

Radiflam® A RV250K AE 341 C BK

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 flame retardant injection moulding grade. 25% glass fiber reinforced. Black colour.

Suitable for parts requiring fire retardancy, medium stiffness and good mechanical resistance. Rated V-0 according to UL-94.

General

| | |
|------------------------|---|
| Filler / Reinforcement | • Glass Fiber, 25% Filler by Weight |
| Additive | • Flame Retardant |
| Features | • Flame Retardant • Medium Stiffness |
| Agency Ratings | • EU 2011/65/EC |
| RoHS Compliance | • RoHS Compliant |
| Appearance | • Black |
| Processing Method | • Injection Molding |
| Resin ID (ISO 1043) | • PA66-T GF25 FR(17+72) |

Properties ¹

| Physical | Dry | Conditioned | Unit | Test Method |
|--------------------------------------|---------|-------------|-----------------------|----------------|
| Density | 1.58 | -- | g/cm ³ | ISO 1183 |
| Molding Shrinkage ² | | | | ISO 294-4 |
| Across Flow | 0.90 | -- | % | |
| Flow | 0.40 | -- | % | |
| Water Absorption | | | | ISO 62 |
| Saturation, 73°F, 0.0787 in | 3.8 | -- | % | |
| Water Absorption | | | | ISO 62 |
| Equilibrium, 73°F, 0.0787 in, 50% RH | 1.0 | -- | % | |
| Mechanical | Dry | Conditioned | Unit | Test Method |
| Tensile Modulus | 1.52E+6 | 1.39E+6 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Break) | 21000 | 13800 | psi | ISO 527-2/1A/5 |
| Tensile Strain (Break) | 2.0 | 2.5 | % | ISO 527-2/1A/5 |
| Flexural Modulus ³ | 1.44E+6 | -- | psi | ISO 178 |
| Flexural Stress ³ | 30500 | -- | psi | ISO 178 |
| Impact | Dry | Conditioned | Unit | Test Method |
| Charpy Notched Impact Strength | | | | ISO 179/1eA |
| -22°F | 3.3 | -- | ft·lb/in ² | |
| 73°F | 3.6 | 5.2 | ft·lb/in ² | |
| Charpy Unnotched Impact Strength | | | | ISO 179/1eU |
| -22°F | 17 | -- | ft·lb/in ² | |
| 73°F | 21 | 24 | ft·lb/in ² | |
| Thermal | Dry | Conditioned | Unit | Test Method |
| Deflection Temperature Under Load | | | | ISO 75-2/Af |
| 264 psi, Unannealed | 464 | -- | °F | |
| Ball Pressure Test (> 365°F) | Pass | -- | | IEC 60695-10-2 |
| Melting Temperature ⁴ | 500 | -- | °F | ISO 11357-3 |

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| 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 | | | | IEC 60112 |
| Solution A | 300 | -- | V | |
| Flammability | Dry | Conditioned | Unit | Test Method |
| 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 | 1430 | -- | °F | |
| 0.08 in | 1430 | -- | °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

- 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