

Luran® S 778T XA SPF60

ASA

INEOS Styrolution

Luran® S 778T XA SPF60 acrylonitrile styrene acrylate (ASA) polymer features high surface quality and good impact strength including enhanced colour fastness. The product delivers superior long-term performance when exposed to UV irradiation and additionally provide excellent chemical resistance. Luran® S 778T XA SPF60 is an injection molding grade with enhanced heat resistance, brilliant surface appearance and best UV resistance among all Luran® S products.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	5	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2500	MPa	ISO 527
Yield stress	52	MPa	ISO 527
Yield strain	3.4	%	ISO 527
Nominal strain at break	8	%	ISO 527
Notched Impact Strength (Charpy), +23°C	15	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	4	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, 50°C/h 50N	103	°C	ISO 306
UL recognition	yes	-	-
Burning Behav. at thickness h	HB	class	UL 94
UL recognition	yes	-	-
ASTM Data			
Thermal Conductivity, solid state	0.17	W/(m K)	ISO 22007-4

Other Properties	Value	Unit	Test Standard
ISO Data			
Density	1070	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Thermal Conductivity of Melt	0.17	W/(m K)	-
Ejection temperature	98	°C	-

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	240 - 280	°C	-
Mold temperature	40 - 80	°C	-

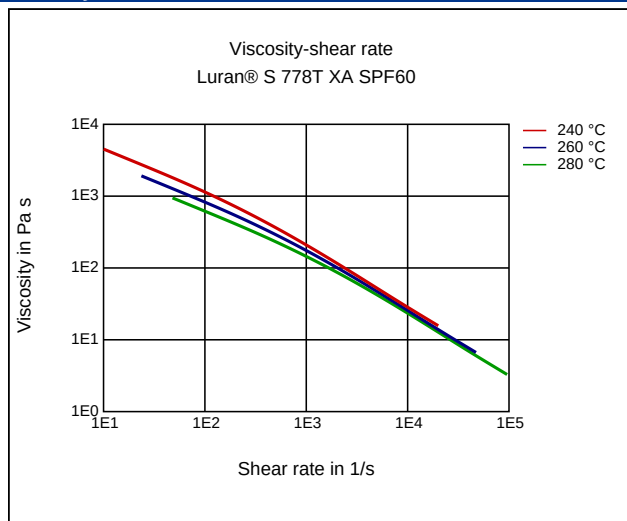
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ASA

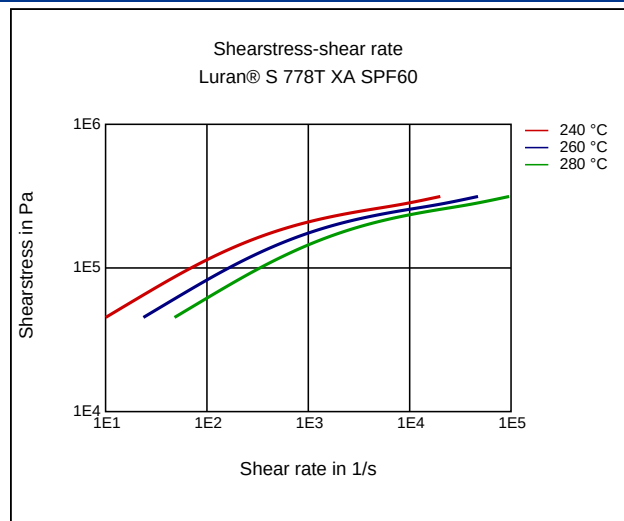
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Diagrams

