

K-Resin KR52

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR52 makes a clear, stiff, very tough, high gloss film suitable for applications such as candy twist wrap, shrink sleeves and overwrap. K-Resin® KR52 is designed for use in the uniaxial oriented film process for shrink sleeves.

FEATURES

- Excellent Optical Properties
- Good Stiffness
- Excellent Printability
- Up to 80% Shrinkage at 100°C

APPLICATIONS

- Shrink Sleeve Labels
- Multi-layer Films
- Tamper Evident Bands
- Roll-Fed Labels

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 200 °C/5 kg	ISO 1133	g/10 min	9.0
Mechanical Properties			
Elongation at Break (MD)	ISO 527	%	260
Elongation at Break (TD)		%	80
Flexural Strength, 23 °C	ASTM D 790	psi	-
Elmendorf Tear (MD)		g	95
Elmendorf Tear (TD)		g	75
Puncture, Energy at Peak Force		J	3
Tensile Yield Strength (MD)	ASTM D 882	MPa	30
Tensile Yield Strength (TD)	ASTM D 882	MPa	45
Secant Modulus, 1% MD	ASTM D 882	MPa	1,100
Secant Modulus, 1% TD	ASTM D 882	MPa	1,600
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°C	60
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	-
Haze	ASTM D 1003	%	4

K-Resin KR52

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Gardner Gloss (mold temperature 100°F)	ASTM D2457	%	145
Other Properties			
Density	ISO 1183	kg/m ³	1010
Oxygen Transmission Rate (23 °C/0% RH)		cc/m ² /day	85
Water Vapor Transmission Rate (WVTR) (23 °C/0% to 85% RH gradient)	DIN 53122	g/m ² /day	2