

Styrofex 2G66

Styrene Butadiene Copolymer (SBC)

TECHNICAL DATASHEET

DESCRIPTION

Styrofex® 2G66 is a styrene-butadiene block copolymer (SBC) with the properties of a thermoplastic elastomer (S-TPE) suitable for extrusion (blown and cast film) and for injection molding. Styrofex® 2G66 is also used for polymers modification and compatibilization. It is more polar than comparable SBS or SEBS grades and offers a combination of high resilience and toughness with good transparency and process stability.

FEATURES

- Excellent thermostability
- Very high elongation at break
- High resilience
- High transparency
- Regulatory compliant

APPLICATIONS

- Food packaging and films
- Stretch hood/ stretch film
- Impact modification / ESCR improvement
- Compounding, compatibilization & recycling
- Medical devices

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm ³ /10 min	13
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179	kJ/m ²	No Break
Charpy Notched Impact Strength, -30° C	ISO 179	kJ/m ²	2
Charpy Unnotched, 23° C	ISO 179	kJ/m ²	No Break
Charpy Unnotched, -30° C	ISO 179	kJ/m ²	No Break
Tensile Stress at Yield, 23° C	ISO 527	MPa	4
Tensile Strain at Yield, 23° C	ISO 527	%	5
Tensile Modulus	ISO 527	MPa	120
Nominal Strain at Break, 23 °C	ISO 527	%	>500
Elongation at Break (MD)	ISO 527	%	>500
Flexural Strength	ISO 178	MPa	4
Flexural Modulus	ISO 178	MPa	140
Hardness, Shore D	ISO 868	-	34
Hardness, Shore A	ISO 868	-	84

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Property, Test Condition	Standard	Unit	Values
Elmendorf Tear (MD)		g	660
Elmendorf Tear (TD)		g	816
Thermal Properties			
Vicat Softening Temperature, B/1 (120°C/h, 10N)	ASTM D 1525	°C	35
Electrical Properties			
Dielectric Constant (100 Hz)	IEC 60250	-	2.5
Volume Resistivity	IEC 60093	Ohm*m	>1E13
Surface Resistivity	IEC 60093	Ohm	1E15
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.565
Light Transmission at 550 nm	ASTM D 1003	%	80
Haze	ASTM D 1003	%	5
Other Properties			
Density	ISO 1183	kg/m ³	998
Water Absorption, Saturated at 23°C	ISO 62	%	0.07
Oxygen Transmission Rate (23°C/0% RH)		cc/m ² /day	27.2
Processing			
Melt Temperature Range	ISO 294	°C	170 to 240
Mold Temperature Range	ISO 294	°C	30 to 50

Typical values for uncolored products

SUPPLY FORM

Styoflex is supplied in pellet form and should be kept in its original containers in cool, dry place. Avoid direct exposure to sunlight. The pellets may cluster if compressed or stored at elevated temperatures; however, granule clusters are easily broken up mechanically.

PRODUCT SAFETY

During processing of Styrofex® small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20 ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well ventilated workplaces - that is where five to eight air changes per hour are made. For safety information please refer to our Material Safety Data Sheet for this product.

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