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 [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.