

# Luran 378P

Styrene Acrylonitrile (SAN)

## TECHNICAL DATASHEET

### DESCRIPTION

Luran® 378P is an easy flow grade of SAN with enhanced chemical resistance and mechanical strength.

### FEATURES

- Very good chemical resistance
- Good heat resistance
- Good surface appearance
- Excellent transparency
- Excellent dimensional stability

### APPLICATIONS

- Battery housings
- Storage boxes
- Toilet seats
- Sanitary equipment

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	20
<b>Mechanical Properties</b>			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	2
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m²	2
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	2
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	19
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	19
Tensile Stress at Yield, 23 °C	ISO 527	MPa	75
Tensile Strain at Break, 23 °C	ISO 527	%	3.5
Tensile Modulus	ISO 527	MPa	3800
Tensile Creep Modulus (1000h)	ISO 899	MPa	2800
Tensile Creep Modulus (1h)	ISO 899	MPa	3500
Flexural Strength, 23 °C	ISO 178	MPa	135
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	89
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	101
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	70
Thermal Conductivity	DIN 52612-1	W/(m K)	0.17
<b>Electrical Properties</b>			
Dielectric Constant (100 Hz)	IEC 62631-2-1	-	3
Dissipation Factor (100 Hz)	IEC 62631-2-1	10 <sup>-4</sup>	50
Dissipation Factor (1 MHz)	IEC 62631-2-1	10 <sup>-4</sup>	80
Volume Resistivity	IEC 62631-3-1	Ohm*m	10 <sup>14</sup>
Surface Resistivity	IEC 62631-3-1	Ohm	>10 <sup>15</sup>
<b>Optical Properties</b>			
Refractive Index, Sodium D Line	ISO 489	-	1.56
Haze	ASTM D 1003	%	< 1
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1080
Bulk Density (with external lubricant)	-	kg/m <sup>3</sup>	650
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
Injection Velocity	ISO 294	mm/s	200
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4