

Polyflam RPP 2000 NAT

LyondellBasell Industries - Polypropylene Homopolymer

General Information

Product Description

Unfilled PP-Compound, halogen free

General

| | | |
|-------------------|---------------------|----------------|
| Features | • Flame Retardant | • Halogen Free |
| Processing Method | • Injection Molding | |
| Resin ID | • PP FR(53) | |

Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-----------------------|-----------------|
| Density | 0.910 | g/cm ³ | ISO 1183/A |
| Melt Mass-Flow Rate (MFR) (230°C/2.16 kg) | 8.0 | g/10 min | ISO 1133 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus (73°F) | 261000 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Yield, 73°F) | 5510 | psi | ISO 527-2/1A/50 |
| Tensile Strain (Break, 73°F) | 8.0 | % | ISO 527-2/1A/50 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -22°F | 1.4 | ft·lb/in ² | |
| 73°F | 3.3 | ft·lb/in ² | |
| Charpy Unnotched Impact Strength (-22°F) | 8.1 | ft·lb/in ² | ISO 179/1eU |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 216 | °F | ISO 75-2/B |
| Deflection Temperature Under Load 264 psi, Unannealed | 138 | °F | ISO 75-2/A |
| Vicat Softening Temperature | | | |
| -- | 207 | °F | ISO 306/B50 |
| -- | 315 | °F | ISO 306/A50 |
| Ball Pressure Test (293°F) | Pass | | IEC 60695-10-2 |
| RTI Elec | | | UL 746B |
| 0.030 in | 149 | °F | |
| 0.06 in | 149 | °F | |
| 0.12 in | 149 | °F | |
| RTI Imp | | | UL 746B |
| 0.030 in | 149 | °F | |
| 0.06 in | 149 | °F | |
| 0.12 in | 149 | °F | |
| RTI Str | | | UL 746B |
| 0.030 in | 149 | °F | |
| 0.06 in | 149 | °F | |
| 0.12 in | 149 | °F | |
| Electrical | Nominal Value | Unit | Test Method |
| Surface Resistivity | 1.0E+15 | ohms | IEC 60093 |

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| Electrical | Nominal Value | Unit | Test Method |
|--------------------------------|----------------------|-------------|--------------------|
| Volume Resistivity | 1.0E+15 | ohms·cm | IEC 60093 |
| Comparative Tracking Index | 600 | V | IEC 60112 |
| Flammability | Nominal Value | Unit | Test Method |
| Burning Rate ² | | | |
| 0.0787 in | 0.0 | in/min | FMVSS 302 |
| 0.0787 in | 0.0 | in/min | ISO 3795 |
| Flame Rating | | | UL 94 |
| 0.030 in | V-2 | | |
| 0.06 in | V-2 | | |
| 0.12 in | V-2 | | |
| Glow Wire Flammability Index | | | IEC 60695-2-12 |
| 0.030 in | 1760 | °F | |
| 0.06 in | 1760 | °F | |
| 0.12 in | 1760 | °F | |
| Glow Wire Ignition Temperature | | | IEC 60695-2-13 |
| 0.030 in | 1610 | °F | |
| 0.06 in | 1560 | °F | |
| 0.12 in | 1470 | °F | |
| Oxygen Index | 27 | % | ISO 4589-2 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|----------------------|-------------|
| Drying Temperature | 158 to 176 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Rear Temperature | 356 | °F |
| Middle Temperature | 392 | °F |
| Front Temperature | 410 | °F |
| Nozzle Temperature | 428 | °F |
| Processing (Melt) Temp | 356 to 410 | °F |
| Mold Temperature | 104 to 176 | °F |
| Injection Pressure | 11600 to 17400 | psi |
| Injection Rate | Slow-Moderate | |
| Holding Pressure | 5800 to 13100 | psi |
| Back Pressure | 725 to 1450 | psi |
| Screw Speed | < 709 | in/min |
| Cushion | < 0.197 | in |

Notes

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

² Self-Extinguishing