

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

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)

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

Other

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

Disclaimer

Liability Exclusion

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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