

K-Resin KR03

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR03 process very well in injection molding, providing good cycle times and design flexibility. Applications range from containers and packaging with living hinges to medical applications, toys, displays, overcaps and hangers. INEOS Styrolution has several grades of K-Resin® SBC tailored for your injection molded needs.

FEATURES

- Excellent Clarity
- Good Stiffness
- Good Formability
- Good Toughness
- High Surface Gloss
- KR03NW is the no-wax (NW) form of KR03 to facilitate printing

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	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	psi	5400
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	260,350
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 D 2457	%	162
Other Properties			

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Property, Test Condition	Standard	Unit	Values
Density	ASTM D 792	-	1.01
Moisture Absorption	ASTM D 570	%	0.09

The nominal properties herein are typical of the product but do not reflect normal testing variance and therefore should not be used for specification purposes. Values are rounded.

[Tensile Yield Strength/Tensile Elongation @ Break] = Type 1 @ 2 in/min (50 mm/min)

[Flexural Modulus/Flexural Yield Strength] = 0.125 in (3.2 mm) specimen @ 0.5 in/sec (1.27 cm/min)

[Instrumented Impact Total Energy] = 0.125 in (3.2 mm) specimen @ 150 in/sec (381 cm/sec) impact rate

DISCLAIMER

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