

Lustran 433

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Lustran® 433 is a general-purpose injection molding grade of ABS (Acrylonitrile Butadiene Styrene). It is a high impact, high-gloss ABS, available only in natural (NR) and black (BK904000).

FEATURES

- High impact strength
- High gloss
- UL 94 HB rated

APPLICATIONS

- Housings
- Toys
- Small appliances
- Consumer goods

| Property, Test Condition | Standard | Unit | Values |
|---|-------------|-----------------------|--------|
| Rheological Properties | | | |
| Melt Flow Rate, 230 °C/3.8 kg | ASTM D 1238 | g/10 min | 3.6 |
| Melt Flow Rate, 220 °C/10 kg | ASTM D 1238 | g/10 min | 12 |
| Mechanical Properties | | | |
| Izod Notched Impact Strength, 23 °C (73 °F) | ASTM D 256 | ft-lb/in | 7 |
| Izod Notched Impact Strength, -40 °C (-40 °F) | ASTM D 256 | ft-lb/in | 1.2 |
| Tensile Stress at Yield, 23 °C | ASTM D 638 | psi | 6100 |
| Tensile Modulus | ASTM D 638 | psi x 10 ³ | 370 |
| Elongation, Failure | ASTM D 638 | % | 30 |
| Flexural Modulus, 23 °C | ASTM D 790 | psi x 10 ³ | 380 |
| Flexural Stress at 5% Deflection | ASTM D 790 | psi | 10500 |
| Hardness, Rockwell | ASTM D 785 | R scale | 109 |
| Thermal Properties | | | |
| DTUL @ 264 psi - Unannealed | ASTM D 648 | °F | 185 |
| DTUL @ 66 psi - Unannealed | ASTM D 648 | °F | 197 |
| DTUL @ 264 psi - Annealed | ASTM D 648 | °F | 202 |
| DTUL @ 66 psi - Annealed | ASTM D 648 | °F | 211 |
| Coefficient of Linear Thermal Expansion | ASTM D 696 | 10 ⁻⁴ /°F | 0.5 |

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| Property, Test Condition | Standard | Unit | Values |
|--------------------------|------------|-------|---------------|
| Processing | | | |
| Linear Mold Shrinkage | ASTM D 955 | in/in | 0.004 - 0.006 |
| Drying Temperature | - | °F | 175 |
| Drying Time | - | h | 2 - 4 |