PRODUCT INFORMATION

RADIFLAM A RV500 AF 821 BR

PROVISIONAL

DESCRIPTION

PA66 flame retardant injection moulding grade with red phosphorus. 50% glass fiber reinforced. Natural red brick colour.

Suitable for parts requiring fire retardancy along with high stiffness and mechanical resistance. Rated V-0 at 0.8 mm according to UL-94. Improved Glow Wire behaviour (GWIT). Typically employed for domestic appliances.

ISO 1043: PA66 GF50 FR(52)

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	Mold Temperature	Injection Speed
280 - 300°C	80 - 100°C	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
ROHS compliant 2011/65/UE and following amendments

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PROPERTY		STANDARD	UNIT	VALUE DAM*	VALUE Cond**
PHYSICAL PROPERTIES					
Density		ISO 1183	kg/m³	1620	
Moulding shrinkage - Parallel / Normal	280 /80 /60 [1]	ISO 294-4	%	0.2 / 0.6	
MECHANICAL PROPERTIES					
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	17500	
Stress at Break	5mm/min	ISO 527-2/1A	MPa	240	
Strain at Break	5mm/min	ISO 527-2/1A	%	2.8	
Flexural Modulus	2mm/min	ISO 178	MPa	15600	
Flexural Strength	2mm/min	ISO 178	MPa	380	
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m²	95	
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m²	16	
THERMAL PROPERTIES					
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	260	
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	255	
FLAMMABILITY PROPERTIES					
Flammability	0.8mm	UL 94	class	V-0	
Glow Wire Flammability Index	1mm	IEC 60695-2-1/2	°C	960	
Glow Wire Flammability Index	2mm	IEC 60695-2-1/2	°C	960	
Glow Wire Ignition Temperature	1mm	IEC 60695-2-1/3	°C	775	
Glow Wire Ignition Temperature	2mm	IEC 60695-2-1/3	°C	775	
Automotive Interior Flammability	3mm	ISO 3795	mm/min	0	
ELECTRICAL PROPERTIES					
Volume Resistivity	500V	IEC 60093	Ohm*m	1E13	1E11
Surface Resistivity	500V	IEC 60093	Ohm	1E12	1E10
Comparative Tracking Index	Sol.A	IEC 60112	-	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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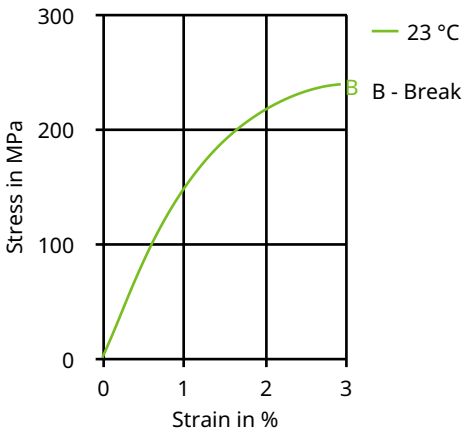
Diagrams

Stress-strain (dry)



Secant modulus-strain (dry)