INEOS Styrolution

ALBIS

Luran® S 796M

ASA — INEOS Styrolution

Luran® S 796M 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 796M is suitable for extrusion and injection molding. It combines medium flowability and enhanced impact strength.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	9	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2000	MPa	ISO 527
Yield stress	41	MPa	ISO 527
Yield strain	3.5	%	ISO 527
Nominal strain at break	13	%	ISO 527
Impact Strength (Charpy), +23°C	250	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	30	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	5	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	95	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	100	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	90	°C	ISO 306
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3.0	mm	-
UL recognition	yes	-	-

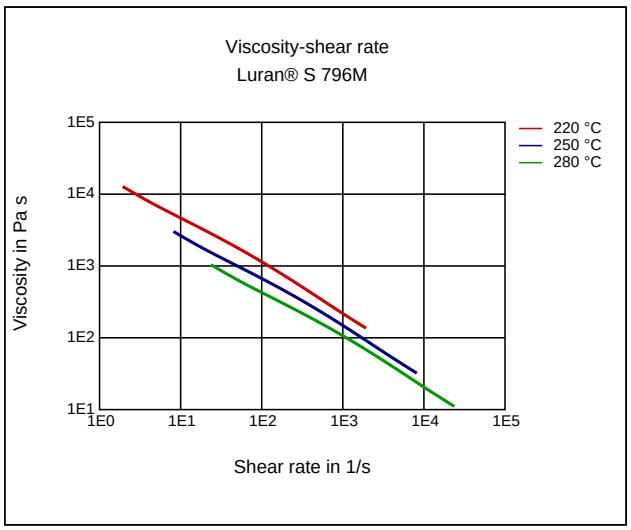
Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	1.65	%	Sim. to ISO 62
Humidity absorption	0.35	%	Sim. to ISO 62
Density	1070	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Thermal Conductivity of Melt	0.17	W/(m K)	-
Spec. heat capacity of melt	2310	J/(kg K)	-

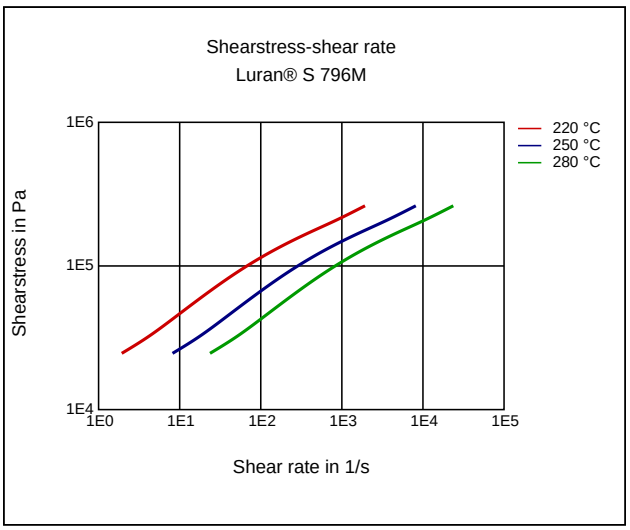
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	240 - 280	°C	-
Mold temperature	40 - 80	°C	-

