

Luran® S KR2859

ASA

INEOS Styrolution

Luran® S KR2859 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 KR2859 is an extrusion grade providing enhanced stiffness and surface gloss.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	12	cm ³ /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	55	MPa	ISO 527
Yield strain	3.2	%	ISO 527
Nominal strain at break	7	%	ISO 527
Impact Strength (Charpy), +23°C	160	kJ/m ²	ISO 179/1eU
Impact Strength (Charpy), -30°C	80	kJ/m ²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	11	kJ/m ²	ISO 179/1eA
Notched Impact Strength (Charpy), -30°C	4	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	97	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	101	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	98	°C	ISO 306

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/m ³	ISO 1183
Bulk density	500	kg/m ³	-

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

Processing Recommendation Extrusion	Value	Unit	Test Standard
Type of extrusion	pipe/tube	-	-
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	200 - 240	°C	-
Type of extrusion	sheet	-	-
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	2 - 4	h	-
Melt temperature	230 - 270	°C	-

Characteristics**Processing**

Profile Extrusion, Sheet Extrusion, Other Extrusion, Blow Molding, Thermoforming

Delivery form

Pellets

Special Characteristics

Impact modified, UV stabilized

Chemical Resistance

General Chemical Resistance

Injection Molding

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Other Extrusion

PREPROCESSING

Pre-drying, Temperature: 80 °C

Pre-drying, Time: 2 - 4h

PROCESSING

Extrusion, Pipes, Melt temperature: 200 - 240 °C

Sheet Extrusion

PREPROCESSING

Pre-drying, Temperature: 80 °C

Pre-drying, Time: 2 - 4h

PROCESSING

Extrusion, Plates, Melt temperature: 230 - 270 °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)
- ✗ Toluene (23 °C)
- ✓ iso-Octane (23 °C)

Ketones

- ✗ Acetone (23 °C)

Ethers

- ✗ Diethyl ether (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)

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- ✓ Zinc Chloride solution (50% by mass) (23°C)

Other

- ✗ Ethyl Acetate (23°C)
- ✓ Water (23°C)