

## PRODUCT INFORMATION

# RADILON A CP300K 333 BK

### DESCRIPTION

PA66 30% mineral filled injection moulding grade. Heat stabilized. Black colour.

Suitable for parts requiring good dimensional stability, reduced shrinkage and low warpage.

ISO 1043: PA66-T MX30

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  
280 - 300°C

Mold Temperature  
80 - 100°C

Injection Speed  
medium-high

### PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet

Underwriters Laboratories Inc. certified material. File number: E116324 [www.ul.com](http://www.ul.com)

ROHS compliant 2011/65/UE and following amendments

## TECHNICAL DATA SHEET

# RADILON A CP300K 333 BK

PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density	ISO 1183	kg/m <sup>3</sup>	1360	
Moulding shrinkage - Parallel / Normal	295 /80 /30 <sup>[1]</sup>	ISO 294-4	%	1.4 / 1.5
Water Absorption, immersion at 23°C	2mm	ISO 62	%	6.1
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	1.9
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	5200 4200
Stress at Break	5mm/min	ISO 527-2/1A	MPa	90 65
Strain at Break	5mm/min	ISO 527-2/1A	%	8 12
Flexural Modulus	2mm/min	ISO 178	MPa	4500
Flexural Strength	2mm/min	ISO 178	MPa	135
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m <sup>2</sup>	55 70
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m <sup>2</sup>	40
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m <sup>2</sup>	4.5 5
Charpy Notched Impact Strength	-30°C	ISO 179/1eA	kJ/m <sup>2</sup>	4
<b>THERMAL PROPERTIES</b>				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	260
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	90
Heat Deflection Temperature	0.45 MPa	ISO 75/2Bf	°C	215
Vicat Softening Temperature	50°C/h 50N	ISO 306	°C	245
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	0.8mm	UL 94	class	HB
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	700
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13 1E11
Surface Resistivity	500V	IEC 60093	Ohm	1E12 1E10
Comparative Tracking Index	Sol.A	IEC 60112	-	500

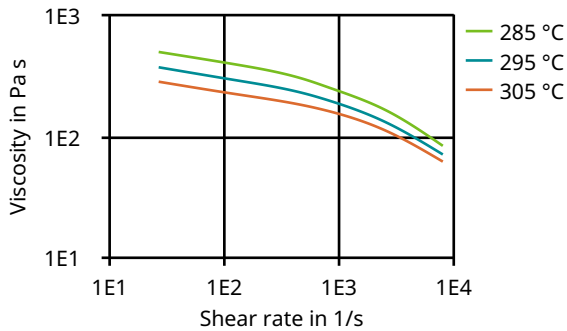
\*: DAM = Dry As Moulded state according to ISO 16396-2 \*\*: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

TECHNICAL DATA SHEET

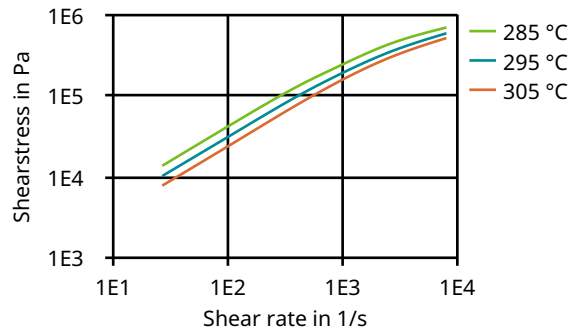
# RADILON A CP300K 333 BK

Diagrams

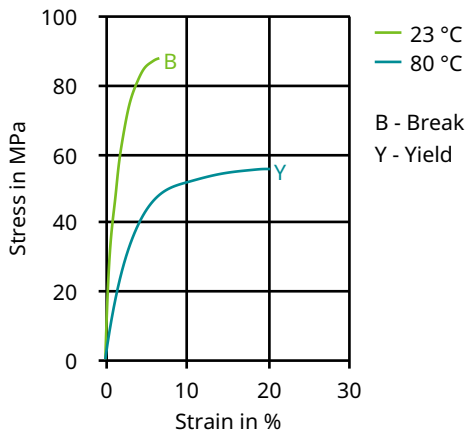
Viscosity-shear rate



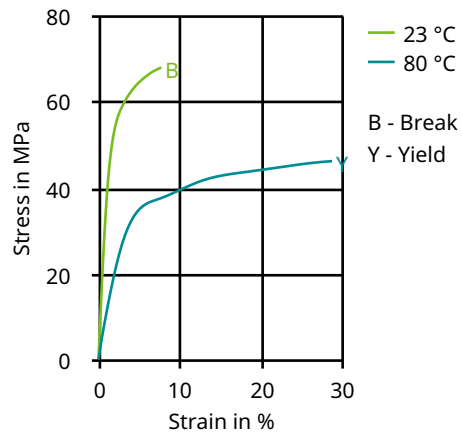
Shearstress-shear rate



Stress-strain (dry)



Stress-strain (cond.)



TECHNICAL DATA SHEET

# RADILON A CP300K 333 BK

Secant modulus-strain (dry)

Secant modulus-strain (cond.)

