

Terblend N NM-13

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

DESCRIPTION

Terblend® N NM-13 is an ABS/PA blend with excellent impact toughness, especially at low temperature.

FEATURES

- Very high impact strength
- High impact toughness at low temperature

APPLICATIONS

- Freezer parts
- Ski top layers

| Property, Test Condition | Standard | Unit | Values |
|---|-------------|-------------------------|--------|
| Rheological Properties | | | |
| Melt Volume Rate, 240 °C/10 kg | ISO 1133 | cm ³ /10 min | 25 |
| Mechanical Properties | | | |
| Tensile Modulus | ISO 527 | MPa | 1600 |
| Tensile Stress at Yield, 23 °C | ISO 527 | MPa | 35 |
| Tensile Strain at Yield, 23 °C | ISO 527 | % | 3.4 |
| Nominal Strain at Break, 23 °C | ISO 527 | % | > 50 |
| Flexural Modulus, 23 °C | ISO 178 | MPa | 1400 |
| Flexural Strength, 23 °C | ISO 178 | MPa | 48 |
| Charpy Notched Impact Strength, 23° C | ISO 179/1eA | kJ/m ² | 80 |
| Charpy Notched Impact Strength, -30 °C | ISO 179/1eA | kJ/m ² | 30 |
| Izod Notched Impact Strength, 23 °C | ISO 180/A | kJ/m ² | 75 |
| Izod Notched Impact Strength, -30 °C | ISO 180/A | kJ/m ² | 30 |
| Thermal Properties | | | |
| Vicat Softening Temperature VST/B/50 (50N, 50 °C/h) | ISO 306 | °C | 91 |
| Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h) | ISO 306 | °C | 165 |
| Coefficient of Linear Thermal Expansion | ISO 11359 | 10 ⁻⁶ /°C | 100 |
| Heat Deflection Temperature A; (unannealed; 1.8 MPa) | ISO 75 | °C | 58 |
| Heat Deflection Temperature B; (unannealed; 0.45 MPa) | ISO 75 | °C | 80 |

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| Electrical Properties | | | |
| Relative Permittivity (1 MHz) | IEC 62631-2-1 | - | 2.9 |
| Dissipation Factor (1 MHz) | IEC 62631-2-1 | 10 ⁻⁴ | 150 |
| Volume Resistivity | IEC 62631-3-1 | Ohm*m | >10 ¹³ |
| Surface Resistivity | IEC 62631-3-1 | Ohm | 10 ¹⁴ |
| Other Properties | | | |
| Density | ISO 1183 | kg/m ³ | 1070 |
| Moisture Absorption, Equilibrium 23 °C/50% RH | ISO 62 | % | 1.1 |
| Processing | | | |
| Melt Temperature Range | ISO 294 | °C | 240 - 270 |
| Mold Temperature Range | ISO 294 | °C | 60 - 80 |
| Drying Temperature | - | °C | 80 - 90 |
| Drying Time | - | h | 4 - 8 |
| Molding shrinkage, free, longitudinal | - | % | 0.7 |