

K-Resin KR38

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR38 alone or in blends, can be easily processed by extrusion and gives thermoformed parts with excellent detail on fast production cycles. The favorable economics of K-Resin SBC, along with high productivity, have made possible tough clear disposable drinking cups, lids, IC carrier tape and other packaging applications. INEOS Styrolution has several grades of K-Resin SBC tailored for your sheet extrusion needs.

FEATURES

- Good Clarity
- Excellent Toughness
- Cold Temperature Impact
- Good Stiffness
- Good Formability
- High Surface Gloss

APPLICATIONS

- Thermoformed Blister Packs
- Cups and Lids
- Portion Packages
- IC Carrier Tape

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	9
Mechanical Properties			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m ²	55
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	50
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m ²	No Break
Tensile Stress at Yield, 23 °C	ISO 527	MPa	15
Tensile Stress at Break, 23 °C	ISO 527	MPa	15
Tensile Strain at Break, 23 °C	ISO 527	%	200
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			

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Property, Test Condition	Standard	Unit	Values
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	50
Vicat Softening Temperature, VST/A/120 (10N, 120 °C/h)	ISO 306	°C	75
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	55
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	73
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	90
Haze	ASTM D 1003	%	3.5
Other Properties			
Density	ISO 1183	kg/m ³	1000
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.07
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 1
Melt Temperature Range	ISO 294	°C	180 - 220
Mold Temperature Range	ISO 294	°C	30 - 50