



Lustran® 433

INEOS Styrolution - Acrylonitrile Butadiene Styrene

Tuesday, January 28, 2020

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 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
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

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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

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