

Lustran® 433

Acrylonitrile Butadiene Styrene

INEOS Styrolution

PROSPECTOR®

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Technical Data

Product 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

General

| | |
|-----------------------------|--|
| Material Status | • Commercial: Active |
| Literature ¹ | • Technical Datasheet (English) |
| UL Yellow Card ² | • E44741-235636 |
| Search for UL Yellow Card | • INEOS Styrolution • Lustran® |
| Availability | • Latin America • North America |
| Features | • General Purpose • High Gloss • High Impact Resistance |
| Uses | • Appliances • General Purpose • Consumer Applications • Housings • Toys |
| Appearance | • Black • Natural Color |
| Processing Method | • Injection Molding |

Physical

| | Nominal Value Unit | Test Method |
|---------------------------|------------------------|-------------|
| Melt Mass-Flow Rate (MFR) | | ASTM D1238 |
| 220°C/10.0 kg | 12 g/10 min | |
| 230°C/3.8 kg | 3.6 g/10 min | |
| Molding Shrinkage - Flow | 4.0E-3 to 6.0E-3 in/in | ASTM D955 |

Mechanical

| | Nominal Value Unit | Test Method |
|---------------------------------|--------------------|-------------|
| Tensile Modulus | 370000 psi | ASTM D638 |
| Tensile Strength (Yield, 73°F) | 6100 psi | ASTM D638 |
| Tensile Elongation (Break) | 30 % | ASTM D638 |
| Flexural Modulus (73°F) | 380000 psi | ASTM D790 |
| Flexural Strength (5.0% Strain) | 10500 psi | ASTM D790 |

Impact

| | Nominal Value Unit | Test Method |
|---------------------|--------------------|-------------|
| Notched Izod Impact | | ASTM D256 |
| -40°F | 1.2 ft·lb/in | |
| 73°F | 7.0 ft·lb/in | |

Hardness

| | Nominal Value Unit | Test Method |
|-----------------------------|--------------------|-------------|
| Rockwell Hardness (R-Scale) | 109 | ASTM D785 |



| Thermal | Nominal Value Unit | Test Method |
|-----------------------------------|--------------------|-------------|
| Deflection Temperature Under Load | | ASTM D648 |
| 66 psi, Unannealed | 197 °F | |
| 66 psi, Annealed | 211 °F | |
| 264 psi, Unannealed | 185 °F | |
| 264 psi, Annealed | 202 °F | |
| CLTE - Flow | 5.0E-5 in/in/°F | ASTM D696 |
| Flammability | Nominal Value Unit | Test Method |
| Flame Rating | HB | UL 94 |
| Injection | Nominal Value Unit | |
| Drying Temperature | 175 °F | |
| Drying Time | 2.0 to 4.0 hr | |
| Mold Temperature | 110 to 150 °F | |

Notes

- ¹ These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- ² A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- ³ Typical properties: these are not to be construed as specifications.

