

# Radiflam® A RV350 AF 375 BK

## Radici Group High Performance Polymers - Polyamide 66

### General Information

#### Product Description

PA66 flame retardant for injection molding grade with red phosphorus. Reinforced with 35% glass fiber. Improved impact properties. Black Colour.

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

#### General

Filler / Reinforcement	• Glass Fiber, 35% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Good Impact Resistance • Good Stiffness
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF35 FR(52)

### Properties<sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.43	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage				ISO 294-4
Across Flow	1.0	--	%	
Flow	0.30	--	%	
Water Absorption				ISO 62
Saturation, 73°F, 0.0787 in	5.4	--	%	
Water Absorption				ISO 62
Equilibrium, 73°F, 0.0787 in, 50% RH	1.3	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	1.46E+6	1.16E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	19600	15200	psi	ISO 527-2/1A/5
Tensile Strain (Break)	3.3	3.3	%	ISO 527-2/1A/5
Flexural Modulus <sup>2</sup>	1.33E+6	1.02E+6	psi	ISO 178
Flexural Stress <sup>2</sup>	31900	21800	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	5.7	--	ft·lb/in <sup>2</sup>	
73°F	7.1	8.6	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	33	--	ft·lb/in <sup>2</sup>	
73°F	33	36	ft·lb/in <sup>2</sup>	
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				ISO 75-2/Bf
66 psi, Unannealed	482	--	°F	
Deflection Temperature Under Load				ISO 75-2/ Af
264 psi, Unannealed	437	--	°F	

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Thermal	Dry	Conditioned	Unit	Test Method
Vicat Softening Temperature	464	--	°F	ISO 306/B50
Melting Temperature <sup>3</sup>	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
Comparative Tracking Index Solution A	500	--	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Burning Rate (0.118 in)	0.0	--	in/min	ISO 3795
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	
0.08 in	1380	--	°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

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

<sup>2</sup> 0.079 in/min

<sup>3</sup> 10°C/min