

# RADIFLAM S RV300K AE 321 C BK

## DESCRIPTION

PA6 flame retardant injection moulding grade. 30% glass fibre reinforced. Black colour.

Suitable for parts requiring fire retardancy, high stiffness and good mechanical resistance. Rated V-0 according to UL-94.

ISO 1043: PA6-GF30 FR(17+72)

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  
250 - 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  
Underwriters Laboratories Inc. certified material [www.ul.com](http://www.ul.com)  
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>				
Density		kg/m <sup>3</sup>	1620	
Moulding shrinkage - Parallel / Normal	270/80/60 <sup>[1]</sup>	%	0.2 / 0.5	
Water Absorption, immersion at 23°C	2mm	%	3.2	
Moisture Absorption 23°C - 50%RH	2mm	%	0.9	
<b>MECHANICAL PROPERTIES</b>				
Tensile Modulus	1mm/min	MPa	11200	
Stress at Break	5mm/min	MPa	120	
Strain at Break	5mm/min	%	1.7	
Flexural Modulus	2mm/min	MPa	10400	
Flexural Strength	2mm/min	MPa	185	
Charpy Impact Strength	+23°C	kJ/m <sup>2</sup>	35	
Charpy Notched Impact Strength	+23°C	kJ/m <sup>2</sup>	8	
<b>THERMAL PROPERTIES</b>				
Melting Temperature	10°C/min	°C	220	
Heat Deflection Temperature	1.80 MPa	°C	205	
Vicat Softening Temperature	50°C/h 50N	°C	200	
Ball Pressure Hardness		°C	≥165	
<b>FLAMMABILITY PROPERTIES</b>				
Flammability	0.8mm	class	V-0	
Glow Wire Flammability Index	1mm	°C	960	
Glow Wire Flammability Index	2mm	°C	960	
Glow Wire Ignition Temperature	1mm	°C	850	
Glow Wire Ignition Temperature	2mm	°C	850	
Automotive Interior Flammability	3mm	mm/min	0	
<b>ELECTRICAL PROPERTIES</b>				
Volume Resistivity	500V	Ohm*m	1E13	1E11
Surface Resistivity	500V	Ohm	1E12	1E10
Comparative Tracking Index	SoI.A	V	350	

\*: DAM = Dry As Moulded state according to ISO 16396-2, \*\*: Cond = Conditioned state similar to ISO 1110

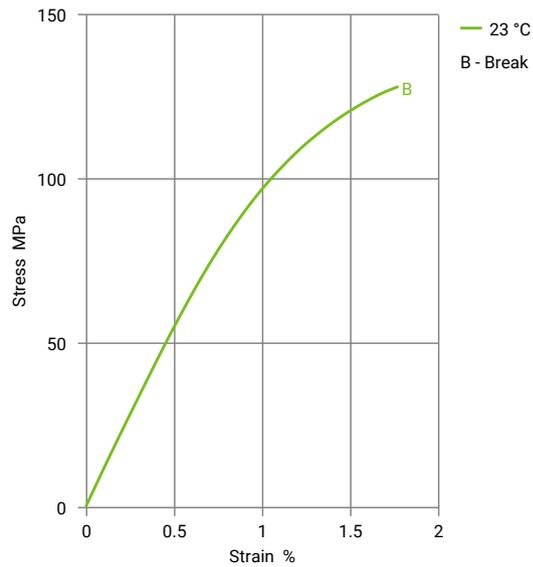
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



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## DIAGRAMS

### Stress-strain (dry)



### Secant modulus-strain (dry)

