



# 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	cm <sup>3</sup> /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.	НВ	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-

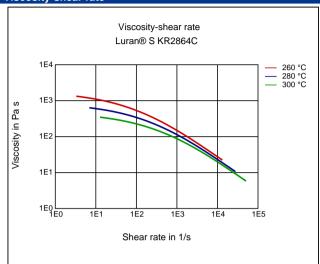
Other Properties	Value	Unit	Test Standard
ISO Data			
Water Absorption	0.6	%	Sim. to ISO 62
Humidity absorption	0.18	%	Sim. to ISO 62
Density	1150	kg/m³	ISO 1183

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

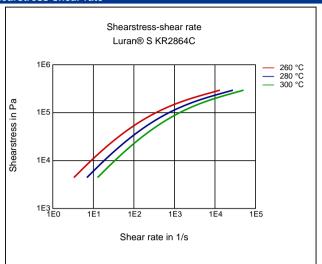
Processing Recommendation Injection Molding	Value	Unit	Test Standard	
Pre-drying - Temperature	100 - 110	°C	-	
Pre-drying - Time	2 - 4	h	-	
Melt temperature	260 - 300	°C	-	
Mold temperature	60 - 90	°C	-	

## Diagrams

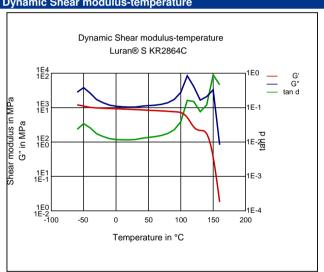
# Viscosity-shear rate



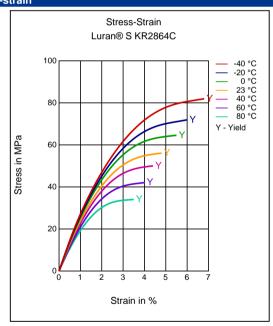
## Shearstress-shear rate



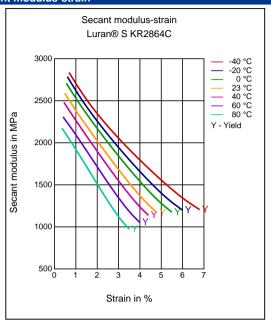
# Dynamic Shear modulus-temperature



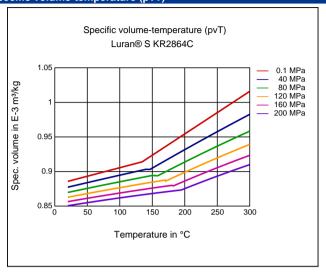
# Stress-strain



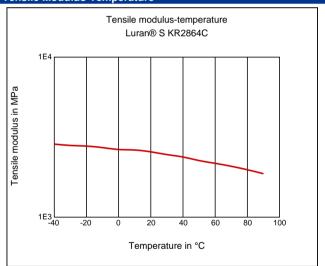
## Secant modulus-strain



## Specific volume-temperature (pvT)



## Tensile Modulus-Temperature



## Characteristics

# Processing

Injection Molding

## **Delivery form**

Pellets

## Additives

Release agent

#### **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

**INEOS Styrolution** 

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

#### **Liability Exclusion**

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