

## PRODUCT INFORMATION

# RADIFLAM A RV250 AF 830 BR

### DESCRIPTION

PA66 flame retardant injection moulding grade with red phosphorus. 25% glass fibre reinforced. Natural red brick colour.

Suitable for parts requiring fire retardancy along with medium stiffness and good mechanical resistance. Typically employed for electrical components. Rated V-0 at 0.75 mm according to UL-94.

ISO 1043: PA66 GF25 FR(52+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. The material can not be used to produce parts operating in hot and humid environments (> 70°C / 160°F), or in contact with hot water or overheated steam.

#### 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 [www.ul.com](http://www.ul.com)  
ROHS compliant 2011/65/EU and following amendments

# TECHNICAL DATA SHEET

## RADIFLAM A RV250 AF 830 BR

PROPERTY	STANDARD	UNIT	VALUE	DAM*	Cond**
<b>PHYSICAL PROPERTIES</b>					
Density		kg/m <sup>3</sup>	1380		
Moulding shrinkage - Parallel / Normal	280 / 80 / 60 <sup>[1]</sup>	%	0.5 / 1.2		
Water Absorption, immersion at 23°C	2mm	%	5.5		
Moisture Absorption 23°C - 50%RH	2mm	%	1.2		
<b>MECHANICAL PROPERTIES</b>					
Tensile Modulus	1mm/min	MPa	8200	5300	
Stress at Break	5mm/min	MPa	135	90	
Strain at Break	5mm/min	%	2.9	3.2	
Flexural Modulus	2mm/min	MPa	7400		
Flexural Strength	2mm/min	MPa	200		
Charpy Impact Strength	+23°C	kJ/m <sup>2</sup>	65		
Charpy Impact Strength	-30°C	kJ/m <sup>2</sup>	50		
Charpy Notched Impact Strength	+23°C	kJ/m <sup>2</sup>	7.2		
Charpy Notched Impact Strength	-30°C	kJ/m <sup>2</sup>	6		
<b>THERMAL PROPERTIES</b>					
Melting Temperature	10°C/min	°C	260		
Heat Deflection Temperature	1.80 MPa	°C	230		
Heat Deflection Temperature	0.45 MPa	°C	255		
Vicat Softening Temperature	50°C/h 50N	°C	240		
<b>FLAMMABILITY PROPERTIES</b>					
Flammability	-mm	UL 94	class	V-0	
Glow Wire Flammability Index	1mm	IEC 60695-2-12	°C	960	
Glow Wire Flammability Index	2mm	IEC 60695-2-12	°C	960	
Glow Wire Ignition Temperature	1mm	IEC 60695-2-13	°C	725	
Glow Wire Ignition Temperature	2mm	IEC 60695-2-13	°C	750	
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	V	600	

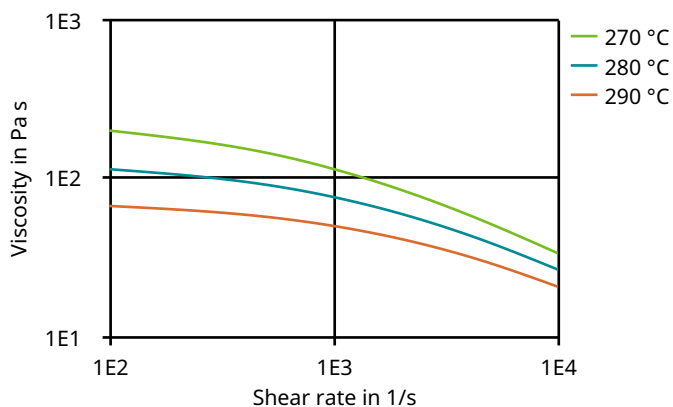
\*: DAM = Dry As Moulded state according to ISO 16396-2 \*\*: Cond = Conditioned state similar to ISO 1110 1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]

