

Technical Data

Product Description

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

FEATURES

- Good flowability
- Easy processing
- New SPF 30 UV stabilization available

APPLICATIONS

- Radiator grills
- Gardening equipment
- Household devices

General

Material Status	• Commercial: Active
Literature <sup>1</sup>	• <a href="#">Technical Datasheet (English)</a>
UL Yellow Card <sup>2</sup>	• <a href="#">E108538-100840263</a>
Search for UL Yellow Card	• <a href="#">INEOS Styrolution</a> • <a href="#">Luran® S</a>
Availability	• Africa & Middle East • Asia Pacific • Europe • Latin America • North America
Features	• Good Flow • Good Processability
Uses	• Household Goods • Lawn and Garden Equipment
Forms	• Pellets
Processing Method	• Injection Molding
Multi-Point Data	• Creep Modulus vs. Time (ISO 11403) • Isochronous Stress vs. Strain (ISO 11403) • Isothermal Stress vs. Strain (ISO 11403) • Secant Modulus vs. Strain (ISO 11403) • Viscosity vs. Shear Rate (ISO 11403)

Physical	Nominal Value Unit	Test Method
Density	1.07 g/cm <sup>3</sup>	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	15 cm <sup>3</sup> /10min	ISO 1133
Molding Shrinkage <sup>4</sup>	0.40 to 0.70 %	
Water Absorption		ISO 62
Saturation, 23°C	1.7 %	
Equilibrium, 23°C, 50% RH	0.35 %	

Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2300 MPa	ISO 527-1
Tensile Stress (Yield, 23°C)	48.0 MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	3.3 %	ISO 527-2
Nominal Tensile Strain at Break (23°C)	10 %	ISO 527-2
Tensile Creep Modulus (1000 hr)	1400 MPa	ISO 899-1
Flexural Stress (23°C)	70.0 MPa	ISO 178

Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	4.0 kJ/m <sup>2</sup>	
23°C	17 kJ/m <sup>2</sup>	



Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness	80.0 MPa	ISO 2039-1
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load <sup>5</sup>		
0.45 MPa, Annealed	101 °C	ISO 75-2/B
1.8 MPa, Annealed	97.0 °C	ISO 75-2/A
Vicat Softening Temperature		
--	97.0 °C	ISO 306/B50
--	105 °C	ISO 306/A50
CLTE - Flow	8.0E-5 to 1.1E-4 cm/cm/°C	ISO 11359-2
Thermal Conductivity	0.17 W/m/K	DIN 52612
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+14 ohms	IEC 62631-3-1
Volume Resistivity	1.0E+13 ohms·cm	IEC 62631-3-1
Relative Permittivity		IEC 62631-2-1
100 Hz	3.70	
1 MHz	3.40	
Dissipation Factor		IEC 62631-2-1
100 Hz	0.011	
1 MHz	0.024	
Flammability	Nominal Value Unit	Test Method
Flammability Classification (1.5 mm)	HB	IEC 60695-11-10, -20
Injection	Nominal Value Unit	
Drying Temperature	80 °C	
Drying Time	2.0 to 4.0 hr	
Processing (Melt) Temp	240 to 280 °C	
Mold Temperature	40 to 80 °C	

**Notes**

- <sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- <sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- <sup>3</sup> Typical properties: these are not to be construed as specifications.
- <sup>4</sup> Free, longitudinal
- <sup>5</sup> 4 h/80 °C