Diagrams

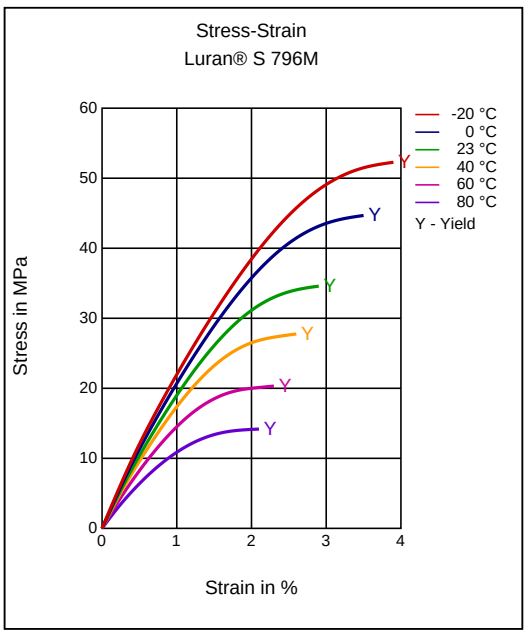
Viscosity-shear rate



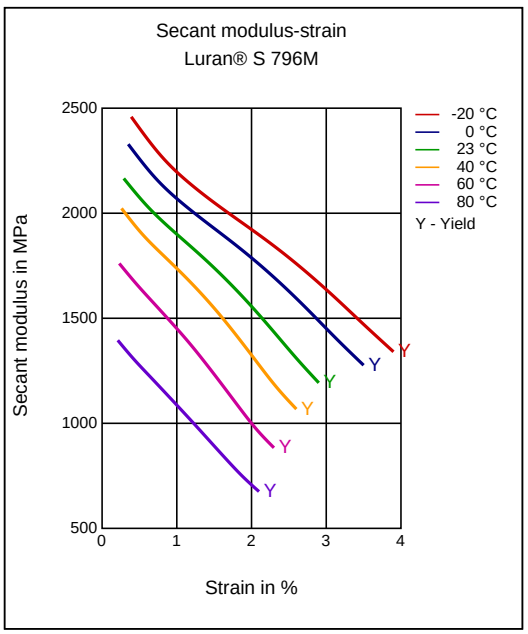
Shearstress-shear rate



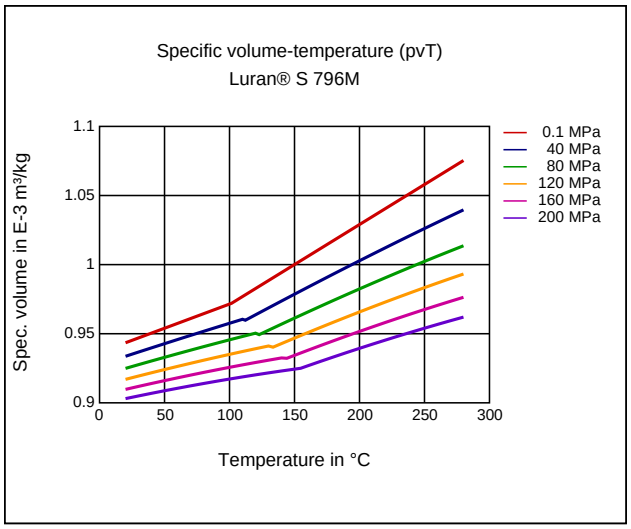
Stress-strain



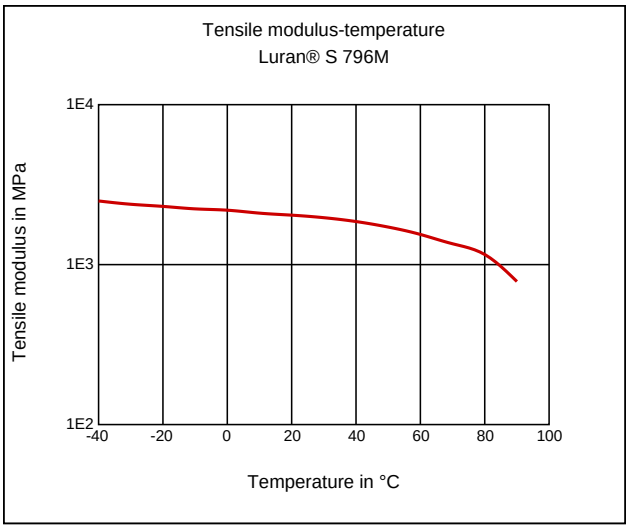
Secant modulus-strain



Specific volume-temperature (pvT)



Tensile Modulus-Temperature



Characteristics

Processing
Injection Molding

Additives
Release agent

Delivery form
Pellets

Special Characteristics
Light stabilized or stable to light, UV stablized, Heat aging stabilized

Injection Molding
PREPROCESSING
Pre-drying, Temperature: 80 °C
Pre-drying, Time: 2 - 4h
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)

Disclaimer