

K-Resin KR53

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR53 makes a clear, stiff, very tough, high gloss film suitable for applications such as candy twist wrap, shrink sleeves and overwrap.

FEATURES

- Excellent Clarity
- High Surface Gloss
- Good Toughness
- Good Heat Sealability

APPLICATIONS

- Medical Packaging
- Produce Packaging
- Twist Wrap
- Lidstock and Labeling Film

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	10.0
Mechanical Properties			
Elongation at Break (MD)	ASTM D 882	%	175
Elongation at Break (TD)	ASTM D 882	%	180
Flexural Strength, 23 °C	ASTM D 790	psi	-
Elmendorf Tear (MD)	ASTM D 1922	lbs	0.044
Elmendorf Tear (TD)	ASTM D 1922	lbs	0.055
Puncture, Energy at Peak Force	ASTM D 3763	in-lb	10
Tensile Yield Strength (MD)	ASTM D 882	psi	3,300
Tensile Yield Strength (TD)	ASTM D 882	psi	2,900
Secant Modulus, 1% MD	ASTM D 882	psi	109,000
Secant Modulus, 1% TD	ASTM D 882	psi	85,000
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°F	145
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	-
Haze	ASTM D 1003	%	0.2

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Property, Test Condition	Standard	Unit	Values
Gardner Gloss (mold temperature 100°F)	ASTM D 2457	%	140
Other Properties			
Density	ASTM D 792	-	1.02
Oxygen Transmission Rate (23 °C/0% RH)	ASTM D 3985	cc/100in ² /day	275
Water Vapor Transmission Rate (WVTR) (23 °C/0% to 85% RH gradient)	ASTM F 1249-06	g/100in ² /day	3.5

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.

Typical blown film properties with 3% SKR17 slip/antiblock, 1 mil (0.025 mm) film (2.5:1 BUR) 35 mil (0.90 mm) die gap.

[Vicat Softening Point] = Injection Molded Specimen.

[Haze] = Haze was measured using blown film containing only 1% SKR19 stabilizer, 1 mil (0.025 mm) film (2.5:1 BUR) 35 mil (0.90 mm) die gap.

DISCLAIMER

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