

RADIFLAM AESTUS T2 RV300 HF 100 NT

DESCRIPTION

PPA flame retardant injection moulding grade, 30% glass fibre reinforced. Halogen and red phosphorus free. High melting point. Natural colour.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Suitable for Lead Free Soldering application. Rated V0 according to UL94.

ISO 1043: PA6T/66-GF30 FR(40)

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 120° C, dew point -20 ° C or below, time 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
310 - 320°C

Mold Temperature
110 - 130°C

Injection Speed
medium

PRODUCT SAFETY AND APPROVALS

For safety instruction please refer to Material Safety Data Sheet
Underwriters Laboratories Inc. certified material www.ul.com
ROHS compliant 2011/65/EU and following amendments



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PROPERTY	STANDARD	UNIT	VALUE	
			DAM*	Cond**
PHYSICAL PROPERTIES				
Density			1460	
Moulding shrinkage - Parallel / Normal	315/120/60 ^[1]	ISO 1183	kg/m ³	
Water Absorption, 24h immersion at 23°C	2mm	ISO 294-4	%	0.4 / 0.9
Moisture Absorption 23°C - 50%RH	2mm	ISO 62	%	0.1
		ISO 62	%	1.3
MECHANICAL PROPERTIES				
Tensile Modulus	1mm/min	ISO 527-2/1A	MPa	11000
Stress at Break	5mm/min	ISO 527-2/1A	MPa	160
Strain at Break	5mm/min	ISO 527-2/1A	%	2.5
Flexural Modulus	2mm/min	ISO 178	MPa	11100
Flexural Strength	2mm/min	ISO 178	MPa	240
Charpy Impact Strength	+23°C	ISO 179/1eU	kJ/m ²	62
Charpy Impact Strength	-30°C	ISO 179/1eU	kJ/m ²	55
Charpy Notched Impact Strength	+23°C	ISO 179/1eA	kJ/m ²	10
				11
THERMAL PROPERTIES				
Melting Temperature	10°C/min	ISO 11357-1/-3	°C	305
Heat Deflection Temperature	1.80 MPa	ISO 75/2Af	°C	280
FLAMMABILITY PROPERTIES				
Flammability	0.4mm	UL 94	class	V-0
Flammability	1.5mm	UL 94	class	5VA
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	800
Glow Wire Ignition Temperature	2mm	IEC 60695-2-13	°C	800
ELECTRICAL PROPERTIES				
Volume Resistivity	500V	IEC 62631-3-1	Ohm*m	1E13
Surface Resistivity	500V	IEC 62631-3-2	Ohm	1E12
Electric Strength		IEC 60243-1	kV/mm	42
Comparative Tracking Index	SoI.A	IEC 60112	V	600

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

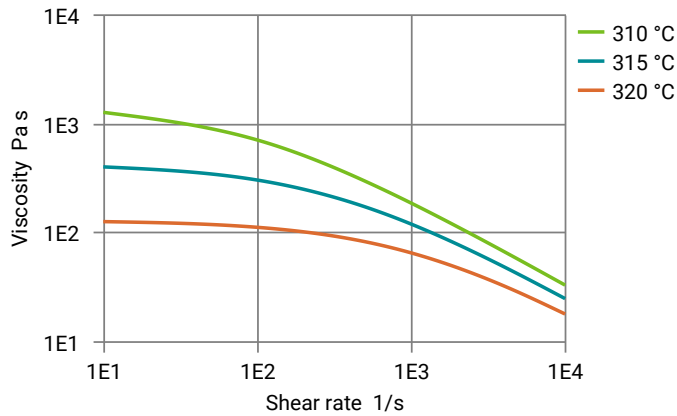
1: Melt Temperature [°C] / Mold Temperature [°C] / Cavity Pressure [MPa]



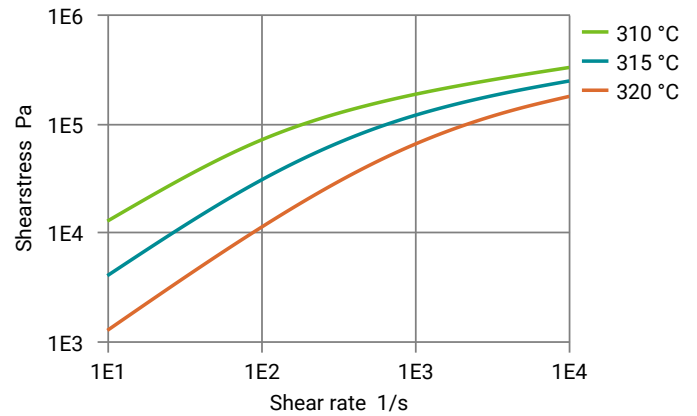
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DIAGRAMS

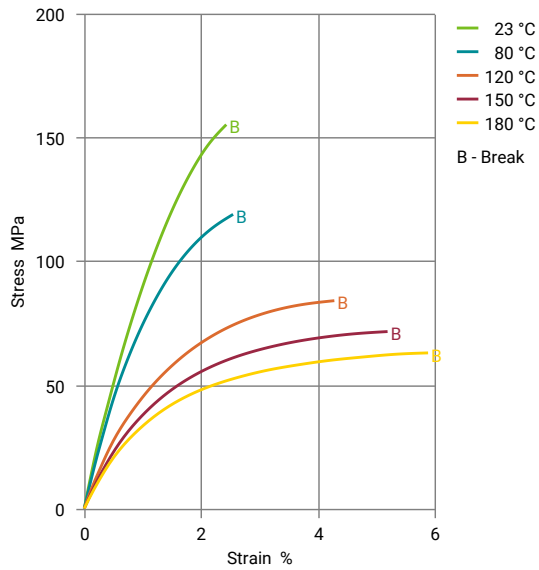
Viscosity-shear rate



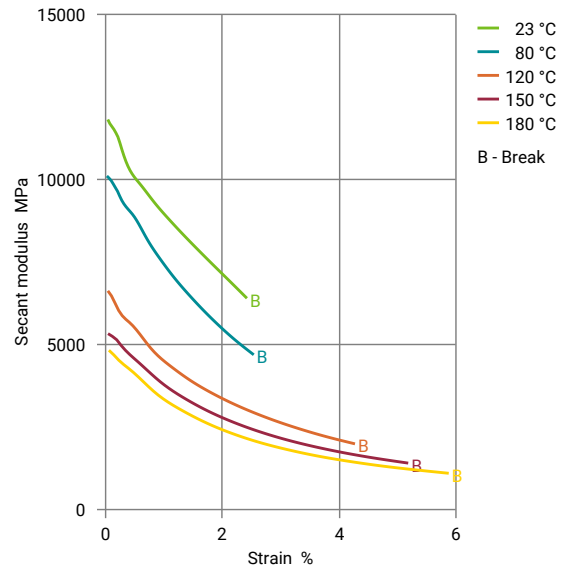
Shearstress-shear rate



Stress-strain (dry)



Secant modulus-strain (dry)



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Tensile modulus-temperature (dry)

