INEOS STYROLUTION

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	ISO 1133	g/10 min	10.0
Mechanical Properties			
Elongation at Break (MD)	ISO 527	%	175
Elongation at Break (TD)		%	180
Flexural Strength, 23 °C	ASTM D 790	psi	-
Elmondorf Tear (MD)		g	20
Elmondorf Tear (TD)		g	25
Puncture, Energy at Peak Force		J	1.1
Tensile Yield Strength (MD)	ASTM D 882	MPa	25
Tensile Yield Strength (TD)	ASTM D 882	MPa	20
Secant Modulus, 1% MD	ASTM D 882	MPa	750
Secant Modulus, 1% TD	ASTM D 882	MPa	590
Dart Drop, 26 in (66 mm)	ASTM D1709	g	580
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°C	63
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	-

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Property, Test Condition	Standard	Unit	Values
Haze	ASTM D 1003	%	0.2
Gardner Gloss (mold temperature 100°F)	ASTM D2457	%	140
Other Properties			
Density	ISO 1183	kg/m³	1020
Oxygen Transmission Rate (23 °C/0% RH)		cc/m²/day	110
Water Vapor Transmission Rate (WVTR) (23 °C/0% to 85% RH gradient)	DIN 53122	g/m²/day	1.5

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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