

Luran® S 778T

Acrylonitrile Styrene Acrylate

INEOS Styrolution

Technical Data

Product Description

Luran® S 778T is an injection molding grade with enhanced heat resistance and best chemical resistance among the ASA grades.

FEATURES

- High softening temperature
- High chemical resistance
- Enhanced stiffness
- Enhanced UV Stabilization Available

APPLICATIONS

- Radiator grills
- Mirror housings
- Household devices

General

Features	• Chemical Resistant	• Good Heat Resistance	• Good Stiffness
Uses	• Household Goods	• Housings	
Automotive Specifications	<ul style="list-style-type: none">• BMW GS 93016• CHRYSLER MS-DB-19 CPN3409 Color: 25991 Black• CHRYSLER MS-DB-19 CPN3409 Color: 28214 Black• CHRYSLER MS-DB-19 CPN3409 Color: Q443 25991 Black• CHRYSLER MS-DB-19 CPN3409 Color: RXF• CHRYSLER MS-DB-19 CPN4011 Color: RXF• CHRYSLER MS-DB-19 CPN4876• DAIMLER DBL 5416• FORD WSB-M4D833-A Color: Black• FORD WSB-M4D833-A Color: FA Black• FORD WSB-M4D833-A Color: JA6A	<ul style="list-style-type: none">• FORD WSB-M4D833-A Color: XSC2506 Graphite Gray• FORD WSB-M4D833-A Color: YGYA Black• FORD WSS-M4D833-A Color: CND• GM GMP.ASA.002 Color: 598F• GM GMP.ASA.002 Color: 848BK• GM GMP.ASA.002 Color: 8555BK• GM GMP.ASA.005 Color: 848BK• GM GMW15583P-ASA-T2 Color: 598F• GM GMW15583P-ASA-T2 Color: 848BK• GM GMW15583P-ASA-T2 Color: 8555BK• GM GMW15583P-ASA-T3 Color: 598F	<ul style="list-style-type: none">• GM GMW15583P-ASA-T3 Color: 848BK• GM GMW15583P-ASA-T3 Color: 8555BK• HYUNDAI MS225-22 T1• HYUNDAI MS225-22 T2• NISSAN NES AAS-IB2-2• PSA Peugeot-Citroën SPA X62 3445• TOYOTA TSM 5523G Color: 11BK02 Black• TOYOTA TSM 5523G Color: 11BK03 Black• VOLKSWAGEN TL 52311 Color: 9B9
Forms	• Pellets		
Processing Method	• Injection Molding		
Multi-Point Data	<ul style="list-style-type: none">• Creep Modulus vs. Time (ISO 11403)• Isochronous Stress vs. Strain (ISO 11403)	<ul style="list-style-type: none">• Isothermal Stress vs. Strain (ISO 11403)• Secant Modulus vs. Strain (ISO 11403)	<ul style="list-style-type: none">• Shear Modulus vs. Temperature (ISO 11403)• Viscosity vs. Shear Rate (ISO 11403)

