INEOS Styrolution

Luran® S KR2864C

(ASA+PC) INEOS Styrolution

Luran® S KR2864C is a blend of ASA with PC, shows high heat and high impact resistance and long-term property retention. Its UV resistance is not only sufficient for all kind of interior applications – incl. unpainted surfaces in light colors – but also for exterior parts with medium weatherability requirements. Luran® S KR2864C is a high flow grade with a balanced profile.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	25	cm³/10min	ISO 1133
Temperature	260	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2600	MPa	ISO 527
Yield stress	63	MPa	ISO 527
Yield strain	4.6	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Notched Impact Strength (Charpy), +23°C	60	kJ/m²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	11	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	105	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	124	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	120	°C	ISO 306
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-

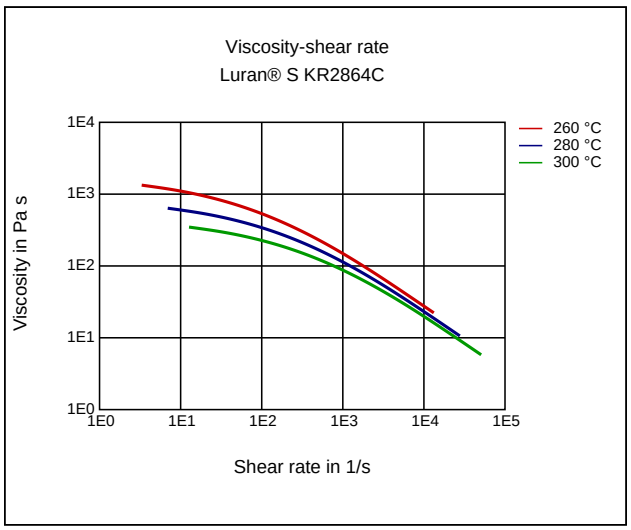
Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1150	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
ISO Data			
Thermal Conductivity of Melt	0.19	W/(m K)	-

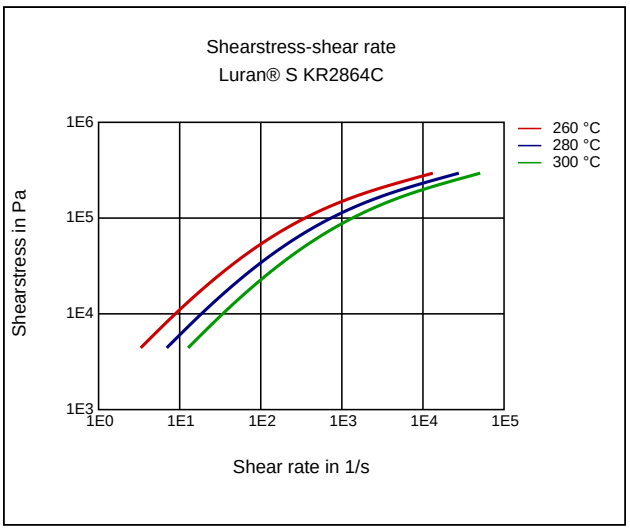
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 110	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	260 - 300	°C	-
Mold temperature	60 - 90	°C	-

