

Radilon® A USZ200 100 NT

Radici Group High Performance Polymers - Polyamide 66

General Information

Product Description

PA66 injection moulding grade. Toughened. Natural colour.

Suitable for parts requiring excellent impact resistance, even at low temperatures, and high flexibility.

General

| | | | |
|---------------------|--|---|-------------------------------------|
| Additive | • Impact Modifier | | |
| Features | • Good Impact Resistance • Good Toughness | • High Flexibility • Impact Modified | • Low Temperature Impact Resistance |
| Agency Ratings | • EU 2011/65/EC | | |
| RoHS Compliance | • RoHS Compliant | | |
| Appearance | • Natural Color | | |
| Processing Method | • Injection Molding | | |
| Resin ID (ISO 1043) | • PA66-HI | | |

Properties ¹

| Physical | Dry | Conditioned | Unit | Test Method |
|--------------------------------------|---------|-------------|-----------------------|-----------------|
| Density | 1.05 | -- | g/cm ³ | ISO 1183 |
| Molding Shrinkage | | | | ISO 294-4 |
| Across Flow | 1.7 | -- | % | |
| Flow | 1.9 | -- | % | |
| Water Absorption | | | | ISO 62 |
| Saturation, 73°F, 0.0787 in | 7.0 | -- | % | |
| Water Absorption | | | | ISO 62 |
| Equilibrium, 73°F, 0.0787 in, 50% RH | 1.8 | -- | % | |
| Mechanical | Dry | Conditioned | Unit | Test Method |
| Tensile Modulus | 225000 | 123000 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Yield) | 6090 | 3630 | psi | ISO 527-2/1A/50 |
| Tensile Strain (Yield) | 15 | 30 | % | ISO 527-2/1A/50 |
| Nominal Tensile Strain at Break | > 100 | > 100 | % | ISO 527-2/1A/50 |
| Flexural Modulus ² | 203000 | -- | psi | ISO 178 |
| Flexural Stress ² | 7980 | -- | psi | ISO 178 |
| Impact | Dry | Conditioned | Unit | Test Method |
| Charpy Notched Impact Strength | | | | ISO 179/1eA |
| -22°F | 38 | -- | ft·lb/in ² | |
| 73°F | 50 | 59 | ft·lb/in ² | |
| Thermal | Dry | Conditioned | Unit | Test Method |
| Deflection Temperature Under Load | | | | ISO 75-2/Af |
| 264 psi, Unannealed | 149 | -- | °F | |
| Vicat Softening Temperature | 356 | -- | °F | ISO 306/B50 |
| Melting Temperature ³ | 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 |

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| Electrical | Dry | Conditioned | Unit | Test Method |
|---|---------|-------------|--------|----------------|
| Volume Resistivity (500 V) | 1.0E+13 | 1.0E+11 | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index Solution A | 600 | -- | V | IEC 60112 |
| Flammability | Dry | Conditioned | Unit | Test Method |
| Burning Rate (0.118 in) | < 1.2 | -- | in/min | ISO 3795 |
| Flame Rating (0.031 in) | HB | -- | | UL 94 |
| Glow Wire Flammability Index 0.08 in | 1200 | -- | °F | IEC 60695-2-12 |
| Glow Wire Ignition Temperature 0.08 in | 1250 | -- | °F | IEC 60695-2-13 |

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 | 0.15 | % |
| Processing (Melt) Temp | 518 to 554 | °F |
| Mold Temperature | 140 to 176 | °F |
| Injection Rate | Moderate | |

Notes

¹ Typical properties: these are not to be construed as specifications.

² 0.079 in/min

³ 10°C/min