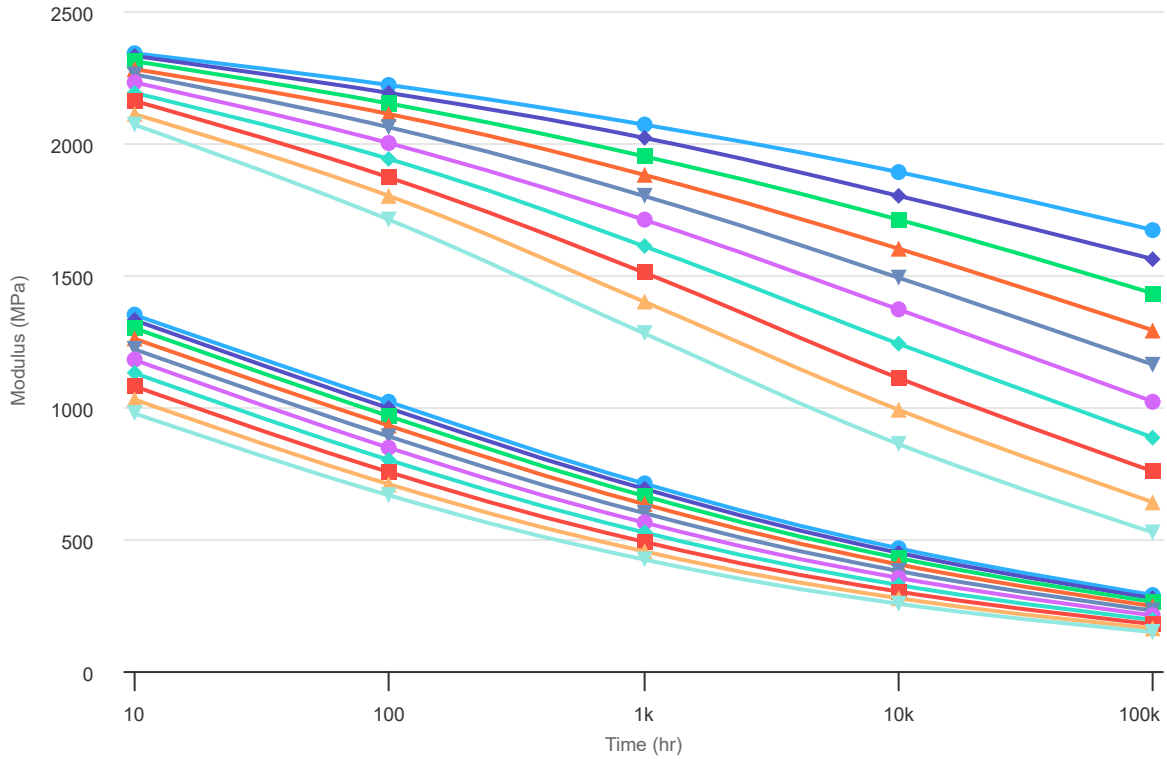
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Physical	Nominal Value Unit	Test Method
Density	1.07 g/cm ³	ISO 1183
Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)	5.0 cm ³ /10min	ISO 1133
Molding Shrinkage ⁴	0.40 to 0.70 %	
Water Absorption		ISO 62
Saturation, 23°C	1.7 %	
Equilibrium, 23°C, 50% RH	0.35 %	
Mechanical	Nominal Value Unit	Test Method
Tensile Modulus	2500 MPa	ISO 527-1
Tensile Stress (Yield, 23°C)	54.0 MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	3.4 %	ISO 527-2
Nominal Tensile Strain at Break (23°C)	8.0 %	ISO 527-2
Tensile Creep Modulus (1000 hr)	1250 MPa	ISO 899-1
Flexural Stress (23°C)	80.0 MPa	ISO 178
Impact	Nominal Value Unit	Test Method
Charpy Notched Impact Strength		ISO 179/1eA
-30°C	4.0 kJ/m ²	
23°C	15 kJ/m ²	
Hardness	Nominal Value Unit	Test Method
Ball Indentation Hardness	85.0 MPa	ISO 2039-1
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load ⁵		
0.45 MPa, Annealed	106 °C	ISO 75-2/B
1.8 MPa, Annealed	103 °C	ISO 75-2/A
Vicat Softening Temperature		
--	104 °C	ISO 306/B50
--	113 °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	3.90	
1 MHz	3.50	
Dissipation Factor		IEC 62631-2-1
100 Hz	9.0E-3	
1 MHz	0.033	
Flammability	Nominal Value Unit	Test Method
Flammability Classification (1.5 mm)	HB	IEC 60695-11-10, -20
Injection	Nominal Value Unit	Test Method
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	

