

K-Resin ECO KR03

Styrene Butadiene Copolymer (SBC)

TECHNICAL
DATASHEET

DESCRIPTION

K-Resin® ECO KR03 BB60 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® ECO KR03 BB60 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® ECO KR03 BB60 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 Formability
- Good Toughness
- High Surface Gloss

APPLICATIONS

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

Property, Test Condition	Standard	Unit	Values
Sustainability Properties			
Attributed Content of ISCC-certified Bio-Circular Sources (min.)	-	-	60
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 Modulus	ASTM D 638	psi x 10 ³	220
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	3800
Tensile Strain at Break, 23 °C	ASTM D 638	%	230
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	260
Flexural Strength, 23 °C	ASTM D 790		5400
Hardness, Shore D	ASTM D 2240	-	63
Nominal Strain at Break, 23 °C	-	%	170

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Property, Test Condition	Standard	Unit	Values
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
Haze	ASTM D 1003	%	1
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.

SUPPLY FORM

K-Resin® is supplied in pellet form and should be kept in its original containers in cool, dry place. Avoid direct exposure to sunlight. K-Resin® can be stored in silos at temperatures well below 45 °C.

PRODUCT SAFETY

During processing of K-Resin® small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well ventilated workplaces - that is where five to eight air changes per hour are made. For safety information please refer to our Material Safety Data Sheet for this product.

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.

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