

# Luran HH-120

Alpha-Methylstyrene Acrylonitrile (AMSAN)

## TECHNICAL DATASHEET

### DESCRIPTION

Luran® HH-120 is a grade of AMSAN with high heat resistance and improved mechanical strength. It is suitable for injection molding and extrusion applications and can be used as a modifier for high heat ABS and PVC. For TDS and further information about the specialty piano black versions of Luran® HH-120 including Styrolution's latest SPF50 UV protection technology please contact the Styrolution Infopoint.

### FEATURES

- Outstanding heat resistance
- Very good mechanical strength
- Good surface appearance
- Excellent dimensional stability
- New SPF 50 UV stabilization available

### APPLICATIONS

- Automotive parts
- Polymer blend additive

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	7
<b>Mechanical Properties</b>			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m <sup>2</sup>	2
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m <sup>2</sup>	2
Charpy Notched Impact Strength, 23° C	ISO 179	kJ/m <sup>2</sup>	2
Charpy Unnotched, 23 °C	ISO 179	kJ/m <sup>2</sup>	20
Charpy Unnotched, -30 °C	ISO 179	kJ/m <sup>2</sup>	21
Tensile Stress at Yield, 23 °C	ISO 527	MPa	79
Tensile Strain at Break, 23 °C	ISO 527	%	3
Tensile Modulus	ISO 527	MPa	3900
Flexural Strength, 23 °C	ISO 178	MPa	135
Hardness, Rockwell		M scale	M84
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	120

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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	104
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	110
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 60250	-	3
Dissipation Factor (100 Hz)	IEC 60250	10 <sup>-4</sup>	50
Dissipation Factor (1 MHz)	IEC 60250	10 <sup>-4</sup>	70
Volume Resistivity	IEC 60093	Ohm*m	1E14
Surface Resistivity	IEC 60093	Ohm	>1E15
<b>Optical Properties</b>			
Refractive Index, Sodium D Line	ISO 489	-	1.567
Light Transmission at 550 nm	ASTM D 1003	%	>89
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>	600
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.30
<b>Processing</b>			
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 0.7
Melt Temperature Range	ISO 294	°C	220 - 270
Mold Temperature Range	ISO 294	°C	40 - 80
Injection Velocity	ISO 294	mm/s	200
Drying Temperature		°C	80
Drying Time		h	2 - 4