# Terluran HI-10

Acrylonitrile Butadiene Styrene (ABS)

STYROLUTION
Driving Success. Together.

## Technical Datasheet

### DESCRIPTION

Terluran HI-10 is an medium flow, injection molding grade with very high resistance to impact with excellent heat distortion and suitable for injection molding and extrusion.

### FEATURES

- High toughness
- Very high impact
- Medium flow
- Great mechanical strength and rigidity
- High impact at sub-zero temperatures

### APPLICATIONS

- Injection molding
- Compounding
- Appliance housings
- Lawn & garden components requiring superior toughness

| Property, Test Condition | Standard | Unit | Values |
|---|---|---|---|
| **Rheological Properties** | | | |
| Melt Flow Rate, 200 °C/5 kg | ASTM D 1238 | g/10 min | 0.1 |
| Melt Flow Rate, 220 °C/10 kg | ASTM D 1238 | g/10 min | 8 |
| Melt Volume Rate 230 °C/3.8 kg | ASTM D 1238 | cm³/10 min | 1.7 |
| **Mechanical Properties** | | | |
| Izod Notched Impact Strength, 23°C (73°F) | ASTM D 256 | ft-lb/in | 8.4 |
| Izod Notched Impact Strength, -18°C (0°F) | ASTM D 256 | ft-lb/in | 3.4 |
| Izod Notched Impact Strength, -30°C (-22°F) | ASTM D 256 | ft-lb/in | 2.2 |
| Tensile Stress at Yield, 23° C | ASTM D 638 | psi | 6240 |
| Tensile Modulus | ASTM D 638 | psi x 10³ | 290 |
| Elongation, Failure | ASTM D 638 | % | 3.5 |
| Flexural Strength | ASTM D 790 | psi | 9570 |
| Flexural Modulus | ASTM D 790 | psi x 10³ | 297 |
| Hardness, Rockwell | ASTM D 785 | R scale | 95 |
| **Thermal Properties** | | | |
| Vicat Softening Temperature, VST/A/50 (50°C/h, 10N) | ISO 306 | °F | 201 |
| DTUL @ 264 psi - Unannealed | ASTM D 648 | °F | 186 |
| DTUL @ 66 psi - Unannealed | ASTM D 648 | °F | 201 |

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| Property, Test Condition | Standard | Unit | Values |
|---|---|---|---|
| DTUL @ 264 psi - Annealed | ASTM D 648 | °F | 208 |
| DTUL @ 66 psi - Annealed | ASTM D 648 | °F | 215 |
| **Electrical Properties** | | | |
| Dielectric Constant at 106 CPS (1000000 Hz, 0,0394 in) | ASTM D 150 | - | 2.8 |
| Volume Resistivity | ASTM D 257 | - | >1E13 |
| **Other Properties** | | | |
| Density | ASTM D 792 | - | 1.03 |
| Water Absorption, Saturated at 23°C | ASTM D 570 | % | 1.03 |
| **Processing** | | | |
| Linear Mold Shrinkage | ASTM D 955 | in/in | 0.004 - 0.007 |
| Melt Temperature Range | | °F | 425 - 500 |
| Mold Temperature Range | | °F | 85 - 140 |
| Injection Velocity | | in/s | 8 |
| Drying Temperature | | °F | 175 |
| Drying Time | | h | 2 to 4 |