

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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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