

K-Resin KR05

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR05 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® KR05 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 Formability
- Good Toughness
- High Surface Gloss

APPLICATIONS

- Bottles
- Molded Boxes and Containers
- Medical Devices
- Portion Packages
- Blister Packaging

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 200 °C/5 kg	ISO 1133	g/10 min	7.5
Mechanical Properties			
Instrumented Dart Impact (total energy)		J	40
Tensile Stress at Yield, 23 °C	ISO 527	MPa	26
Tensile Strain at Break, 23 °C	ISO 527	%	230
Flexural Strength, 23 °C	ISO 178	MPa	37
Flexural Modulus, 23 °C	ISO 178	MPa	1,795
Hardness, Shore D	ISO 868	-	63
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°C	85
DTUL @ 264 psi - Annealed		°C	62
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
Other Properties			
Density	ISO 1183	kg/m ³	1010
Moisture Absorption	ASTM D570	%	0.09