

K-Resin KR20

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

K-Resin® KR20 a clear styrene-butadiene block copolymer (SBC) with an exceptional high toughness. K-Resin® KR20 is mainly used in compounding of styrenic polymers to enhance the impact properties of such blends.

FEATURES

- Improved toughness for styrenic polymers and styrenic polymer blends

APPLICATIONS

- Impact modification of styrenic polymer and styrenic polymer blends

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	6
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	50
Tensile Stress at Yield, 23 °C	ISO 527	MPa	10
Tensile Strain at Yield, 23 °C	ISO 527	%	2
Tensile Modulus	ISO 527	MPa	700
Flexural Strength, 23 °C	ISO 178	MPa	12
Flexural Modulus, 23 °C	ISO 178	MPa	500
Hardness, Shore D	ISO 868	-	47
Thermal Properties			
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	57
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	60
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	50
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	60 - 90
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.56
Light Transmission at 550 nm	ASTM D 1003	%	91
Haze	ASTM D 1003	%	2

K-Resin KR20

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Other Properties			
Density	ISO 1183	kg/m ³	1010
Water Absorption, Saturated at 23 °C	ISO 62	%	0.07
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 1

Typical values for uncolored products

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.