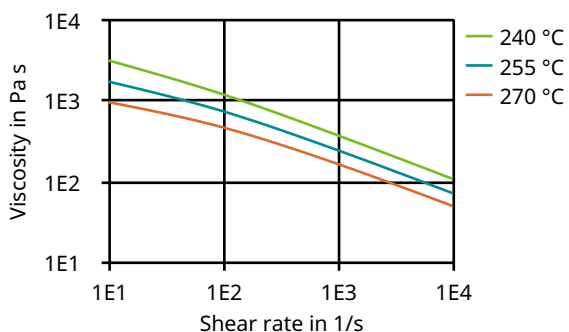
\*: DAM = Dry As Moulded state according to ISO 16396-2 \*\*: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

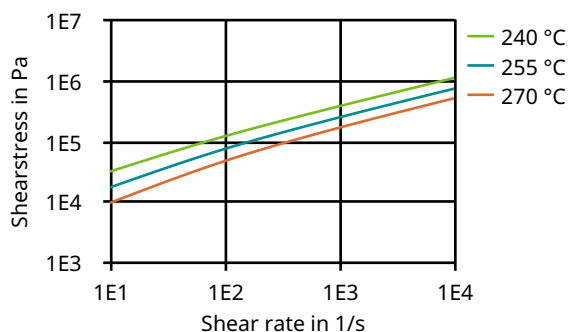
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Diagrams

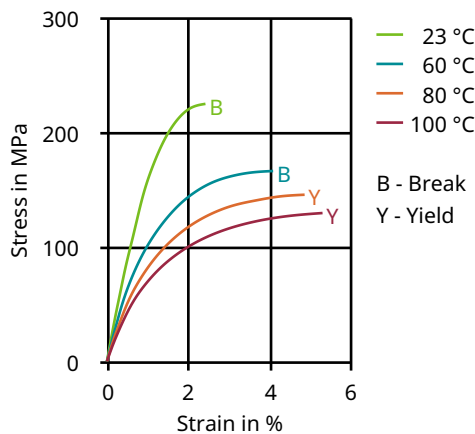
Viscosity-shear rate



Shearstress-shear rate



Stress-strain (dry)



Secant modulus-strain (dry)

