30.01.2025

# LURAN® S KR2867C WU, ASA+PC UL94 V0

- MSDS available on request
- LURAN S® KR2867C WU contains SVHC

INEOS Styrolution

ALBIS

# Luran® S KR2867C WU

(ASA+PC) INEOS Styrolution

Easy flowing injection moulding grade containing bromine-, chlorine- and antimony-free flame retardant. Available in Europe only.

| Rheological properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Melt volume-flow rate, MVR | 45 | cm³/10min | ISO 1133 |
| Temperature | 260 | °C | - |
| Load | 5 | kg | - |
| Molding shrinkage, parallel | 0.5 | % | ISO 294-4, 2577 |
| Molding shrinkage, normal | 0.9 | % | ISO 294-4, 2577 |

| Mechanical Properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Tensile Modulus | 2600 | MPa | ISO 527 |
| Yield stress | 61 | MPa | ISO 527 |
| Yield strain | 4 | % | ISO 527 |
| Nominal strain at break | 50 | % | ISO 527 |
| Impact Strength (Charpy), +23°C | no break | kJ/m² | ISO 179/1eU |
| Impact Strength (Charpy), -30°C | no break | kJ/m² | ISO 179/1eU |
| Notched Impact Strength (Charpy), +23°C | 16 | kJ/m² | ISO 179/1eA |
| Notched Impact Strength (Charpy), -30°C | 9 | kJ/m² | ISO 179/1eA |

| Thermal Properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Temp. of deflection under load (1.80 MPa) | 96 | °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 | 105 | °C | ISO 306 |
| Coeff. of Linear Therm. Expansion, parallel | 75 | E-6/K | ISO 11359-1/-2 |
| Burning Behav. at 1.5 mm Nom. Thickn. | V-0 | class | UL 94 |
| Thickness tested | 1.6 | mm | - |
| UL recognition | yes | - | - |
| Burning Behav. at thickness h | V-0 | class | UL 94 |
| Thickness tested | 3.0 | mm | - |
| UL recognition | yes | - | - |
| Oxygen index | 30 | % | ISO 4589-1/-2 |

| Electrical Properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Relative permittivity, 100Hz | 3.1 | - | IEC 62631-2-1 |
| Relative permittivity, 1MHz | 3 | - | IEC 62631-2-1 |
| Dissipation Factor, 100Hz | 60 | E-4 | IEC 62631-2-1 |
| Dissipation Factor, 1MHz | 100 | E-4 | IEC 62631-2-1 |
| Volume Resistivity | 1E13 | Ohm*m | IEC 62631-3-1 |
| Surface Resistivity | 1E14 | Ohm | IEC 62631-3-2 |
| Comparative tracking index | 250 | - | IEC 60112 |

| Other Properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Water Absorption | 0.4 | % | Sim. to ISO 62 |
| Humidity absorption | 0.15 | % | Sim. to ISO 62 |
| Density | 1190 | kg/m³ | ISO 1183 |

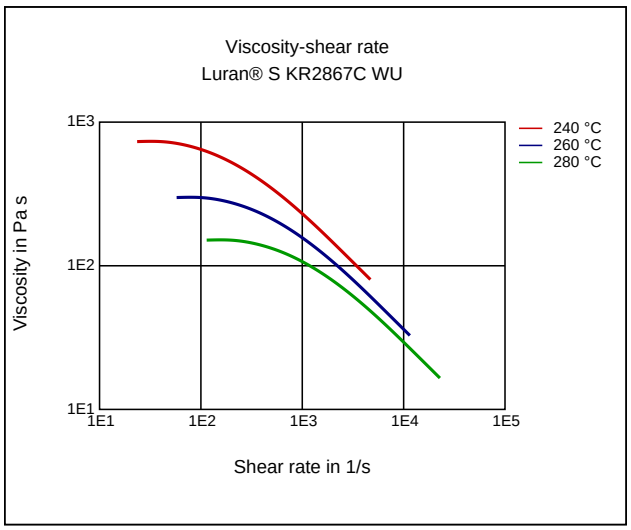
| Rheological calculation properties | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Ejection temperature | 100 | °C | - |

| Test specimen production | Value | Unit | Test Standard |
|---|---|---|---|
| **ISO Data** | | | |
| Injection Molding, melt temperature | 280 | °C | ISO 294 |
| Injection Molding, mold temperature | 80 | °C | ISO 294 |
| Injection Molding, injection velocity | 200 | mm/s | ISO 294 |

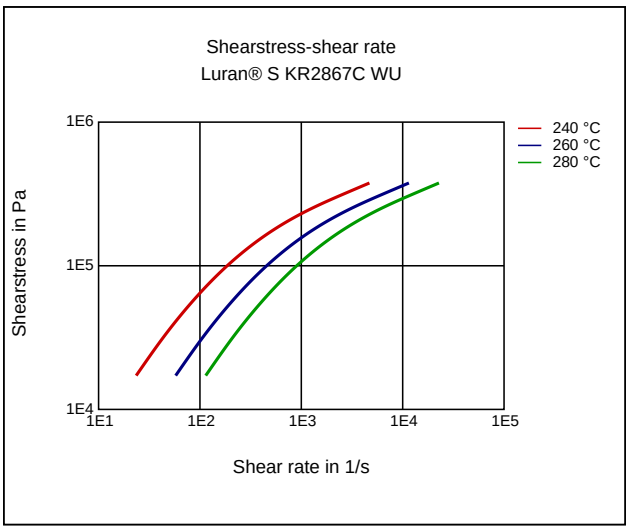
| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|---|---|---|
| Pre-drying - Temperature | 85 - 95 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Melt temperature | 260 - 280 | °C | - |
| Mold temperature | 40 - 60 | °C | - |