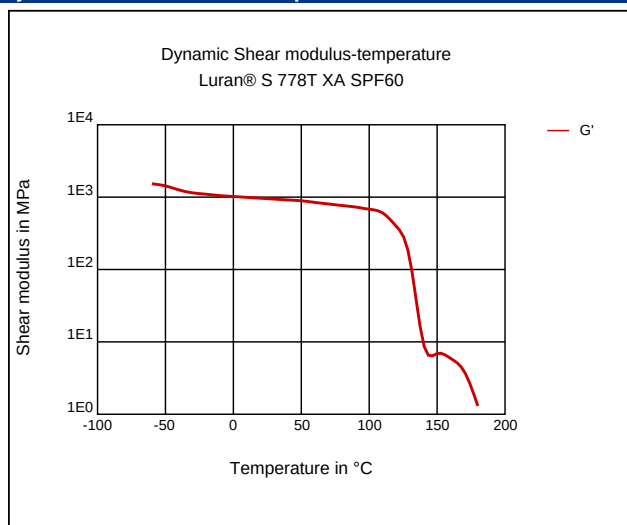
Viscosity-shear rate



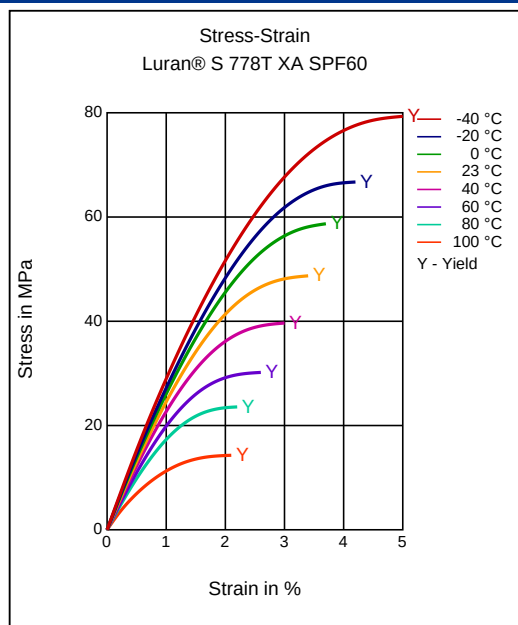
Shearstress-shear rate



Dynamic Shear modulus-temperature



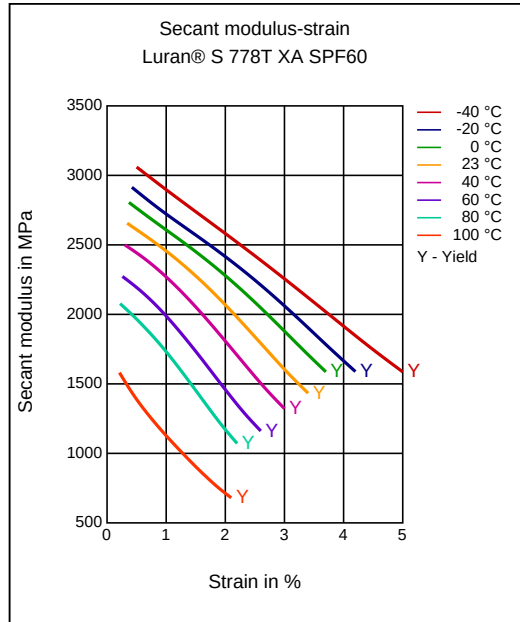
Stress-strain



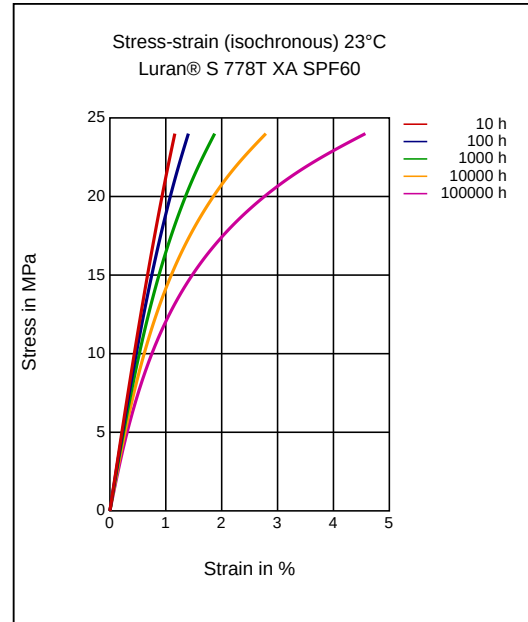
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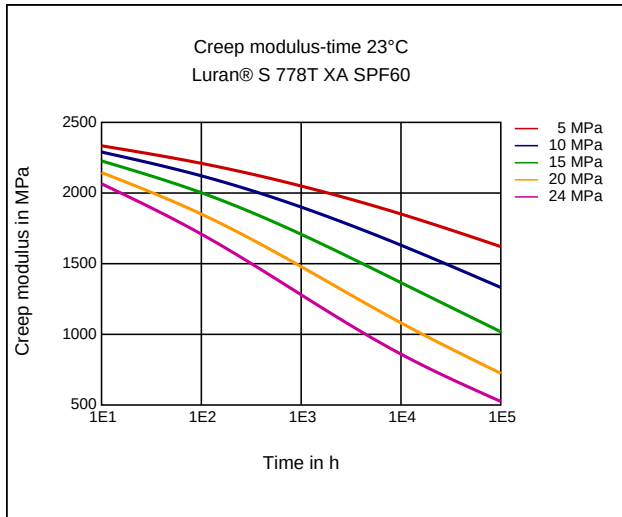
Secant modulus-strain



