

Radiflam® A RV150HHR AF 3800 BK

 Radici Group High Performance Polymers - *Polyamide 66*

General Information

Product Description

PA66 flame retardant with Red Phosphorus. 15% glass fiber reinforced, highly heat resistance injection moulding grade, black colour.

Suitable for parts requiring fire retardancy, high heat resistance and improved stiffness. Rated V-0 at 0.75mm according to UL-94.

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Europe • North America • Asia Pacific • Latin America
Filler / Reinforcement	• Glass Fiber, 15% Filler by Weight
Additive	• Flame Retardant
Features	• Flame Retardant • Good Stiffness • High Heat Resistance
Uses	• Automotive Applications
Agency Ratings	• EU 2011/65/EC
RoHS Compliance	• RoHS Compliant
Automotive Specifications	• GM GMW16864P-PA-GF15H
Appearance	• Black
Processing Method	• Injection Molding
Resin ID (ISO 1043)	• PA66 TGF15-FR52

 Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.34	g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (275°C/0.325 kg)	32	g/10 min	ISO 1133
Molding Shrinkage ²			ISO 294-4
Across Flow	1.2	%	
Flow	0.90	%	
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	Nominal Value	Unit	Test Method
Tensile Modulus	943000	psi	ISO 527-1/1A/1
Tensile Stress (Break)	16000	psi	ISO 527-2/1A/5
Tensile Strain (Break)	2.8	%	ISO 527-2/1A/5
Flexural Modulus ³	856000	psi	ISO 178
Flexural Stress ³	24700	psi	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-22°F	2.9	ft·lb/in ²	
73°F	3.3	ft·lb/in ²	
Charpy Unnotched Impact Strength (73°F)	25	ft·lb/in ²	ISO 179/1eU
Notched Izod Impact Strength			ISO 180/1A
-22°F	2.5	ft·lb/in ²	
73°F	2.9	ft·lb/in ²	
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (66 psi, Unannealed)	482	°F	ISO 75-2/Bf
Deflection Temperature Under Load (264 psi, Unannealed)	419	°F	ISO 75-2/Af
Vicat Softening Temperature	428	°F	ISO 306/B50



Melting Temperature ⁴	500 °F	ISO 11357-3
CLTE - Flow (73 to 131°F)	1.1E-4 in/in/°F	ISO 11359-2
CLTE - Transverse (73 to 131°F)	1.5E-5 in/in/°F	ISO 11359-2
Electrical	Nominal Value Unit	Test Method
Surface Resistivity ⁵	1.0E+11 ohms	IEC 62631-3-2
Volume Resistivity ⁵	1.0E+15 ohms·cm	IEC 62631-3-1
Flammability	Nominal Value Unit	Test Method
Burning Rate (0.118 in)	0.0 in/min	ISO 3795
Flame Rating		UL 94
0.031 in	V-0	
0.06 in	V-0	
Glow Wire Flammability Index (0.04 in)	1760 °F	IEC 60695-2-12

Processing Information

Injection	Nominal Value 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 500V

