

# K-Resin DK11

Styrene Butadiene Copolymer (SBC)

## TECHNICAL DATASHEET

### DESCRIPTION

K-Resin® DK11 makes a clear, stiff, very tough, high gloss film suitable for applications such as candy twist wrap, shrink sleeves and overwrap. K-Resin® SBC grades designed for blown film extrusion is DK11.

### FEATURES

- Excellent Clarity
- High Surface Gloss
- Good Heat Sealability

### APPLICATIONS

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

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm <sup>3</sup> /10 min	7.5
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	2
Tensile Stress at Yield, 23 °C	ISO 527	MPa	25
Tensile Strain at Yield, 23 °C	ISO 527	%	2
Tensile Strain at Break, 23 °C	ISO 527	%	170
Tensile Modulus	ISO 527	MPa	1500
Flexural Strength, 23 °C	ISO 178	MPa	30
Flexural Modulus, 23 °C	ISO 178	MPa	1500
Hardness, Shore D	ISO 868	-	63
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	52
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	84
Heat Deflection Temperature, B (0.45 MPa)	ISO 75	°C	76
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	62
Coefficient of Linear Thermal Expansion	ISO 11359	10 <sup>-6</sup> /°C	60 - 90
<b>Optical Properties</b>			

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Property, Test Condition	Standard	Unit	Values
Refractive Index, Sodium D Line	ISO 489	-	1.57
Light Transmission at 550 nm	ASTM D 1003	%	92
Haze	ASTM D 1003	%	< 2
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1020
Water Absorption, Saturated at 23 °C	ISO 62	%	0.07
<b>Processing</b>			
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 1

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.

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