

Polyflam RIPP 2000 S WHI87235

LyondellBasell Industries - Polypropylene Copolymer

General Information

Product Description

Unfilled flame retardant polypropylene copolymer compound, UV stabilized for outdoor applications (i.e. stadium seats), free of halogens according to DIN VDE 0472 part 815

General

| | |
|-------------------|---|
| Additive | <ul style="list-style-type: none"> Flame Retardant UV Stabilizer |
| Features | <ul style="list-style-type: none"> Copolymer Flame Retardant 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) |

Properties ¹

| 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) | 13 | cm ³ /10min | ISO 1133 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus | 160000 | psi | ISO 527-1/1A/1 |
| Tensile Stress (Yield) | 3480 | psi | ISO 527-2/1A/50 |
| Tensile Strain (Yield) | 10 | % | ISO 527-2/1A/50 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength | | | ISO 179/1eA |
| -22°F | 1.2 | ft-lb/in ² | |
| 73°F | 6.2 | ft-lb/in ² | |
| Charpy Unnotched Impact Strength | | | ISO 179/1eU |
| -22°F | 22 | ft-lb/in ² | |
| 73°F | No Break | | |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (66 psi, Unannealed) | 172 | °F | ISO 75-2/Bf |
| Deflection Temperature Under Load 264 psi, Unannealed | 127 | °F | ISO 75-2/af |
| Vicat Softening Temperature | | | |
| -- | 147 | °F | ISO 306/B50 |
| -- | 286 | °F | ISO 306/A120 |
| Ball Pressure Test (248°F) | Pass | | IEC 60695-10-2 |
| RTI Elec | | | UL 746B |
| 0.06 in | 149 | °F | |
| 0.12 in | 149 | °F | |
| RTI Imp | | | UL 746B |
| 0.06 in | 149 | °F | |
| 0.12 in | 149 | °F | |
| RTI Str | | | UL 746B |
| 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 | 1290 | °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 |
| Rear Temperature | 356 | °F |
| Middle Temperature | 374 | °F |
| Front Temperature | 392 | °F |
| Nozzle Temperature | 410 | °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 | 4350 to 10200 | psi |
| Back Pressure | 725 to 1450 | psi |

Notes

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

² Self-Extinguishing