

Lustran[®] 433 INEOS Styrolution - Acrylonitrile Butadiene Styrene

Thursday, January 23, 2025

General Information

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 | | |
|-----------------------|--------------------------------------------------------------|----------------------------------------------------|--------------------------------------------|
| Regional Availability | Latin America | North America | |
| Features | General Purpose | High Gloss | High Impact Resistance |
| Uses | Appliances Consumer Applications | General PurposeHousings | • Toys |
| Appearance | Black | Natural Color | |
| Processing Method | Injection Molding | | |

| ASTM & ISO Properties ¹ | | | | | |
|---------------------------------------|------------------|-----------|---------------|----------|-------------|
| Physical | Typical Value | (English) | Typical Value | (SI) | Test Method |
| Melt Mass-Flow Rate (MFR) | | | | | ASTM D1238 |
| 220°C/10.0 kg | 12 | g/10 min | 12 | g/10 min | |
| 230°C/3.8 kg | 3.6 | g/10 min | 3.6 | g/10 min | |
| Molding Shrinkage - Flow | 4.0E-3 to 6.0E-3 | in/in | 0.40 to 0.60 | % | ASTM D955 |
| Mechanical | Typical Value | (English) | Typical Value | (SI) | Test Method |
| Tensile Modulus | 370000 | psi | 2550 | MPa | ASTM D638 |
| Tensile Strength (Yield, 73°F (23°C)) | 6100 | psi | 42.1 | MPa | ASTM D638 |
| Tensile Elongation (Break) | 30 | % | 30 | % | ASTM D638 |
| Flexural Modulus (73°F (23°C)) | 380000 | psi | 2620 | MPa | ASTM D790 |
| Flexural Strength (5.0% Strain) | 10500 | psi | 72.4 | MPa | ASTM D790 |

Copyright ©, 2025, Formerra, LLC. All the information in this literature is for general information purpose only. Formerra makes no representations, guarantees, or warranties of any kind with respect to the information contained in this literature, including its accuracy, completeness, reliability, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information aboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for pricing, property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Formerra makes no warranties or guarantees respecting suitability of either Formerra's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. FORMERRA MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature or any other provided literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner. Any action you take upon the information you find in this literature. By using this literature, you hereby consent to this disclaimer and agree to its terms.

Lustran® 433 INEOS Styrolution - Acrylonitrile Butadiene Styrene

| Impact | Typical Value | (English) | Typical Value | (SI) | Test Method |
|-----------------------------------|---------------|-----------|---------------|----------|-------------|
| Notched Izod Impact | | | | | ASTM D256 |
| -40°F (-40°C) | 1.2 | ft·lb/in | 64 | J/m | |
| 73°F (23°C) | 7.0 | ft·lb/in | 370 | J/m | |
| Hardness | Typical Value | (English) | Typical Value | (SI) | Test Method |
| Rockwell Hardness (R-Scale) | 109 | | 109 | | ASTM D785 |
| Thermal | Typical Value | (English) | Typical Value | (SI) | Test Method |
| Deflection Temperature Under Load | | | | | ASTM D648 |
| 66 psi (0.45 MPa), Unannealed | 197 | °F | 91.7 | °C | |
| 66 psi (0.45 MPa), Annealed | 211 | °F | 99.4 | °C | |
| 264 psi (1.8 MPa), Unannealed | 185 | °F | 85.0 | °C | |
| 264 psi (1.8 MPa), Annealed | 202 | °F | 94.4 | °C | |
| CLTE - Flow | 5.0E-5 | in/in/°F | 9.0E-5 | cm/cm/°C | ASTM D696 |
| Flammability | Typical Value | (English) | Typical Value | (SI) | Test Method |
| Flame Rating | HB | | HB | | UL 94 |

| Processing Information | | | | | |
|------------------------|---------------|-----------|---------------|------|--|
| Injection | Typical Value | (English) | Typical Value | (SI) | |
| Drying Temperature | 175 | °F | 79 | °C | |
| Drying Time | 2.0 to 4.0 | hr | 2.0 to 4.0 | hr | |
| Mold Temperature | 110 to 150 | °F | 43 to 66 | °C | |

Notes

¹ Typical properties: these are not to be construed as specifications.

Copyright ©, 2025, Formerra, LLC. All the information in this literature is for general information purpose only. Formerra makes no representations, guarantees, or warranties of any kind with respect to the information contained in this literature, including its accuracy, completeness, reliability, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for pricing, property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Formerra makes no warranties or guarantees respecting suitability of either Formerra's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/ou sear or handling of any product. FORMERRA MAKES NO WARRANTIES COR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature or any other provided literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner. Any action you take upon the information you find in this literature. By using this literature, you hereby consent to this disclaimer and agree to its terms.