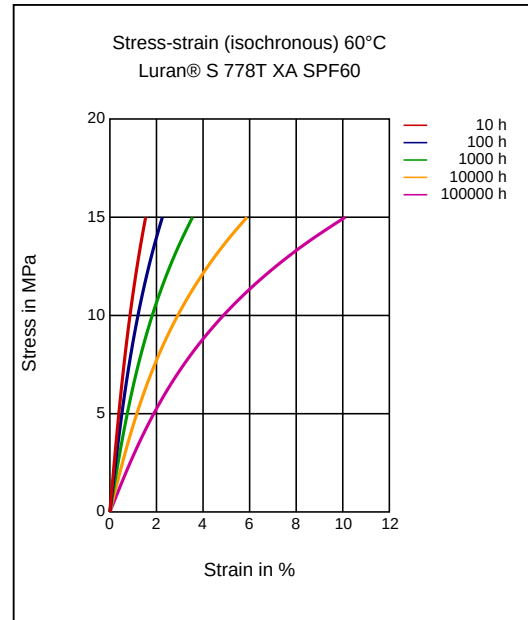
Stress-strain (isochronous) 23 °C



Creep modulus-time 23 °C



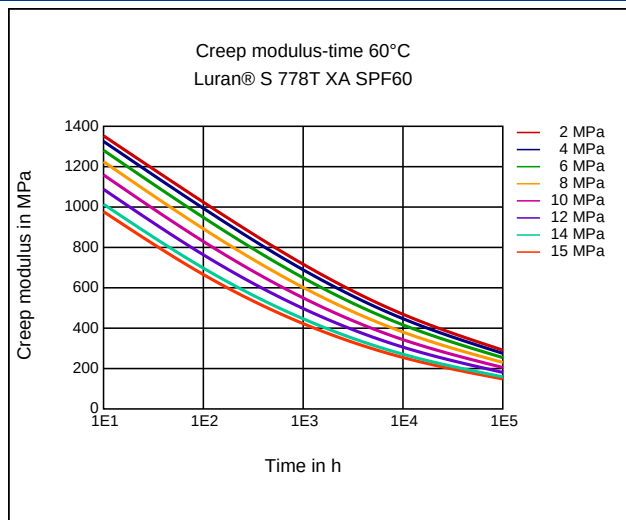
Stress-strain (isochronous) 60 °C



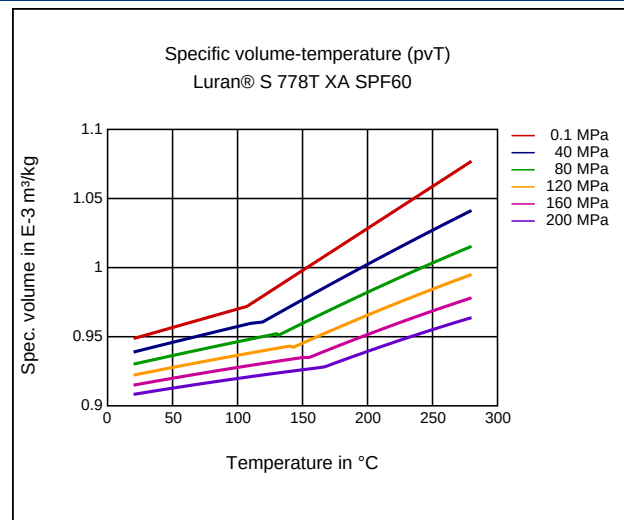
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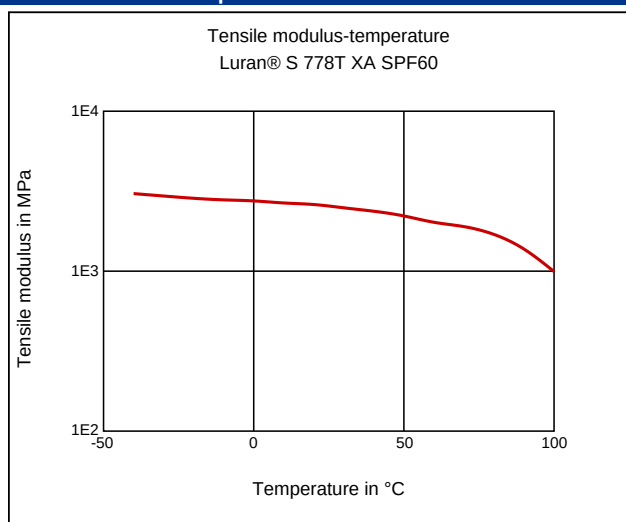
Creep modulus-time 60°C



Specific volume-temperature (pvT)



Tensile Modulus-Temperature



Characteristics

Processing

Injection Molding

Delivery form

Pellets, Black

Additives

Release agent

Special Characteristics

Impact modified, Light stabilized or stable to light, UV stabilized, Heat aging stabilized

Features

High Gloss

Chemical Resistance

General Chemical Resistance

Applications

Automotive

Injection Molding

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

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PROCESSING

Melt temperature, range: 240 - 280 °C

Mold temperature, range: 40 - 80 °C

Chemical Media Resistance

Acids

