

Radiflam® A RV250 AF 333 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant for injection molding grade with red phosphorus. 25% glass fibre reinforced. Black colour.

Suitable for parts requiring flame retardancy along with medium stiffness and good mechanical resistance. Rated V-0 at 0.75 mm according to UL-94.

General

Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Medium Stiffness
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF25 FR(52+72)

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.39	--	g/cm ³	ISO 1183
Molding Shrinkage ²				ISO 294-4
Across Flow	1.2	--	%	
Flow	0.50	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	5.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.2	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.20E+6	754000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	19600	13100	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.7	3.2	%	ISO 527-2/1A/5
Flexural Modulus ³	1.07E+6	--	psi	ISO 178
Flexural Stress ³	29000	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	2.9	--	ft·lb/in ²	
73°F	3.7	5.2	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	24	--	ft·lb/in ²	
73°F	29	36	ft·lb/in ²	
Notched Izod Impact Strength				ISO 180/1A
-22°F	3.0	--	ft·lb/in ²	
73°F	3.7	--	ft·lb/in ²	

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Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load 66 psi, Unannealed	491	--	°F	ISO 75-2/Bf
Deflection Temperature Under Load 264 psi, Unannealed	446	--	°F	ISO 75-2/Af
Vicat Softening Temperature	464	--	°F	ISO 306/B50
Melting Temperature ⁴	500	--	°F	ISO 11357-3
Thermal Conductivity ⁵ (73°F)	2.2	--	Btu·in/hr/ft ² /°F	ISO 8302
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 Solution A	500	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating 0.031 in 0.06 in	V-0 5VA	-- --		UL 94
Glow Wire Flammability Index 0.04 in 0.08 in	1760 1760	-- --	°F °F	IEC 60695-2-12
Glow Wire Ignition Temperature 0.04 in 0.08 in	1340 1380	-- --	°F °F	IEC 60695-2-13

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.

² 280°C Melt Temperature, 80°C Mold Temperature, 60 MPa Cavity Pressure

³ 0.079 in/min

⁴ 10°C/min

⁵ through plane