Technical Data Sheet

# *Polyflam* RPP 490 H2FR NAT

Polypropylene, Homopolymer

## Product Description

Flame-retardant PP-homoplymer, halogenfree

## Regulatory Status

For regulatory compliance information, see *Polyflam* RPP 490 H2FR NAT Product Stewardship Bulletin (PSB) and Safety Data Sheet (SDS).

| | |
|---|---|
| **Status** | Discontinued |
| **Availability** | Europe |
| **Processing Method** | Injection Molding |
| **Resin ID** | PP (FR51) |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---|---|---|
| **Physical** | | | |
| Melt Volume Flow Rate, (230 °C/2.16 kg) | 30 | cm³/10 min | ISO 1133 |
| Density, (Method A) | 1.16 | g/cm³ | ISO 1183 |
| **Mechanical** | | | |
| Tensile Stress at Yield, (Type 1A, 50 mm/min) | 22.0 | MPa | ISO 527-2 |
| Flexural Modulus, (2.0 mm/min) | 3500 | MPa | ISO 178 |
| Tensile Strain at Yield, (Type 1A, 50 mm/min) | 1.3 | % | ISO 527-2 |
| Tensile Modulus, (1 mm/min, Type 1A) | 3300 | MPa | ISO 527-1 |
| Flexural Stress, (2.0 mm/min, 1.7%) | 40.0 | MPa | ISO 178 |
| **Impact** | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C, Type 1, Edgewise, Notch A) | 1.5 | kJ/m² | ISO 179 |
| (-30 °C, Type 1, Edgewise, Notch A) | 1.0 | kJ/m² | ISO 179 |
| Charpy Impact Strength - Unnotched | | | |
| (23 °C, Type 1, Edgewise) | 9.0 | kJ/m² | ISO 179 |
| (-30 °C, Type 1, Edgewise) | 6.0 | kJ/m² | ISO 179 |
| **Hardness** | | | |
| Ball Pressure Test, (145 °C) | Pass | | IEC 60695-10-2 |
| **Thermal** | | | |
| Vicat Softening Temperature | | | |
| (B (50N), 50 °C/h) | 110 | °C | ISO 306 |
| (A (10N), 50 °C/h) | 155 | °C | ISO 306 |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 120 | °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 85.0 | °C | ISO 75-2/A |
| **Electrical** | | | |
| Comparative Tracking Index (CTI) | 600 | V | IEC 60112 |
| **Flammable** | | | |

| | | | |
|---|---|---|---|
| Glow Wire Flammability Index | | | |
| (1.5 mm) | 960 | °C | IEC 60695-2-12 |
| (3.0 mm) | 960 | °C | IEC 60695-2-12 |
| Glow Wire Ignition Temperature | | | |
| (1.5 mm) | 900 | °C | IEC 60695-2-13 |
| (3.0 mm) | 900 | °C | IEC 60695-2-13 |
| Oxygen Index | 50 | % | ISO 4589-2 |
| **UL Information** | | | |
| Flame Rating | | | |
| (1.6 mm) | V-2 | | UL 94 |
| (3.2 mm) | V-0 | | UL 94 |
| Flammability Classification | | | |
| (1.6 mm) | V-2 | | IEC 60695-11-10, -20 |
| (3.2 mm) | V-0 | | IEC 60695-11-10, -20 |

## Notes

These are typical property values not to be construed as specification limits.

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Company Information

For further information regarding the LyondellBasell company, please visit http://www.lyb.com/.



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