Diagrams

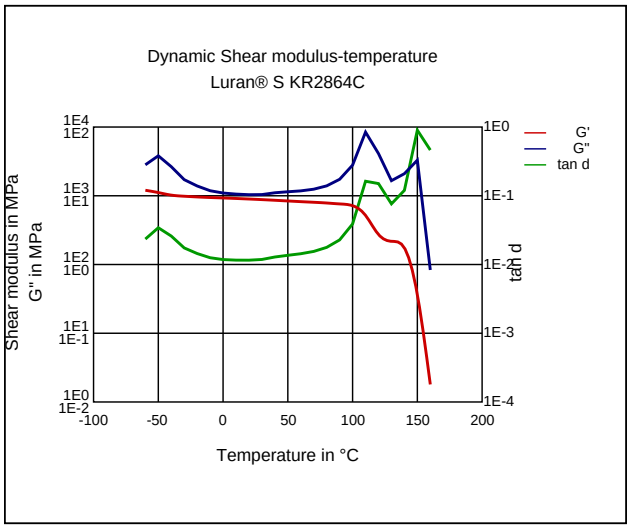
Viscosity-shear rate



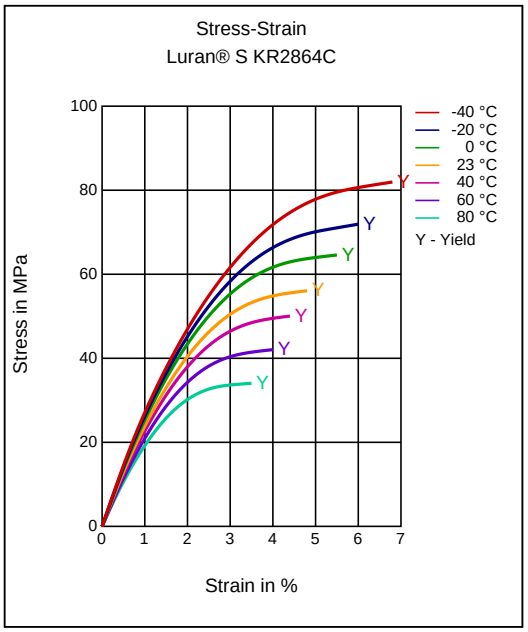
Shearstress-shear rate



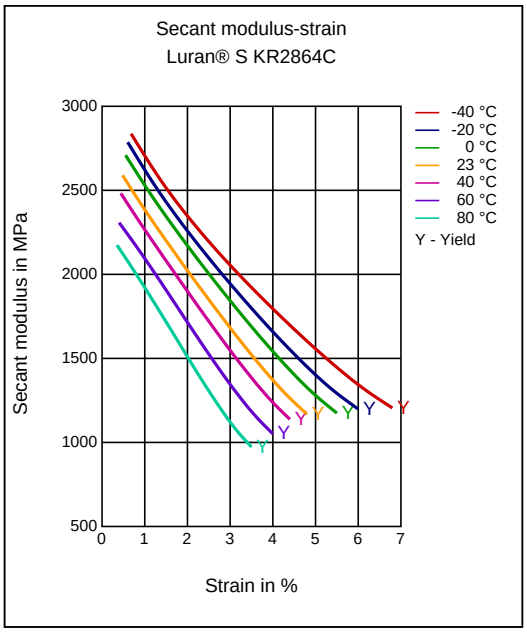
Dynamic Shear modulus-temperature



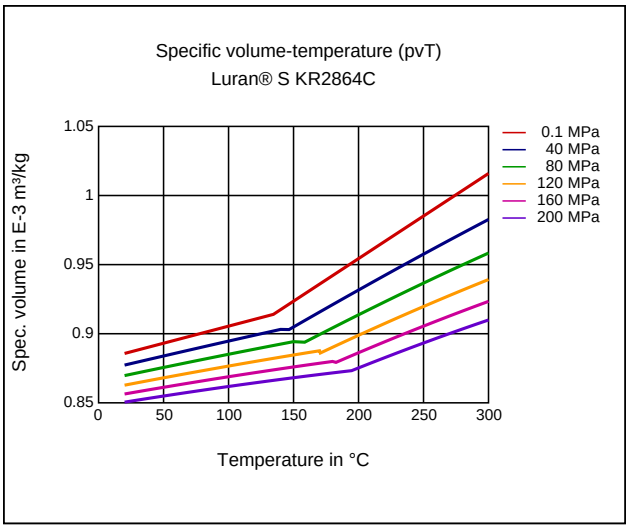
Stress-strain



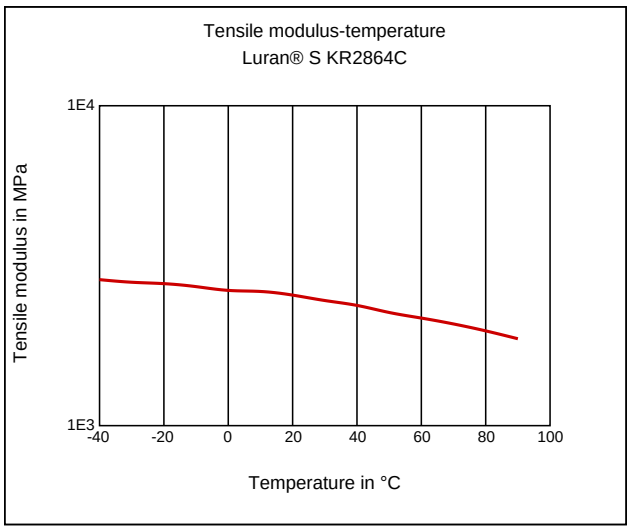
Secant modulus-strain



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: 100 - 110 °C

Pre-drying, Time: 2 - 4h

PROCESSING

Melt temperature, range: 260 - 300 °C

Mold temperature, range: 60 - 90 °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)
- ✔ 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)

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)

Standard Fuels

- ✔ Standard fuel without alcohol (pref. ISO 1817 Liquid C) (23 °C)
- ✔ Standard fuel with alcohol (pref. ISO 1817 Liquid 4) (23 °C)
- ✔ Diesel fuel (pref. ISO 1817 Liquid F) (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)
- ✔ Sodium Carbonate solution (2% by mass) (23 °C)
- ✔ Zinc Chloride solution (50% by mass) (23 °C)

Other

- ✔ Water (23 °C)
- ✔ Deionized water (90 °C)

Disclaimer

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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