

# Luran S 778TE

Acrylonitrile Styrene Acrylate (ASA)

## TECHNICAL DATASHEET

### DESCRIPTION

Luran® S acrylonitrile styrene acrylate (ASA) polymers feature high surface quality and good impact strength including enhanced colour fastness. The products deliver superior long-term performance when exposed to UV irradiation and additionally provide excellent chemical resistance. Luran® S 778TE is an extrusion grade with enhanced heat resistance and best chemical resistance among the Luran S grades.

### FEATURES

- Chemical resistance
- Well extrudable
- Heat resistance
- Long-term property retention
- UV resistance

### APPLICATIONS

- PVC capstock for sheets, sidings, roof tiles, gardening equipment
- Extruded sheets & profiles
- Sidings and deckings

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	5
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	15
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m <sup>2</sup>	4
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m <sup>2</sup>	220
Tensile Modulus	ISO 527	MPa	2500
Tensile Stress at Yield, 23 °C	ISO 527	MPa	54
Tensile Strain at Yield, 23 °C	ISO 527	%	3.4
Nominal Strain at Break, 23 °C	ISO 527	%	8
Flexural Modulus, 23 °C	ISO 178	MPa	2450
Flexural Strength, 23 °C	ISO 178	MPa	80
Hardness, Ball Indentation	ISO 2039-1	MPa	85
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	104
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	103

# Luran S 778TE

Acrylonitrile Styrene Acrylate (ASA)

## TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	106
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	80 - 110
Thermal Conductivity	ISO 22007-4	W/(m K)	0.17
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1070
UL94 rating at 1.5 mm thickness	IEC 60695-11-10	-	HB
Water Absorption, Saturated at 23 °C	ISO 62	%	1.65
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.35
<b>Processing</b>			
Melt Temperature Range	ISO 294	°C	200 - 250
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7