# Lustran® ABS 433

## Acrylonitrile Butadiene Styrene

## Styrolution

# Message:

Lustran® ABS 433 is a general-purpose injection molding grade of ABS (Acrylonitrile Butadiene Styrene). It is a highimpact, high-gloss ABS, available only in natural (000000)

and black (904000). In its natural color (000000), Lustran ABS 433 meets FDA requirements for food contact.

Typical applications include housings, toys, small appliances, and consumer goods. As with any product, use of Lustran ABS 433 resin in a given application must be tested (including but not limited to field testing) in advance by the user to determine suitability.

General Information					
UL YellowCard	E44741-235636				
Features	Highlight				
	Impact resistance, high				
	Compliance of Food Expo	sure			
Uses	Electrical appliances				
	Shell				
	Toys				
	Consumer goods application field				
Agency Ratings	EC 1907/2006 (REACH)				
	FDA Food Exposure, Not Rated 3				
RoHS Compliance	RoHS compliance				
Appearance	Black				
	Natural color				
Forms	Particle				
Processing Method	Injection molding				
Physical	Nominal Value	Unit	Test Method		
Specific Gravity	1.05	g/cm³	ASTM D792		
Melt Mass-Flow Rate (MFR)			ASTM D1238		
220°C/10.0 kg	12	g/10 min	ASTM D1238		
230°C/3.8 kg	5.0	g/10 min	ASTM D1238		
Molding Shrinkage - Flow	0.40 - 0.60	%	ASTM D955		
Hardness	Nominal Value	Unit	Test Method		
Rockwell Hardness (R-Scale)	109		ASTM D785		
Mechanical	Nominal Value	Unit	Test Method		
Tensile Modulus	2550	MPa	ASTM D638		
Tensile Strength (Yield)	42.1	MPa	ASTM D638		

Tensile Elongation (Break)	30	%	ASTM D638
Flexural Modulus	2620	MPa	ASTM D790
Flexural Strength (Yield)	72.4	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
-40°C, 3.18 mm	64	J/m	ASTM D256
23°C, 3.18 mm	370	J/m	ASTM D256
23°C, 12.7 mm	210	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
0.45 MPa, unannealed, 12.7mm	91.7	°C	ASTM D648
0.45 MPa, annealed, 12.7mm	99.4	°C	ASTM D648
1.8 MPa, unannealed, 12.7mm	85.0	°C	ASTM D648
1.8 MPa, annealed, 12.7mm, molded	102	°C	ASTM D648
1.8 MPa, annealed, 12.7mm	94.4	°C	ASTM D648
Vicat Softening Temperature	106	°C	ASTM D1525 <sup>1</sup>
CLTE - Flow	9.0E-5	cm/cm/°C	ASTM D696
Flammability	Nominal Value		Test Method
Flame Rating			UL 94
1.50 mm	НВ		UL 94
3.00 mm	НВ		UL 94
Injection	Nominal Value	Unit	
Drying Temperature			
A	82.2 - 87.8	°C	
В	71.1 - 76.7	0.0	
Drying Time	7 1.1 7 0.7	°C	
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A	2.0	hr	
В			
	2.0	hr	
В	2.0 4.0	hr hr	
B Suggested Max Moisture	2.0 4.0 < 0.10	hr hr %	
B Suggested Max Moisture Suggested Shot Size	2.0 4.0 < 0.10 50 - 75	hr hr %	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind	2.0 4.0 < 0.10 50 - 75 20	hr hr % %	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature	2.0 4.0 < 0.10 50 - 75 20 235 - 249	hr hr % % % %	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254	hr hr % % % °C °C	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature Front Temperature	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254 246 - 260	hr hr % % % °C °C °C	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature Front Temperature Nozzle Temperature	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254 246 - 260 246 - 260	hr hr % % % °C °C °C	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature Front Temperature Nozzle Temperature Processing (Melt) Temp	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254 246 - 260 246 - 260 246 - 274	hr hr % % % °C °C °C °C	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature Front Temperature Nozzle Temperature Processing (Melt) Temp Mold Temperature	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254 246 - 260 246 - 274 43.3 - 65.6	hr hr % % % % °C °C °C °C °C	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature Front Temperature Nozzle Temperature Processing (Melt) Temp Mold Temperature Injection Pressure	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254 246 - 260 246 - 260 246 - 274 43.3 - 65.6 68.9 - 110	hr hr % % % % °C °C °C °C °C	
B Suggested Max Moisture Suggested Shot Size Suggested Max Regrind Rear Temperature Middle Temperature Front Temperature Nozzle Temperature Processing (Melt) Temp Mold Temperature Injection Pressure Injection Rate	2.0 4.0 < 0.10 50 - 75 20 235 - 249 241 - 254 246 - 260 246 - 274 43.3 - 65.6 68.9 - 110 Fast	hr hr % % % °C °C °C °C °C	

Screw L/D Ratio	20.0:1.0	
Screw Compression Ratio	2.5:1.0	
Injection instructions		
Screw Speed: ModerateHold Pressur	50 to 70% of the injection pressure	
NOTE		
1.	标准 B (120°C/h)	

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## Recommended distributors for this material

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