

K-Resin KR03E

Styrene Butadiene Copolymer (SBC)

TECHNICAL
DATASHEET

DESCRIPTION

K-Resin® KR03 process very well in injection molding, providing good cycle times and design flexibility. K-Resin® KR03 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. K-Resin® KR03 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® KR03 can be 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
- Good Formability
- High Surface Gloss

APPLICATIONS

- Toys
- Clam Packaging
- Displays
- Container, Cups and Lids
- Extruded Sheets
- Blow Bottles

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	7.5
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
Tensile Modulus	ASTM D 638	psi x 10 ³	240
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

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Property, Test Condition	Standard	Unit	Values
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	92
Gardner Gloss (mold temperature 100°F)	ASTM D2457	%	162
Haze	ASTM D 1003	%	< 0.9
Other Properties			
Density (ASTM)	ASTM D 792	g/cm ³	1.01
Moisture Absorption	ASTM D570	%	0.09

Typical values for uncolored products

Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities.

Please consult our local sales or technical representatives for details.

DISCLAIMER

The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. 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.