

**Radiflam® A RV300 HF 339 BK**

 Radici Group High Performance Polymers - *Polyamide 66*

## General Information

**Product Description**

PA66 flame retardant injection moulding grade. Halogen and phosphorus free. 30% glass fibre reinforced and heat stabilized. Deep black colour.

Suitable for parts requiring fire retardancy along with high stiffness and good mechanical resistance. Good electrical insulating properties. 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, 30% Filler by Weight
Additive	• Flame Retardant • Heat Stabilizer
Features	• Electrically Insulating • Flame Retardant • Halogen Free • Heat Stabilized • High Stiffness • Low (to None) Phosphorus Content
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66-GF30 FR(40)

 Properties <sup>1</sup>

Physical	Dry	Conditioned	Unit	Test Method
Density	1.41	--	g/cm <sup>3</sup>	ISO 1183
Molding Shrinkage <sup>2</sup>				ISO 294-4
Across Flow	0.90	--	%	
Flow	0.30	--	%	
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	1.54E+6	1.28E+6	psi	ISO 527-1/1A/1
Tensile Stress (Break)	21800	16000	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	3.5	%	ISO 527-2/1A/5
Flexural Modulus <sup>3</sup>	1.46E+6	--	psi	ISO 178
Flexural Stress <sup>3</sup>	34100	--	psi	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-22°F	3.3	--	ft·lb/in <sup>2</sup>	
73°F	4.8	5.7	ft·lb/in <sup>2</sup>	
Charpy Unnotched Impact Strength				ISO 179/1eU
-22°F	31	--	ft·lb/in <sup>2</sup>	
73°F	33	--	ft·lb/in <sup>2</sup>	
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)	464	--	°F	ISO 75-2/Af
Vicat Softening Temperature	482	--	°F	ISO 306/B50
Melting Temperature <sup>4</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
Electric Strength	1000	890	V/mil	IEC 60243-1
Comparative Tracking Index (Solution A)	550	--	V	IEC 60112
<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	
0.08 in	1430	--	°F	

### Processing Information

<b>Injection</b>	<b>Dry 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	527 to 554 °F
Mold Temperature	176 to 194 °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

