

Polyflam RPP 2000 S NAT

LyondellBasell Industries - Polypropylene Homopolymer

General Information

Product Description

Flame retardant polypropylene homopolymer compound, UV stabilized for outdoor applications (i.e. stadium seats), free of halogens

General

| | |
|-------------------|---|
| Additive | <ul style="list-style-type: none"> Flame Retardant UV Stabilizer |
| Features | <ul style="list-style-type: none"> Flame Retardant Homopolymer Halogen Free UV Stabilized |
| Uses | <ul style="list-style-type: none"> Outdoor Applications Seats |
| Processing Method | <ul style="list-style-type: none"> Injection Molding |
| Resin ID | <ul style="list-style-type: none"> PP FR(53) |

Properties¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|------------------------|-----------------|
| Density | 0.910 | g/cm ³ | ISO 1183/A |
| Melt Volume-Flow Rate (MVR) (230°C/2.16 kg) | 7.0 | cm ³ /10min | ISO 1133 |
| Water Absorption (Equilibrium, 73°F, 50% RH) | 0.16 | % | ISO 62 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 160000 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Yield) | 4640 | psi | ISO 527-2/1A/50 |
| Tensile Strain (Yield) | 11 | % | ISO 527-2/1A/50 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength (73°F) | 2.4 | ft-lb/in ² | ISO 179/1eA |
| Charpy Unnotched Impact Strength (73°F) | No Break | | ISO 179/1eU |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 201 | °F | ISO 75-2/Bf |
| Deflection Temperature Under Load 264 psi, Unannealed | 120 | °F | ISO 75-2/ Af |
| Vicat Softening Temperature | | | |
| -- | 194 | °F | ISO 306/B50 |
| -- | 304 | °F | ISO 306/A120 |
| Ball Pressure Test (284°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 | |

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| Electrical | Nominal Value | Unit | Test Method |
|--------------------------------|---------------|--------|----------------------|
| Surface Resistivity | > 1.0E+15 | ohms | IEC 60093 |
| Volume Resistivity | > 1.0E+13 | ohms·m | IEC 62631-3-1 |
| Comparative Tracking Index | 600 | V | IEC 60112 |
| Flammability | Nominal Value | Unit | Test Method |
| Burning Rate ² | | | |
| 0.0787 in | 0.0 | in/min | ISO 3795 |
| 0.0787 in | 0.0 | in/min | FMVSS 302 |
| Flammability Classification | | | IEC 60695-11-10, -20 |
| 0.03 in | V-2 | | |
| 0.06 in | V-2 | | |
| 0.13 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 | 26 | % | ISO 4589-2 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | 158 to 176 | °F |
| Drying Time | 2.0 to 4.0 | hr |
| Processing (Melt) Temp | 356 to 410 | °F |
| Mold Temperature | 104 to 176 | °F |

Notes

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

² Self-Extinguishing