

K-Resin KR40

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR40 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

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	9
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	4
Tensile Stress at Yield, 23 °C	ISO 527	MPa	15
Tensile Strain at Yield, 23 °C	ISO 527	%	3
Tensile Strain at Break, 23 °C	ISO 527	%	300
Tensile Modulus	ISO 527	MPa	750
Flexural Strength, 23 °C	ISO 178	MPa	17
Flexural Modulus, 23 °C	ISO 178	MPa	650
Hardness, Shore D	ISO 868	-	55
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	40
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	61
Heat Deflection Temperature, B (0.45 MPa)	ISO 75	°C	56
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	46
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	60 - 90
Optical Properties			

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Refractive Index, Sodium D Line	ISO 489	-	1.56
Light Transmission at 550 nm	ASTM D 1003	%	92
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

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