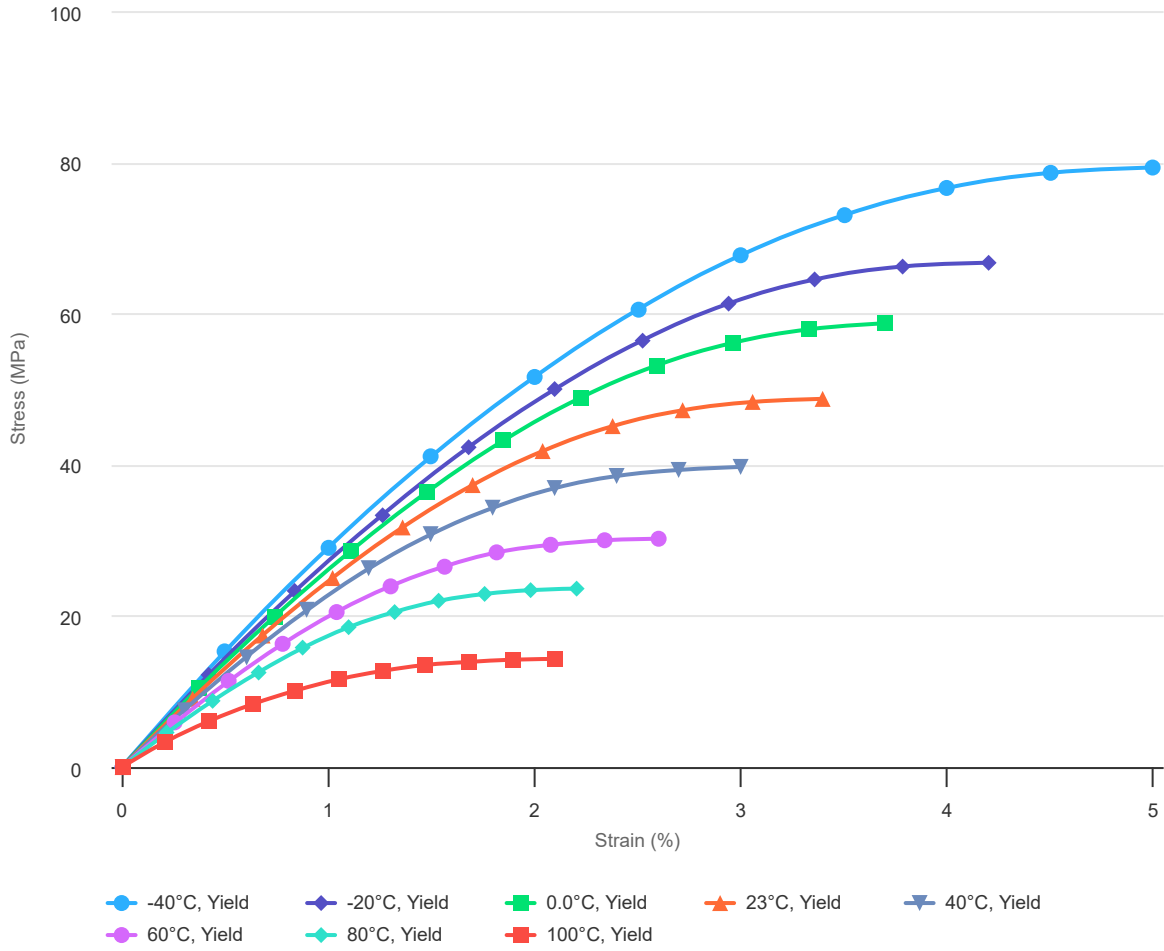
Creep Modulus vs. Time (ISO 11403)



