



# Lustran® 433

## INEOS Styrolution - Acrylonitrile Butadiene Styrene

Thursday, October 10, 2019

### 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 Purpose • Housings	• Toys
Appearance	• Black • Natural Color		
Forms	• Pellets		
Processing Method	• Injection Molding		

### ASTM & ISO Properties <sup>1</sup>

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
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

Copyright ©, 2019 PolyOne Distribution Company The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained therefrom. The information is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance. Because of the variation in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the application disclosed. Full-scale testing and end product performance are the responsibility of the user. PolyOne Distribution Company shall not be liable for and the customer assumes all risk and liability of any use or handling of any material beyond PolyOne Distribution Company's direct control. PolyOne Distribution Company MAKES NO WARRANTIES, EXPRESS OR IMPLIED, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendations, nor as an inducement to practice any patented invention without permission of the patent owner.

# Lustran® 433

## INEOS Styrolution - Acrylonitrile Butadiene Styrene

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
Screw L/D Ratio	20.0:1.0	20.0:1.0
Screw Compression Ratio	2.5:1.0	2.5:1.0

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.