

Radiflam® A RV150 AF 339 BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant injection moulding grade with red phosphorus. 15% glass fiber reinforced. Deep black colour.

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

General

| | |
|------------------------|-------------------------------------|
| Filler / Reinforcement | • Glass Fiber, 15% Filler by Weight |
| Additive | • Flame Retardant |
| Features | • Flame Retardant • Good Stiffness |
| Uses | • Automotive Applications |
| Agency Ratings | • EU 2011/65/EC |
| RoHS Compliance | • RoHS Compliant |
| Appearance | • Black |
| Processing Method | • Injection Molding |
| Resin ID (ISO 1043) | • PA66 GF15 FR(52) |

Properties ¹

| Physical | Dry | Conditioned | Unit | Test Method |
|--|---------|-------------|-----------------------|----------------|
| Density | 1.34 | -- | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) 275°C/0.325 kg | 44 | -- | g/10 min | ISO 1133 |
| Molding Shrinkage ² Across Flow | 1.2 | -- | % | ISO 294-4 |
| Flow | 0.60 | -- | % | |
| Mechanical | Dry | Conditioned | Unit | Test Method |
| Tensile Modulus | 870000 | -- | psi | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 14900 | -- | psi | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 2.7 | -- | % | ISO 527-2/1A/5 |
| Flexural Modulus ³ | 798000 | -- | psi | ISO 178 |
| Flexural Stress ³ | 22500 | -- | psi | ISO 178 |
| Impact | Dry | Conditioned | Unit | Test Method |
| Charpy Notched Impact Strength 73°F | 2.8 | -- | ft·lb/in ² | ISO 179/1eA |
| Charpy Unnotched Impact Strength 73°F | 18 | -- | ft·lb/in ² | ISO 179/1eU |
| Thermal | Dry | Conditioned | Unit | Test Method |
| 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 |
| Electrical | Dry | Conditioned | Unit | Test Method |
| Surface Resistivity ⁵ | 1.0E+12 | 1.0E+10 | ohms | IEC 62631-3-2 |

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| Electrical | Dry | Conditioned | Unit | Test Method |
|---|---------|-------------|---------|----------------|
| Volume Resistivity ⁵ | 1.0E+15 | 1.0E+13 | ohms·cm | IEC 62631-3-1 |
| 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 0.04 in | 1760 | -- | °F | IEC 60695-2-12 |

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

⁵ 500V