

K-Resin KR38

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR38 alone or in blends, can be extruded into sheet and thermoformed on conventional equipment at high output rates. The favorable economics of K-Resin SBC, along with high productivity, have made possible tough clear disposable drinking cups, lids and other packaging applications. INEOS Styrolution has several grades of K-Resin SBC tailored for your sheet extrusion needs.

FEATURES

- Combines Clarity and Toughness
- Good Formability
- High Surface Gloss
- Good Toughness and Stiffness

APPLICATIONS

- Thermoformed Blister Packs
- Portion Packages
- Cups and Lids

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	10
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	50
Tensile Stress at Yield, 23 °C	ISO 527	MPa	15
Tensile Strain at Yield, 23 °C	ISO 527	%	2
Tensile Strain at Break, 23 °C	ISO 527	%	180
Tensile Modulus	ISO 527	MPa	900
Flexural Strength, 23 °C	ISO 178	MPa	20
Flexural Modulus, 23 °C	ISO 178	MPa	1000
Hardness, Shore D	ISO 868	-	55
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	50
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	75
Heat Deflection Temperature, B (0.45 MPa)	ISO 75	°C	73
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	55
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	60 - 90

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Property, Test Condition	Standard	Unit	Values
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.56
Light Transmission at 550 nm	ASTM D 1003	%	92
Haze	ASTM D 1003	%	2
Other Properties			
Density	ISO 1183	kg/m ³	1010
Water Absorption, Saturated at 23 °C	ISO 62	%	0.07
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 1

Typical values for uncolored products

DISCLAIMER

The aforementioned data shall constitute the agreed contractual quality of the product sold by INEOS Styrolution at the time of passing of risk. INEOS Styrolution does not make any further warranty, representation or guarantee of any kind, express or implied, regarding the suitability of the product for any particular purpose or application and INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.