

## Technical Datasheet

## DESCRIPTION

Lustran® SAN 51 is a transparent styrene acrylonitrile (SAN) with medium flow and highest toughness.

## FEATURES

- Superior chemical and heat resistance
- Highest toughness
- UL classification 94 HB

## APPLICATIONS

- Industrial Battery cases
- Disposable lighters
- Transparent covers

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Flow Rate, 230 °C/3.8 kg	ASTM D 1238	g/10 min	6.5
<b>Mechanical Properties</b>			
Izod Notched Impact Strength, 23°C (73°F)	ASTM D 256	ft-lb/in	0.4
Izod Unnotched Impact Strength	ASTM D 256	ft-lb/in	4.9
Tensile Stress at Break, 23° C	ASTM D 638	psi	11,000
Tensile Modulus	ASTM D 638	psi x 10 <sup>3</sup>	490
Flexural Strength	ASTM D 790	psi	19,000
Flexural Modulus	ASTM D 790	psi x 10 <sup>3</sup>	520
Hardness, Rockwell	ASTM D 785	M scale	83
<b>Thermal Properties</b>			
Vicat Softening Temperature, B/1 ( 120°C/h, 10N)	ASTM D 1525	°F	230
DTUL @ 264 psi - Unannealed	ASTM D 648	°F	205
DTUL @ 264 psi - Annealed	ASTM D 648	°F	219
Coefficient of Linear Thermal Expansion	ASTM D 696	10 <sup>-4</sup> /°F	0.38
<b>Optical Properties</b>			
Refractive Index, Sodium D Line	ASTM D 542	-	1.57
Haze	ASTM D 1003	%	2.0
<b>Other Properties</b>			
Density	ASTM D 792	-	1.08

Property, Test Condition	Standard	Unit	Values
<b>Processing</b>			
Linear Mold Shrinkage	ASTM D 955	in/in	0.003 to 0.004
Melt Temperature Range		°F	425 - 500
Mold Temperature Range		°F	100 - 180
Drying Temperature		°F	180 -190
Drying Time		h	2 hours

Typical values for uncolored products

## SUPPLY FORM

Lustran SAN resins are available in bulk railcar, bulk truckload and 726kg box quantities.

## REGULATORY COMPLIANCE

Please refer to Styrolution web site or contact Styrolution Technical Service for further information.

## PRODUCT SAFETY

Please refer to Styrolution product SDS or contact Styrolution Technical Service for further information.

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