

Radiflam® A RV250 HFG1 100 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant injection moulding grade, halogen and red phosphorus free with improved GWIT performances. 25% glass fiber reinforced. Natural colour.

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

General

Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant		
Features	• Electrically Insulating • Flame Retardant	• Halogen Free • Low (to None) Phosphorus Content	• Medium Stiffness
Agency Ratings	• EU 2011/65/EC		
RoHS Compliance	• RoHS Compliant		
Appearance	• Natural Color		
Processing Method	• Injection Molding		
Resin ID (ISO 1043)	• PA66-GF25 FR(40)		

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.40	--	g/cm ³	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	0.80	--	%	
Flow	0.40	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	4.7	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.4	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.41E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	21000	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.7	--	%	ISO 527-2/1A/5
Flexural Modulus ²	1.38E+6	--	psi	ISO 178
Flexural Stress ²	32600	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
73°F	4.8	--	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
73°F	31	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Melting Temperature ³	500	--	°F	ISO 11357-3

Radiflam® A RV250 HFG1 100 NT
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	575	--	V	
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating				UL 94
0.016 in	V-0	--		
0.031 in	V-0	--		
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
0.030 in	1470	--	°F	
0.06 in	1470	--	°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	536 to 572	°F
Mold Temperature	176 to 212	°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