

# 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

Filler / Reinforcement	• Glass Fiber, 25% Filler by Weight
Additive	• Flame Retardant
Features	<ul style="list-style-type: none"> <li>• Flame Retardant</li> <li>• Halogen Free</li> <li>• Low (to None) Phosphorus Content</li> <li>• Medium Stiffness</li> </ul>
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 <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.38	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.40	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	5.5	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.3	--	%	
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 <sup>3</sup>	1.30E+6	--	psi	ISO 178
Flexural Stress <sup>3</sup>	29700	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	4.0	--	ft·lb/in <sup>2</sup>	
73°F	4.5	--	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	24	--	ft·lb/in <sup>2</sup>	
73°F	27	--	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Af
264 psi, Unannealed	464	--	°F	

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<b>Thermal</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
Vicat Softening Temperature	473	--	°F	ISO 306/B50
Melting Temperature <sup>4</sup>	500	--	°F	ISO 11357-3
<b>Electrical</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
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
<b>Flammability</b>	<b>Dry</b>	<b>Conditioned</b>	<b>Unit</b>	<b>Test Method</b>
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
0.04 in	1340	--	°F	

**Processing Information**

<b>Injection</b>	<b>Dry</b>	<b>Unit</b>
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**

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 280°C Melt Temperature, 80°C Mold Temperature, 60 MPa Cavity Pressure

<sup>3</sup> 0.079 in/min

<sup>4</sup> 10°C/min