

Lustran 1152

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Lustran® 1152 resin is a very high-impact extrusion grade of ABS (acrylonitrile butadiene styrene) with a balance of properties not offered by other grades of ABS. It offers superior toughness, particularly for low-temperature applications, and good thermoformability.

FEATURES

- Very high impact strength
- Superior toughness, especially in low temperature applications
- Ease of coloring
- Good thermoformability
- UL 94 HB rated

APPLICATIONS

- Vehicle instrument panels
- Luggage shells
- Agricultural equipment
- Construction equipment

Property, Test Condition	Standard	Unit	Values
Mechanical Properties			
Izod Notched Impact Strength, 23 °C (73 °F)	ASTM D 256	ft-lb/in	9.2
Izod Notched Impact Strength, -18 °C (0 °F)	ASTM D 256	ft-lb/in	6.5
Izod Notched Impact Strength, -40 °C (-40 °F)	ASTM D 256	ft-lb/in	4.2
Instrumented Dart Impact (total energy)	ASTM D 3763	in-lbs	444
Instrumented Dart Impact (Peak force)	ASTM D 3763	in-lbs	264
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	4500
Tensile Modulus	ASTM D 638	psi x 10 ³	220
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	260
Flexural Stress at 5% Deflection	ASTM D 790	psi	7000
Hardness, Rockwell	ASTM D 785	R scale	93
Thermal Properties			
DTUL @ 264 psi - Unannealed	ASTM D 648	°F	180
DTUL @ 66 psi - Unannealed	ASTM D 648	°F	193
DTUL @ 264 psi - Annealed	ASTM D 648	°F	195
DTUL @ 66 psi - Annealed	ASTM D 648	°F	206
Coefficient of Linear Thermal Expansion	ASTM D 696	10 ⁻⁴ /°F	0.58

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Property, Test Condition	Standard	Unit	Values
Optical Properties			
Specular Gloss, 60 °	ASTM D 523		80
Other Properties			
Density	ASTM D 792	lb/in ³	1.03
Processing			
Linear Mold Shrinkage	ASTM D 955	in/in	0.004 - 0.006
Drying Temperature	-	°F	175
Drying Time	-	h	2 - 4