INEOS STYROLUTION

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	
Rheological Properties				
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	7.5	
Mechanical Properties				
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	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	
Thermal Properties				
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 ⁻⁶ /°C	60 - 90	
Optical Properties				

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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	%	< 0.9	
Other Properties				
Density	ISO 1183	kg/m³	1020	
Water Absorption, Saturated at 23 °C	ISO 62	%	0.07	
Processing				
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, I 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 me asured using blown film containing only 1% SKR19 stabilizer, I mil (0.025 mm) film (2.5:1 BUR) 35 mil (0.90 mm) die gap.

DISCLAIMER

The aforementioned data shall constitute the agreed contractual quality of the product sold by INEOS Styrolution at the time of passing of risk. INEOS Styrolution does not make any further warranty, representation or guarantee of any kind, express or implied, regarding the suitability of the product for any particular purpose or application and INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.