

# Lustran® 433

### INEOS Styrolution - Acrylonitrile Butadiene Styrene

Wednesday, December 8, 2021

### **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	<ul><li>Appliances</li><li>Consumer Applications</li></ul>	<ul><li>General Purpose</li><li>Housings</li></ul>	• Toys
Appearance	Black	Natural Color	
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	

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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		НВ		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**

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