

K-Resin KR10

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR10 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. K-Resin® KR10 will process on most conventional equipment, allowing the molder to run a crystal clear bottle without expensive machine modifications, special molds, different screws, or dryers. K-Resin® SBC are blow molded in a broad range of sizes and shapes, from small pill bottles and medical drainage units, to very tall display bottles. They can also be injection blow molded into extremely high impact bottles with glass-like clarity.

FEATURES

- Excellent Clarity
- Good Stiffness
- Good Toughness
- High Surface Gloss
- Good Formability

APPLICATIONS

- Molded Boxes with Integral Hinges
- Medical Devices
- Overcaps
- Displays
- Blister Packaging
- Bottles and Portion Packages

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Mechanical Properties			
Instrumented Dart Impact (total energy)	ASTM D 3763	in-lbs	354
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	3800
Tensile Strain at Break, 23 °C	ASTM D 638	%	230
Flexural Strength, 23 °C	ASTM D 790		5400
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	260
Hardness, Shore D	ASTM D 2240	-	63
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°F	185
DTUL @ 264 psi - Annealed	ASTM D 648	°F	144
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	92
Gardner Gloss (mold temperature 100°F)	ASTM D2457	%	162

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Property, Test Condition	Standard	Unit	Values
Haze	ASTM D 1003	%	< 0.9
Other Properties			
Moisture Absorption	ASTM D570	%	0.09
Density (ASTM)	ASTM D 792	g/cm ³	1.01