

Terlux HD 2822

Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS)

TECHNICAL DATASHEET

DESCRIPTION

Terlux® HD 2822 is a new standard-injection molding grade based on a MABS polymer. Terlux® HD 2822 offers a well balanced combination of stiffness and toughness and the high transparency well known in SAN molding compositions.

FEATURES

- Excellent transparency
- Good resistance to chemicals
- Good Stiffness and surface finish
- High impact strength
- HD service package available

APPLICATIONS

- Medical devices

| Property, Test Condition | Standard | Unit | Values |
|---|-------------|-------------------------|--------|
| Rheological Properties | | | |
| Melt Volume Rate 220 °C/10 kg | ISO 1133 | cm ³ /10 min | 2 |
| Melt Volume Rate, 220 °C/21.6 kg | ISO 1133 | cm ³ /10 min | 17 |
| Mechanical Properties | | | |
| Charpy Notched Impact Strength, 23° C | ISO 179/1eA | kJ/m ² | 5 |
| Charpy Notched Impact Strength, -30 °C | ISO 179/1eA | kJ/m ² | 2 |
| Charpy Unnotched, 23 °C | ISO 179/1eU | kJ/m ² | 120 |
| Charpy Unnotched, -30 °C | ISO 179/1eU | kJ/m ² | 80 |
| Tensile Stress at Yield, 23 °C | ISO 527 | MPa | 48 |
| Tensile Strain at Yield, 23 °C | ISO 527 | % | 4 |
| Tensile Modulus | ISO 527 | MPa | 2000 |
| Tensile Creep Modulus (1000h) | ISO 899 | MPa | 1250 |
| Nominal Strain at Break, 23 °C | ISO 527 | % | 12 |
| Flexural Strength, 23 °C | ISO 178 | MPa | 70 |
| Hardness, Ball Indentation | ISO 2039-1 | MPa | 70 |
| Thermal Properties | | | |
| Vicat Softening Temperature VST/B/50 (50N, 50 °C/h) | ISO 306 | °C | 93 |

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| Property, Test Condition | Standard | Unit | Values |
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| Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h) | ISO 306 | °C | 105 |
| Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa) | ISO 75 | °C | 90 |
| Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa) | ISO 75 | °C | 94 |
| Coefficient of Linear Thermal Expansion | ISO 11359 | 10 ⁻⁶ /°C | 80 - 110 |
| Thermal Conductivity | DIN 52612-1 | W/(m K) | 0.17 |
| Electrical Properties | | | |
| Dielectric Constant (100 Hz) | IEC 60250 | - | 2.9 |
| Dissipation Factor (100 Hz) | IEC 60250 | 10 ⁻⁴ | 160 |
| Dissipation Factor (1 MHz) | IEC 60250 | 10 ⁻⁴ | 140 |
| Volume Resistivity | IEC 60093 | Ohm*m | 10 ¹³ |
| Surface Resistivity | IEC 60093 | Ohm | 10 ¹⁵ |
| Optical Properties | | | |
| Refractive Index, Sodium D Line | ISO 489 | - | 1.54 |
| Other Properties | | | |
| Density | ISO 1183 | kg/m ³ | 1080 |
| Bulk Density (with external lubricant) | - | kg/m ³ | 590 |
| Water Absorption, Saturated at 23 °C | ISO 62 | % | 0.7 |
| Processing | | | |
| Linear Mold Shrinkage | ISO 294-4 | % | 0.4 - 0.7 |
| Melt Temperature Range | ISO 294 | °C | 230 - 260 |
| Mold Temperature Range | ISO 294 | °C | 50 - 75 |
| Injection Velocity | ISO 294 | mm/s | 200 |
| Drying Temperature | - | °C | 70 |
| Drying Time | - | h | 2 |

Typical values for uncolored products

PROCESSING

Terlux is primarily processed through injection molding but any process suitable for thermoplastic molding compositions may also be used.

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