

## Radiflam® AESTUS T2 RV300 HF 100 NT

Radici Group High Performance Polymers - *Polyphthalamide*

### General Information

#### Product Description

PPA flame retardant injection moulding grade, 30% glass fiber 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.

#### General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Halogen Free • High Stiffness • Low (to None) Phosphorus Content
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA-6T/66-GF30 FR(40)

### Properties <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.46	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.90	--	%	
Flow	0.40	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	0.10	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.58E+6	1.60E+6	psi	ISO 527-1/1A/1
Tensile Stress (Yield)	23200	19600	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.4	2.2	%	ISO 527-2/1A/5
Flexural Modulus <sup>2</sup>	1.60E+6	--	psi	ISO 178
Flexural Stress <sup>2</sup>	34800	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength (73°F)	4.8	5.2	ft·lb/in <sup>2</sup>	ISO 179/1eA
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	24	--	ft·lb/in <sup>2</sup>	
73°F	26	--	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	536	--	°F	ISO 75-2/Af
Melting Temperature <sup>3</sup>	581	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	--	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	--	ohms·m	IEC 62631-3-1
Electric Strength	1100	1100	V/mil	IEC 60243-1
Comparative Tracking Index (Solution A)	600	--	V	IEC 60112



Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating				UL 94
0.016 in	V-0	--		
0.06 in	5VA	--		
Glow Wire Flammability Index				IEC 60695-2-12
0.04 in	1760	--	°F	
0.08 in	1760	--	°F	
Glow Wire Ignition Temperature				IEC 60695-2-13
0.04 in	1470	--	°F	
0.08 in	1470	--	°F	

### Processing Information

Injection	Dry	Unit
Drying Temperature - Desiccant Dryer	248	°F
Drying Time - Desiccant Dryer	> 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	590 to 608	°F
Mold Temperature	230 to 266	°F
Injection Rate	Moderate	

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.079 in/min

<sup>3</sup> 10°C/min

