

LURAN S 777K

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 777K is considered as the standard injection molding grade within the Luran S portfolio offering a well-balanced property profile.

FEATURES

- Easy processing
- Balanced property profile
- Long-term property retention
- Strong UV resistance

APPLICATIONS

- Automotive Exterior
- Radiator grills
- Housings for electrical & electronic devices
- Household applications
- Gardening tools
- Toys, sports & leisure

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm ³ /10 min	15
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	17
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m ²	4
Tensile Modulus	ISO 527	MPa	2300
Tensile Stress at Yield, 23 °C	ISO 527	MPa	48
Tensile Strain at Yield, 23 °C	ISO 527	%	3.3
Nominal Strain at Break, 23 °C	ISO 527	%	10
Flexural Strength, 23 °C	ISO 178	MPa	70
Hardness, Ball Indentation	ISO 2039-1	MPa	80
Izod Notched Impact Strength, -40 °C (-40 °F)	ASTM D 256	kJ/m ²	0.5
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	97
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	97

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Property, Test Condition	Standard	Unit	Values
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	101
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	80 - 110
Thermal Conductivity	ISO 22007-4	W/(m K)	0.17
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	200
Other Properties			
Density	ISO 1183	kg/m ³	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
Processing			
Melt Temperature Range	ISO 294	°C	240 - 280
Mold Temperature Range	ISO 294	°C	40 - 80
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7

Typical values for uncolored products

Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities.

Please consult our local sales or technical representatives for details.

DISCLAIMER

The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.