



Lustran® 451

INEOS Styrolution - Acrylonitrile Butadiene Styrene

Sunday, November 3, 2019

General Information

Product Description

Lustran® 451 is a easy flowing, medium impact injection molding resin designed with a unique balance of impact, heat resistance, flow and gloss.

FEATURES

- Medium impact strength
- Medium flow
- Unique balance of impact, heat resistance, flow and gloss
- UL 94 HB

APPLICATIONS

- Major appliance

General

Material Status	• Commercial: Active
Availability	• Latin America • North America
Features	• Medium Flow • Medium Impact Resistance
Uses	• Appliances
Forms	• Pellets
Processing Method	• Injection Molding

ASTM & ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density / Specific Gravity	1.06		ASTM D792
Melt Mass-Flow Rate			ASTM D1238
200°C/5.0 kg	1.8	g/10 min	
230°C/3.8 kg	4.4	g/10 min	
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	380000	psi	ASTM D638
Tensile Strength (Yield, 73°F)	6200	psi	ASTM D638
Flexural Modulus (73°F)	375000	psi	ASTM D790
Flexural Strength (5.0% Strain)	10800	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
0°F	1.3	ft-lb/in	
73°F	3.4	ft-lb/in	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	107		ASTM D785
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi, Unannealed	177	°F	
Deflection Temperature Under Load (264 psi, Annealed)	215	°F	ASTM D648
Vicat Softening Temperature	205	°F	ASTM D1525 ²
CLTE - Flow	4.6E-5	in/in/°F	ASTM D696

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Flammability	Nominal Value	Unit	Test Method
Flame Rating	HB		UL 94

Processing Information

Injection	Nominal Value	Unit
Drying Temperature	175	°F
Drying Time	2.0 to 4.0	hr
Mold Temperature	110 to 150	°F
Screw L/D Ratio	20.0:1.0	
Screw Compression Ratio	2.5:1.0	

Notes

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

² Rate B (120°C/h), Loading 1 (10 N)