

Styrolux T99

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

The product line Styrolux® comprises clear styrene butadiene copolymers. The grades have in general an intrinsic toughness, are easy to process and work as modifiers and compatibilizers not only in polystyrene but in many other polymers, e.g. polyolefins. For all Styrolux® grades food contact statements are available upon request. Styrolux® T99 is recommended for applications in compounding and shares basic properties with its sister grade Styrolux® T. Styrolux T99 improves the melt flow and toughness of a polymer blend, and can be applied to steer the softness and improve the compatibilization of different blend components.

FEATURES

- Toughness
- Transparency
- Softness

APPLICATIONS

- Compounding

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	12
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	2
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m ²	> 80
Tensile Modulus	ISO 527	MPa	1200
Tensile Stress at Yield, 23 °C	ISO 527	MPa	25
Tensile Strain at Yield, 23 °C	ISO 527	%	3
Tensile Stress at Break, 23 °C	ISO 527	MPa	22
Tensile Strain at Break, 23 °C	ISO 527	%	250
Nominal Strain at Break, 23 °C	ISO 527	%	250
Flexural Modulus, 23 °C	ISO 178	MPa	1000
Flexural Strength, 23 °C	ISO 178	MPa	32
Hardness, Shore D	ISO 868	-	58
Thermal Properties			

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Property, Test Condition	Standard	Unit	Values
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	46
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	62
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	50
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	56
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.57
Haze	ASTM D 1003	%	< 2
Light Transmission at 550 nm	ASTM D 1003	%	89
Other Properties			
Density	ISO 1183	kg/m ³	1.02
Water Absorption, Saturated at 23 °C	ISO 62	%	0.07
Processing			
Melt Temperature Range	ISO 294	°C	180 - 250
Mold Temperature Range	ISO 294	°C	30 - 50
Linear Mold Shrinkage	ISO 294-4	%	0.3 - 1