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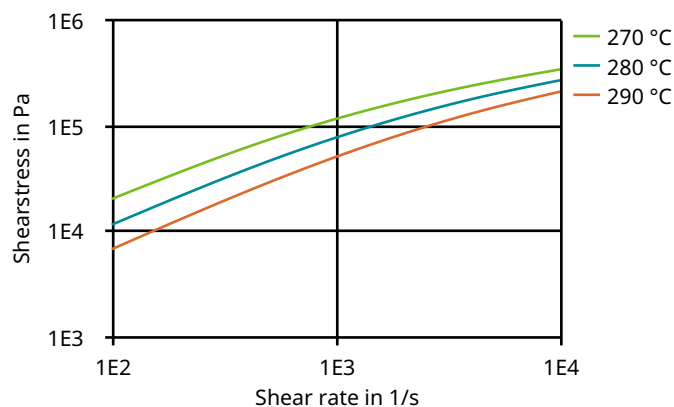
## RADIFLAM A RV250 AF 830 BR

### Diagrams

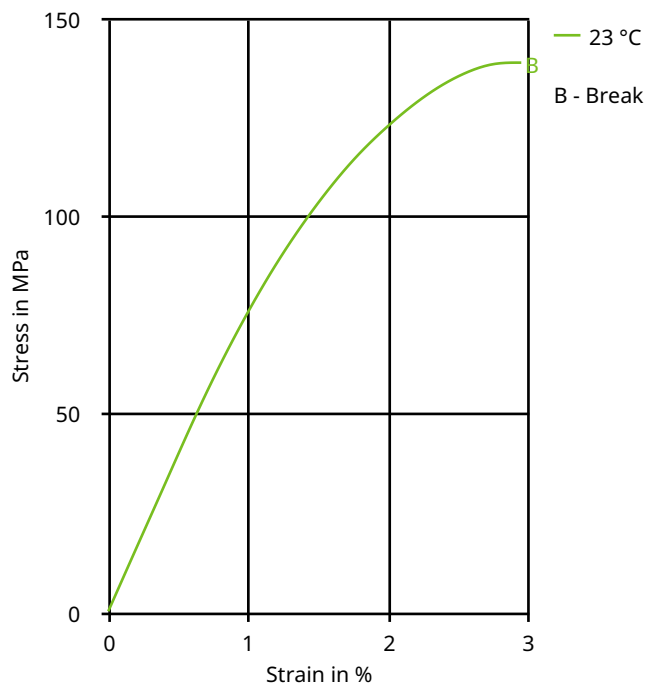
#### Viscosity-shear rate



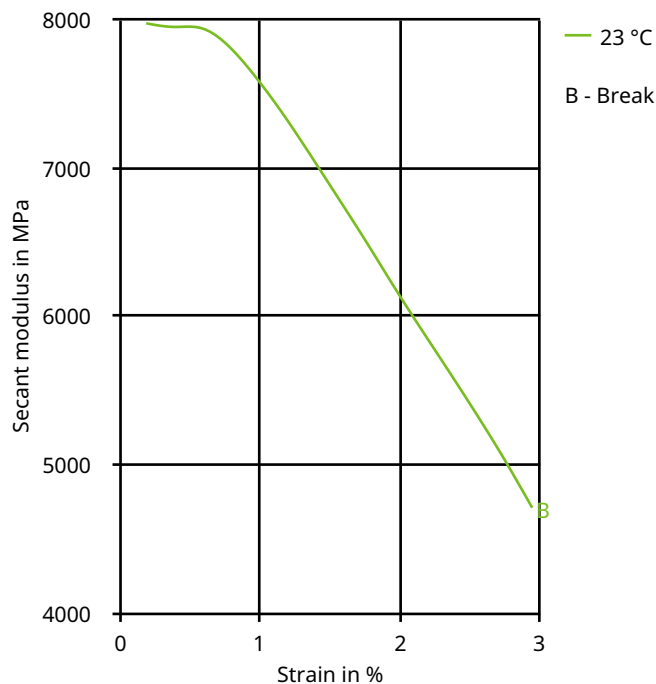
#### Shearstress-shear rate



#### Stress-strain (dry)



#### Secant modulus-strain (dry)



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Specific volume-temperature (pvT)

