Technical Data Sheet

# *Polyflam* RPP 374 ND CS1 GRY61075

Polypropylene Compounds

**Product Description**

20% talc filled flame-retardant PP-homopolymer; without PBDE

| | |
|---|---|
| **Processing Method** | Injection Molding |
| **Attribute** | Copper Contact Stabilized; Homopolymer |
| **Additive** | Flame Retardant |
| **Filler/Reinforcement** | Talc, 20% |
| **Resin ID** | PP TD20 FR(17) |

| Typical Properties | Nominal Value | Units | Test Method |
|---|---|---|---|
| **Physical** | | | |
| Melt Volume Flow Rate, (230 °C/2.16 kg) | 19 | cm³/10 min | ISO 1133 |
| Density, (Method A) | 1.35 | g/cm³ | ISO 1183 |
| **Mechanical** | | | |
| Tensile Stress at Yield, (Type 1A, 50 mm/min) | 21.0 | MPa | ISO 527-2 |
| Tensile Strain at Yield, (Type 1A, 50 mm/min) | 2.5 | % | ISO 527-2 |
| Tensile Modulus, (1 mm/min, Type 1A) | 3000 | MPa | ISO 527-1 |
| **Impact** | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C, Type 1, Edgewise, Notch A) | 2.5 | kJ/m² | ISO 179 |
| (-30 °C, Type 1, Edgewise, Notch A) | 2.3 | kJ/m² | ISO 179 |
| Charpy Impact Strength - Unnotched | | | |
| (23 °C, Type 1, Edgewise) | 20 | kJ/m² | ISO 179 |
| (-30 °C, Type 1, Edgewise) | 8.5 | kJ/m² | ISO 179 |
| **Hardness** | | | |
| Ball Pressure Test, (125 °C) | Pass | | IEC 60695-10-2 |
| **Thermal** | | | |
| Vicat Softening Temperature | | | |
| (B (50N), 50 °C/h) | 82.0 | °C | ISO 306 |
| (A (10N), 50 °C/h) | 145 | °C | ISO 306 |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 118 | °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 60.0 | °C | ISO 75-2/A |
| RTI Elec | | | |
| (1.5 mm) | 105 | °C | UL 746B |
| (3.0 mm) | 105 | °C | UL 746B |
| RTI Imp | | | |
| (1.5 mm) | 105 | °C | UL 746B |
| (3.0 mm) | 105 | °C | UL 746B |

| | | | |
|---|---|---|---|
| RTI Str | | | |
| (1.5 mm) | 105 | °C | UL 746B |
| (3.0 mm) | 105 | °C | UL 746B |
| **Electrical** | | | |
| Volume Resistivity | >1.0E+13 | ohm*m | IEC 62631-3-1 |
| Comparative Tracking Index (CTI) | 600 | V | IEC 60112 |
| Surface Resistivity | >1.0E+15 | ohm | IEC 60093 |
| **Flammable** | | | |
| Burning Rate | | | |
| (2.00 mm, Self-Extinguishing) | 0.0 | mm/min | FMVSS 302 |
| (2.00 mm, Self-Extinguishing) | 0.0 | mm/min | ISO 3795 |
| 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) | 700 | °C | IEC 60695-2-13 |
| (3.0 mm) | 700 | °C | IEC 60695-2-13 |
| Oxygen Index | 26 | % | ISO 4589-2 |
| **Additional Information** | | | |
| Water Absorption 23C/50RH | 0.16 | % | ISO 62 |
| **Injection Parameters** | | | |
| Drying Time | 2.0 to 4.0 | hr | |
| Drying Temperature | 70 to 80 | °C | |
| Nozzle Temperature | 220 | °C | |
| Screw Speed | <300 | mm/sec | |
| Processing (Melt) Temp | 180 to 220 | °C | |
| Front Temperature | 210 | °C | |
| Holding Pressure | 40.0 to 90.0 | MPa | |
| Middle Temperature | 200 | °C | |
| Rear Temperature | 180 | °C | |
| Injection Rate | Slow-Moderate | | |
| Back Pressure | 5.00 to 10.0 | MPa | |
| Mold Temperature | 40 to 80 | °C | |
| Injection Pressure | 80.0 to 120 | MPa | |
| Cushion | <5.00 | mm | |
| **UL Information** | | | |
| Flame Rating | | | |
| (1.5 mm) | V-0 | | UL 94 |
| (3.0 mm) | V-0 | | UL 94 |
| Flammability Classification | | | |
| (1.5 mm) | V-0 | | IEC 60695-11-10, -20 |
| (3.0 mm) | V-0 | | IEC 60695-11-10, -20 |
| UL File Number | E86615 | | |