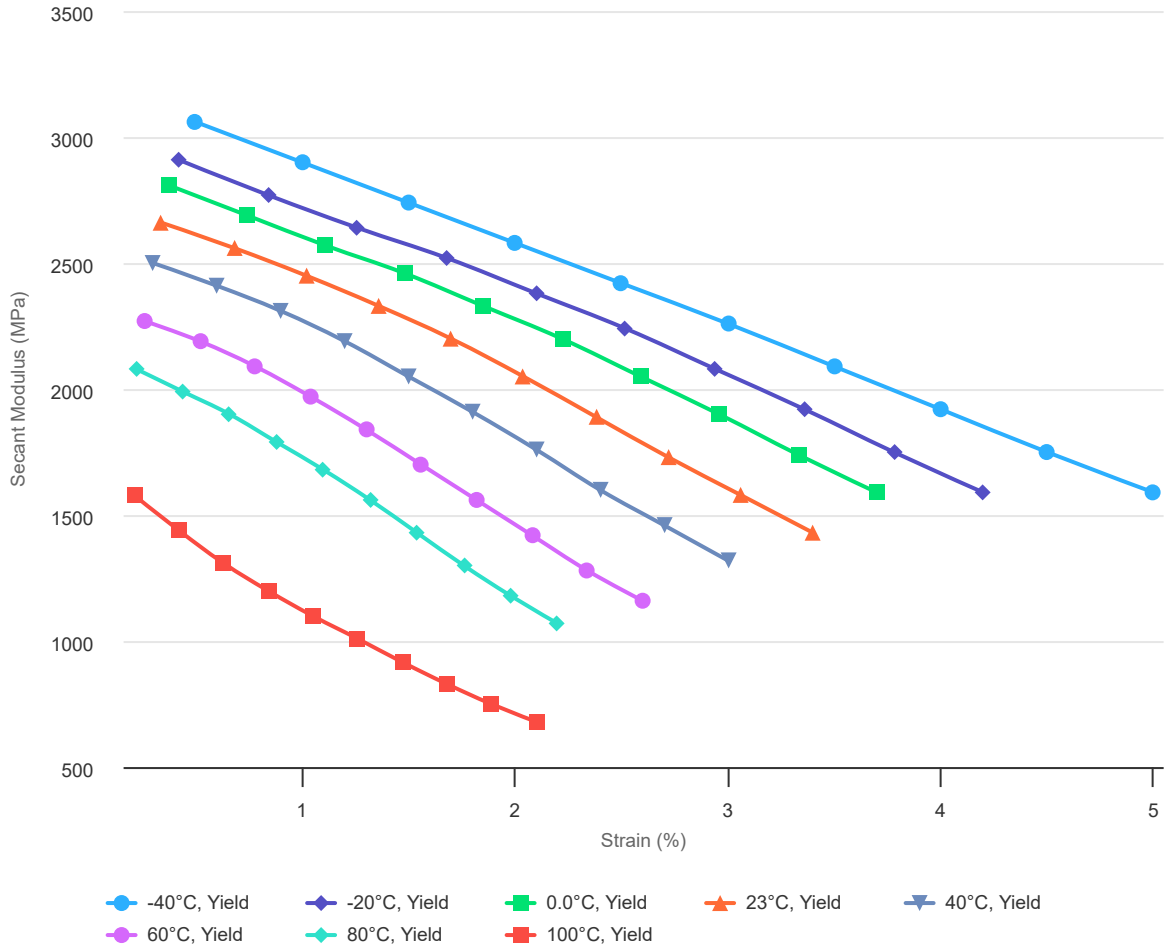
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|-------------------|-------------------|-------------------|-------------------|
| ● 23°C, 4.000 MPa | ◆ 23°C, 6.200 MPa | ■ 23°C, 8.400 MPa | ▲ 23°C, 10.60 MPa |
| ▼ 23°C, 12.80 MPa | ● 23°C, 15.00 MPa | ◆ 23°C, 17.20 MPa | ■ 23°C, 19.40 MPa |
| ▲ 23°C, 21.60 MPa | ▼ 23°C, 24.00 MPa | ● 60°C, 2.500 MPa | ◆ 60°C, 3.900 MPa |
| ■ 60°C, 5.300 MPa | ▲ 60°C, 6.700 MPa | ▼ 60°C, 8.100 MPa | ● 60°C, 9.500 MPa |
| ◆ 60°C, 10.90 MPa | ■ 60°C, 12.30 MPa | ▲ 60°C, 13.70 MPa | ▼ 60°C, 15.00 MPa |