## Diagrams

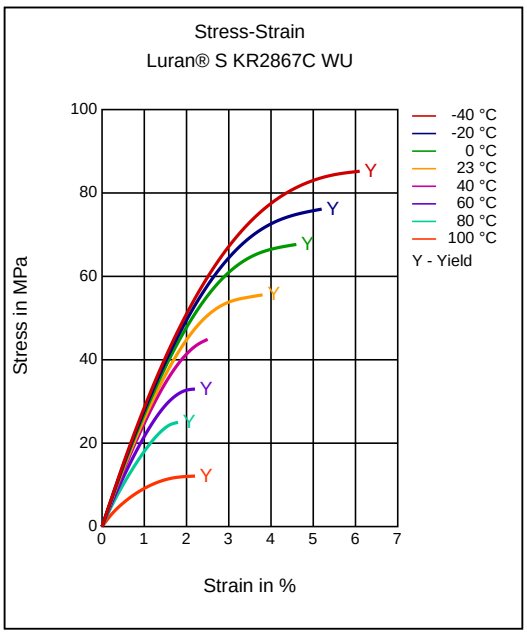
### Viscosity-shear rate



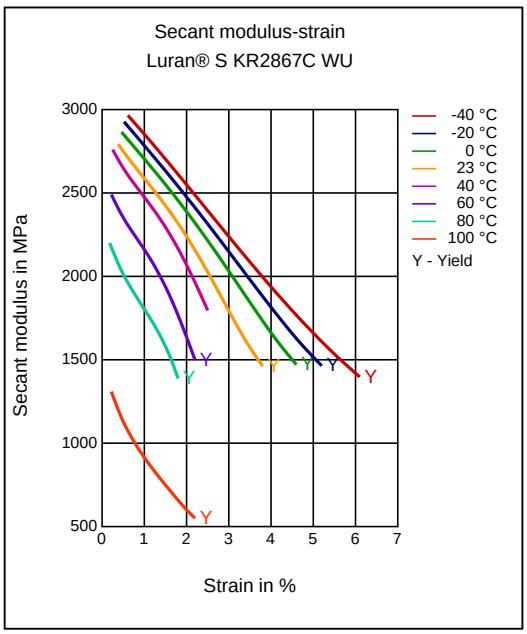

### Shearstress-shear rate



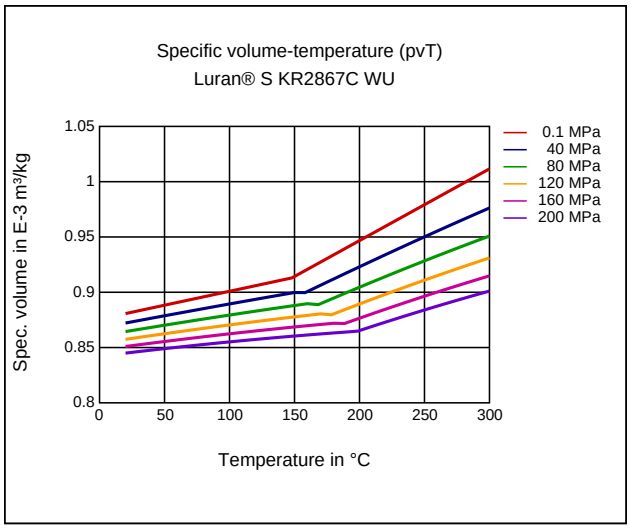

### Stress-strain



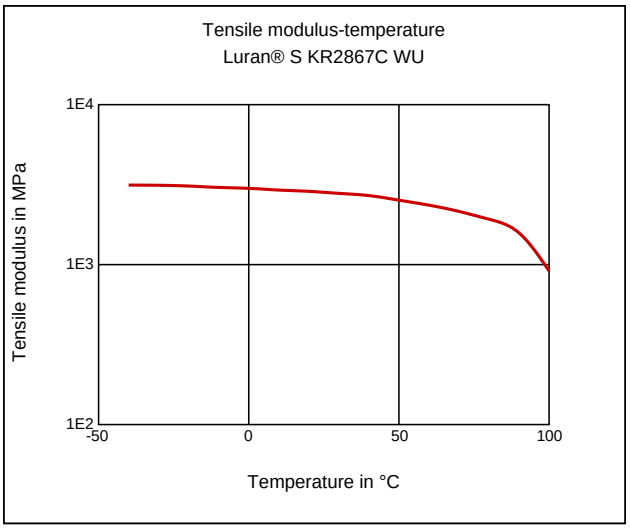

### Secant modulus-strain



## 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/Post-processing, Pre-drying, Temperature: 85 - 95 °C
Pre/Post-processing, Pre-drying, Time: 2 - 4 h

PROCESSING
injection molding, Melt temperature, range: 260 - 280 °C
injection molding, Melt temperature, recommended: 280 °C
injection molding, Mold temperature, range: 40 - 60 °C
injection molding, Mold temperature, recommended: 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)
- ✔ 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