

Lustran 451

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

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

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	1.8
Melt Flow Rate, 230 °C/3.8 kg	ASTM D 1238	g/10 min	4.4
Mechanical Properties			
Izod Notched Impact Strength, 23 °C (73 °F)	ASTM D 256	ft-lb/in	3.4
Izod Notched Impact Strength, -18 °C (0 °F)	ASTM D 256	ft-lb/in	1.3
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	6200
Tensile Modulus	ASTM D 638	psi x 10 ³	380
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	375
Flexural Stress at 5% Deflection	ASTM D 790	psi	10800
Hardness, Rockwell	ASTM D 785	R scale	107
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°F	205
DTUL @ 264 psi - Unannealed	ASTM D 648	°F	177
DTUL @ 264 psi - Annealed	ASTM D 648	°F	215
Coefficient of Linear Thermal Expansion	ASTM D 696	10 ⁻⁴ /°F	0.46
Other Properties			
Density	ASTM D 792	lb/in ³	1.06

Lustran 451

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Processing			
Linear Mold Shrinkage	ASTM D 955	in/in	0.004 - 0.006
Drying Temperature	-	°F	175
Drying Time	-	h	2 - 4