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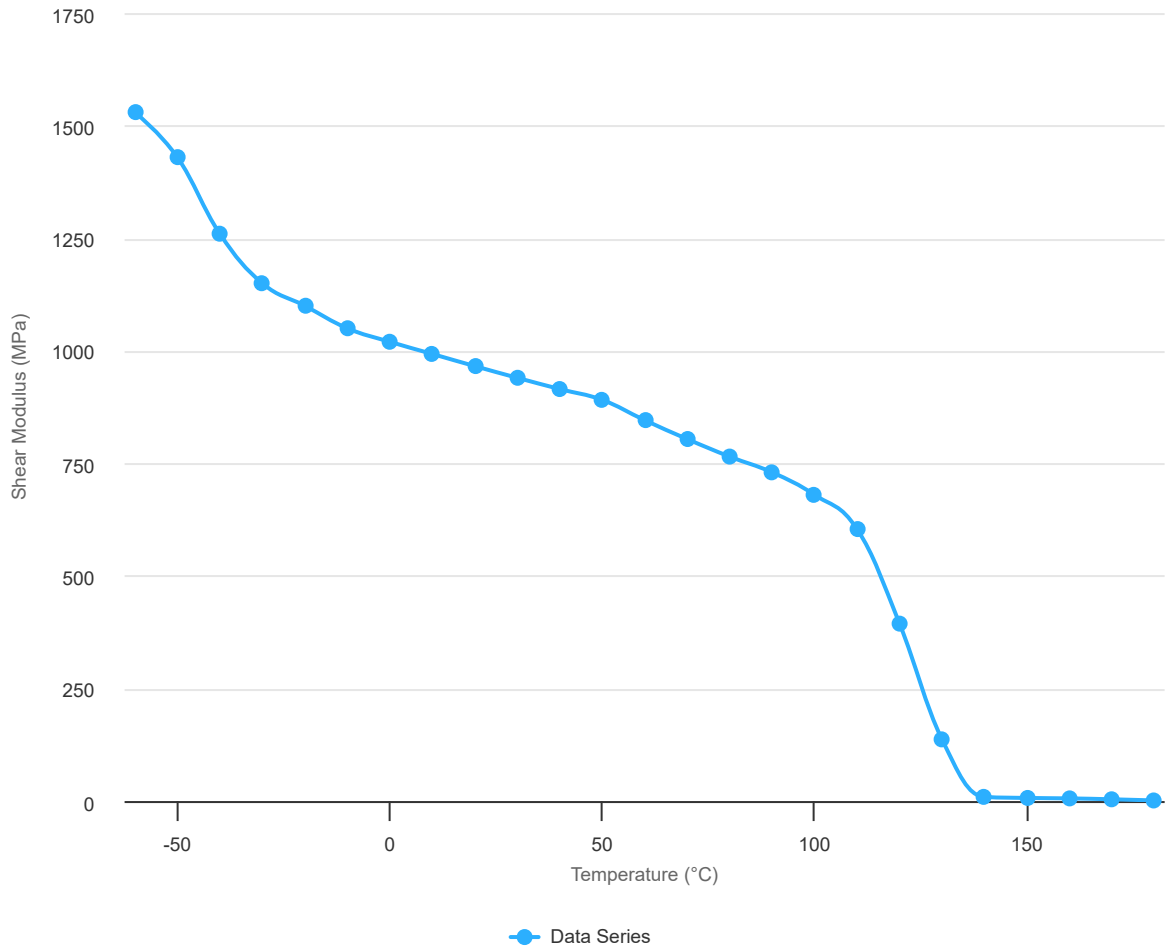
Isothermal Stress vs. Strain (ISO 11403)



