

# Luran® ECO 388S BC60

Styrene Acrylonitrile (SAN)

## TECHNICAL DATASHEET

### DESCRIPTION

Luran® ECO 388S is a specialty grade of SAN with enhanced chemical resistance and the highest mechanical strength. It is suitable for injection molding and extrusion applications. Luran ECO 388S BC60 is an ISCC compliant product leading to a substitution of fossil source styrene with ISCC certified bio-attributed styrene.

### FEATURES

- Chemical resistance
- Heat resistance
- Transparency

### APPLICATIONS

- Food contact applications
- Industrial batteries
- Sanitary housings

Property, Test Condition	Standard	Unit	Values
<b>Sustainability Properties</b>			
Carbon Footprint Reduction vs Fossil-Based (3rd party validated)	ISO 14044	%	77
Attributed Content of ISCC-certified Bio-Circular Sources (min.)	-	%	60
<b>Rheological Properties</b>			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	7
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	2.5
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m <sup>2</sup>	21
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m <sup>2</sup>	19
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m <sup>2</sup>	2.5
Tensile Modulus	ISO 527	MPa	3800
Tensile Stress at Yield, 23 °C	ISO 527	MPa	79
Tensile Strain at Break, 23 °C	ISO 527	%	4
Flexural Modulus, 23 °C	ISO 178	MPa	3669
Flexural Strength, 23 °C	ISO 178	MPa	140
Hardness, Ball Indentation	ISO 2039-1	MPa	175
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	107

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Property, Test Condition	Standard	Unit	Values
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	101
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	102
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	70
Thermal Conductivity	ISO 22007-4	W/(m K)	0.17
<b>Optical Properties</b>			
Refractive Index, Sodium D Line	ISO 489	-	1.56
Haze	ASTM D 1003	%	< 1
Light Transmission at 550 nm	ASTM D 1003	%	> 89
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1080
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.3
<b>Processing</b>			
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 0.7
Melt Temperature Range	ISO 294	°C	220 - 260
Mold Temperature Range	ISO 294	°C	40 - 80
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4