- ✓ Acetic Acid (5% by mass) (23 °C)
- ✓ Citric Acid solution (10% by mass) (23 °C)
- ✓ Lactic Acid (10% by mass) (23 °C)
- ✓ Hydrochloric Acid (36% by mass) (23 °C)
- ✓ Nitric Acid (40% by mass) (23 °C)
- ✓ Sulfuric Acid (38% by mass) (23 °C)
- ✓ Sulfuric Acid (5% by mass) (23 °C)
- ✓ Chromic Acid solution (40% by mass) (23 °C)

Bases

- ✓ Sodium Hydroxide solution (35% by mass) (23 °C)
- ✓ Sodium Hydroxide solution (1% by mass) (23 °C)
- ✓ Ammonium Hydroxide solution (10% by mass) (23 °C)

Alcohols

- ✓ Isopropyl alcohol (23 °C)
- ✓ Methanol (23 °C)
- ✓ Ethanol (23 °C)

Hydrocarbons

- ✓ n-Hexane (23 °C)
- ✓ iso-Octane (23 °C)

Mineral oils

- ✓ SAE 10W40 multigrade motor oil (23 °C)

Salt solutions

- ✓ Sodium Chloride solution (10% by mass) (23 °C)
- ✓ Sodium Hypochlorite solution (10% by mass) (23 °C)
- ✓ Sodium Carbonate solution (20% by mass) (23 °C)
- ✓ Zinc Chloride solution (50% by mass) (23 °C)

Other

- ✓ Water (23 °C)
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