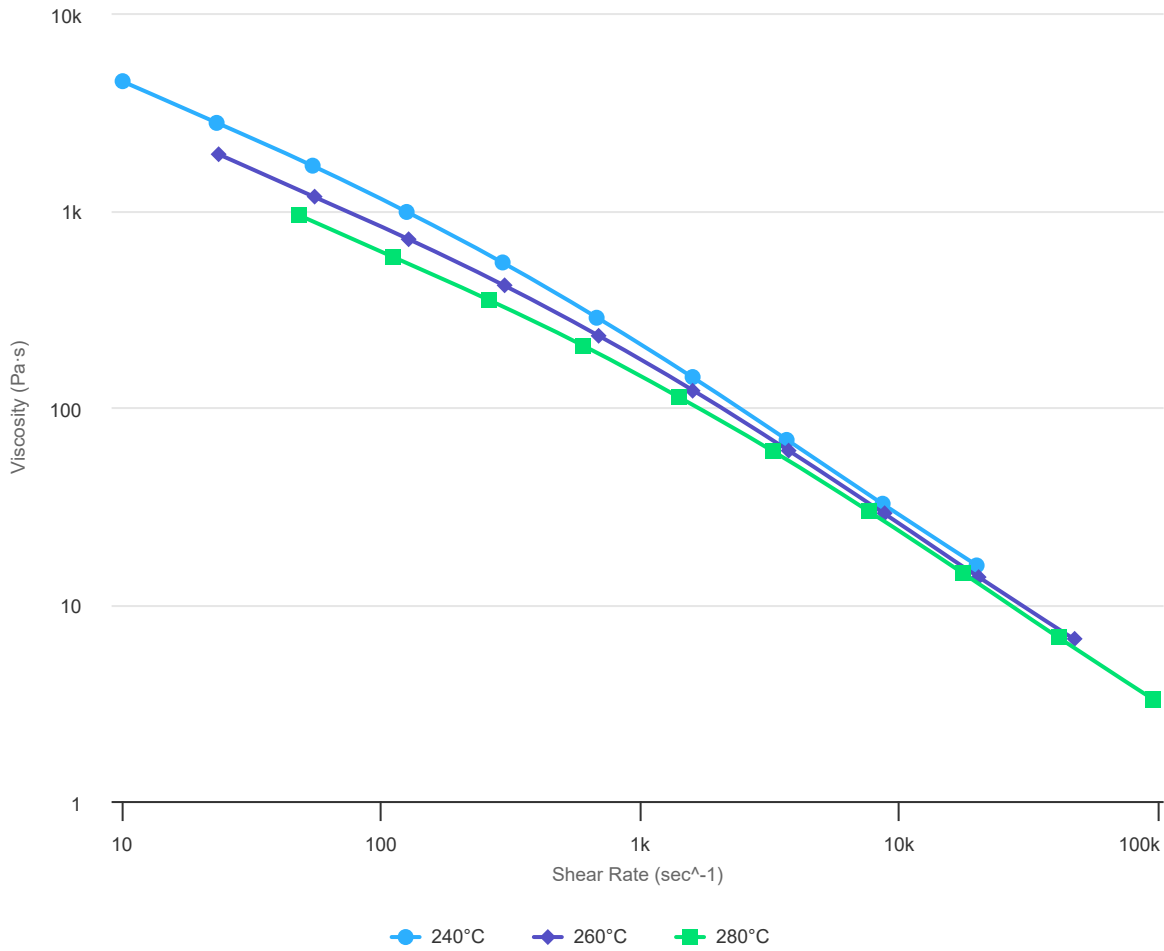
Secant Modulus vs. Strain (ISO 11403)



Shear Modulus vs. Temperature (ISO 11403)



Viscosity vs. Shear Rate (ISO 11403)



Notes

¹ 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.

² 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.

³ Typical properties: these are not to be construed as specifications.

⁴ Free, longitudinal

⁵ 4 h/80 °C