

Radiflam® S RV250 FR 100 NT

Radici Group High Performance Polymers - Polyamide 6

General Information

Product Description

PA6 flame retardant injection moulding grade, halogen and phosphorus free. 25% glass fiber reinforced. Natural colour.

Suitable for parts requiring fire retardancy along with medium stiffness and good mechanical resistance. Low smoke toxicity and optical density. Rated V-0 according to UL-94.

General

Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Halogen Free • Low (to None) Phosphorus Content • Low Toxicity • Medium Stiffness
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Natural Color
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA6-GF25 FR(61+72)

Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.76	--	g/cm ³	ISO 1183
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	2.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.1	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	2.22E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	21800	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.0	--	%	ISO 527-2/1A/5
Flexural Modulus ²	2.23E+6	--	psi	ISO 178
Flexural Stress ²	35500	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
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	419	--	°F	
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	392	--	°F	
Vicat Softening Temperature	401	--	°F	ISO 306/B50
Melting Temperature ³	428	--	°F	ISO 11357-3
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity (500 V)	1.0E+12	1.0E+10	ohms	IEC 62631-3-2

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Electrical	Dry	Conditioned	Unit	Test Method
Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1
Comparative Tracking Index Solution A	600	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
Flame Rating (0.06 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
0.04 in	1340	--	°F	
0.08 in	1340	--	°F	
Oxygen Index	45	--	%	ISO 4589-2

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	0.15	%
Processing (Melt) Temp	464 to 536	°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