

Technical Datasheet

DESCRIPTION

Lustran® SAN 31 is a transparent styrene acrylonitrile (SAN) with high flow and toughness.

FEATURES

- Good chemical and heat resistance
- Meets USP Class VI requirements
- Meets FDA modified ISO 10993-1 requirements
- UL classification 94 HB

APPLICATIONS

- Dinnerware
- Medical devices
- Comestic packaging
- Tumblers, mugs and jars
- Lens

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 230 °C/3.8 kg	ASTM D 1238	g/10 min	7.5
Mechanical Properties			
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	3.8
Tensile Stress at Break, 23° C	ASTM D 638	psi	10,500
Tensile Modulus	ASTM D 638	psi x 10 ³	475
Flexural Strength	ASTM D 790	psi	16,700
Flexural Modulus	ASTM D 790	psi x 10 ³	500
Hardness, Rockwell	ASTM D 785	M scale	83
Thermal Properties			
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	218
Coefficient of Linear Thermal Expansion	ASTM D 696	10 ⁻⁴ /°F	0.38
Optical Properties			
Refractive Index, Sodium D Line	ASTM D 542	-	1.57
Light Transmission at 550 nm	ASTM D 1003	%	87 - 88

Property, Test Condition	Standard	Unit	Values
Haze	ASTM D 1003	%	0.7
Other Properties			
Density	ASTM D 792	-	1.08
Processing			
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.

FOOD CONTACT COMPLIANCE STATEMENT

The base resin used in the Lustran SAN 31 product is in chemical compliance with 21 CFR 181.32 (acrylonitrile copolymers and resins) for use in the manufacture of repeated usehouseware articles.

PRODUCT SAFETY

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

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