

Radiflam® A RV250 HF 358 BK

Radici Group High Performance Polymers - *Polyamide 66*

General Information

Product Description

PA66 flame retardant for injection molding grade, halogen and red phosphorus free. 25% glass fibre reinforced. Black colour.

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

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight		
Additive	• Flame Retardant		
Features	• Flame Retardant • Halogen Free	• Low (to None) Phosphorus Content • 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(40)		

Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm ³	ISO 1183
Molding Shrinkage ²				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.40	--	%	
Water Absorption (Saturation, 73°F, 0.0787 in)	5.5	--	%	ISO 62
Water Absorption (Equilibrium, 73°F, 0.0787 in, 50% RH)	1.3	--	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.32E+6	--	psi	ISO 527-1/1A/1
Tensile Stress (Break)	18900	--	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.6	--	%	ISO 527-2/1A/5
Flexural Modulus ³	1.30E+6	--	psi	ISO 178
Flexural Stress ³	29700	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.0	--	ft·lb/in ²	
73°F	4.5	--	ft·lb/in ²	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	24	--	ft·lb/in ²	
73°F	27	--	ft·lb/in ²	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load (264 psi, Unannealed)	464	--	°F	ISO 75-2/Af
Vicat Softening Temperature	473	--	°F	ISO 306/B50
Melting Temperature ⁴	500	--	°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



Volume Resistivity (500 V)	1.0E+13	1.0E+11	ohms·m	IEC 62631-3-1
Flammability	Dry	Conditioned	Unit	Test Method
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 (0.04 in)	1340	--	°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				

