# Novodur HH-112

Acrylonitrile Butadiene Styrene (ABS)

STYROLUTION
Driving Success. Together.

## Technical Datasheet

### DESCRIPTION

Novodur® HH-112 is a high heat injection molding grade. It provides extraordinary heat resistance combined with enhanced stiffness.

### FEATURES

- Very high heat resistance
- High stiffness

### APPLICATIONS

- Automotive rear lamp housings
- Glove box caps

| Property, Test Condition | Standard | Unit | Values |
|---|---|---|---|
| **Rheological Properties** | | | |
| Melt Volume Rate 220 °C/10 kg | ISO 1133 | cm³/10 min | 6 |
| **Mechanical Properties** | | | |
| Charpy Notched Impact Strength, 23° C | ISO 179 | kJ/m² | 12 |
| Charpy Notched Impact Strength, -30° C | ISO 179 | kJ/m² | 5 |
| Charpy Unnotched, 23° C | ISO 179 | kJ/m² | 140 |
| Charpy Unnotched, -30° C | ISO 179 | kJ/m² | 80 |
| Tensile Stress at Yield, 23° C | ISO 527 | MPa | 58 |
| Tensile Strain at Yield, 23° C | ISO 527 | % | 3.1 |
| Tensile Modulus | ISO 527 | MPa | 2700 |
| Nominal Strain at Break, 23 °C | ISO 527 | % | 8 |
| Flexural Strength | ISO 178 | MPa | 81 |
| Flexural Modulus | ISO 178 | MPa | 2700 |
| Hardness, Ball Indentation | ISO 2039-1 | MPa | 114 |
| **Thermal Properties** | | | |
| Vicat Softening Temperature VST/B/50 (50°C/h, 50N) | ISO 306 | °C | 112 |
| Vicat Softening Temperature, VST/A/50 (50°C/h, 10N) | ISO 306 | °C | 118 |
| Heat Deflection Temperature A; (annealed, 1.8 MPa) | ISO 75 | °C | 109 |
| Heat Deflection Temperature B; (annealed, 0.45 MPa) | ISO 75 | °C | 113 |
| Coefficient of Linear Thermal Expansion | ISO 11359 | 10^(-6)/°C | 90 |

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| Thermal Conductivity | DIN 52612-1 | W/(m K) | 0.17 |
| **Electrical Properties** | | | |
| Dielectric Strength, Short Time, 1.5 mm | IEC 60243-1 | kV/mm | 41 |
| Volume Resistivity | IEC 60093 | Ohm*m | 1E13 |
| Comparative Tracking Index | IEC 60112 | V | 600 |
| **Other Properties** | | | |
| Density | ISO 1183 | kg/m³ | 1050 |
| Moisture Absorption, Equilibrium 23°C/50% RH | ISO 62 | % | 0.25 |
| **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 | 30 - 80 |
| Injection Velocity | ISO 294 | mm/s | 200 |
| Drying Temperature | | °C | 80 |
| Drying Time | | h | 2 - 4 |
| Max Service Temperature | | °C | 90 |