Styroflex 2G66

Styrene Butadiene Copolymer (SBC)

STYROLUTION
Driving Success. Together.

Technical Datasheet

DESCRIPTION

Styroflex 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. Styroflex 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
- Intermediate polarity/ good compatibility with different polymers

APPLICATIONS

- Food packaging and films
- Stretch hood/ stretch film
- Impact modification / ESCR improvement
- Compounding, compatibilization & recycling
- Soft touch injection molding; toys, 2-K inj. mold.

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm³/10 min	13
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179	kJ/m²	No Break
Charpy Notched Impact Strength, -30° C	ISO 179	kJ/m²	2
Charpy Unnotched, 23° C	ISO 179	kJ/m²	No Break
Charpy Unnotched, -30° C	ISO 179	kJ/m²	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)		%	>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
Elmondorf Tear (MD)		g	660

Contact us:
Phone +49 2133 51 4007
infopoint.emea@styrolution.com
www.styrolution.com

Property, Test Condition	Standard	Unit	Values
Elmondorf 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/m³	998
Water Absorption, Saturated at 23°C	ISO 62	%	0.07
Oxygen Transmission Rate (23°C/0% RH)		cc/m²/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

Styroflex 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 Styroflex® 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.

Contact us:
Phone +49 2133 51 4007
infopoint.emea@styrolution.com
www.styrolution.com

DISCLAIMER

The above information is provided in good faith. Styrolution is not responsible for any processing or compounding which may occur to product finished articles, packaging materials or their components. Further, Styrolution MAKES NO WARRANTY OR REPRESENTATION OF ANY KIND, REGARDING THE INFORMATION GIVEN OR THE PRODUCTS DESCRIBED, AND EXPRESSLY DISCLAIMS ALL IMPLIED WARRANTIES, REPRESENTATIONS AND CONDITIONS, INCLUDING WITHOUT LIMITATION ALL WARRANTIES AND CONDITIONS OF QUALITY, MERCHANTABILITY AND SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Responsibility for use, storage, handling and disposal of the products described herein is that of the purchaser or end user.

Contact us:
Phone +49 2133 51 4007
infopoint.emea@styrolution.com
www.styrolution.com