

Radiflam® A RV300 HF 9293 GY

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant injection moulding grade, 30% glass fibre reinforced. Halogen and phosphorus free, improved fluidity. Electrical light grey colour.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Good electrical insulating properties. Rated V-0 according to UL-94.

General

Filler / Reinforcement	• Glass Fiber, 30% Filler by Weight
Additive	• Flame Retardant
Features	• Electrically Insulating • Flame Retardant • Good Flow • Halogen Free • Low (to None) Phosphorus Content
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Light Grey
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF30 FR(40)

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.44	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	4.3	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.3	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.51E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	19600	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.3	--	%	ISO 527-2/1A/5
Flexural Modulus ²	1.49E+6	--	psi	ISO 178
Flexural Stress ²	30500	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	3.8	--	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	24	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	491	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	464	--	°F	
Melting Temperature ³	496	--	°F	ISO 11357-3

Radiflam® A RV300 HF 9293 GY

Radici Group High Performance Polymers - Polyamide 66

Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1
Comparative Tracking Index				IEC 60112
Solution A	600	--	V	
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating (0.031 in)	V-0	--		UL 94
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
0.08 in	1430	--	°F	

Processing Information

Injection	Dry	Unit
Drying Temperature - Desiccant Dryer	176	°F
Drying Time - Desiccant Dryer	2.0 to 4.0	hr
Dew Point - Desiccant Dryer	< -4	°F
Suggested Max Moisture	0.10	%
Processing (Melt) Temp	527 to 554	°F
Mold Temperature	176 to 194	°F
Injection Rate	Moderate-Fast	

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 10°C/min