

Styreflex 4G80

Styrene Butadiene Copolymer (SBC)

TECHNICAL
DATASHEET

DESCRIPTION

Styreflex® 4G80 is a styrene butadiene block copolymer (SBC) optimized for extrusion.

FEATURES

- Good kink resistance
- Good transparency
- Good solvent bonding
- Soft feel surface

APPLICATIONS

- Tubing for medical devices
- Grips for tools or sports equipment

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 220 °C/10 kg	ASTM D 1238	g/10 min	76
Melt Flow Rate, 200 °C/5 kg	ASTM D 1238	g/10 min	15
Mechanical Properties			
Tensile Modulus	ASTM D 638	psi x 10 ³	10
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	350
Tensile Strain at Break, 23 °C	ASTM D 638	%	> 500
Izod Notched Impact Strength, 23 °C (73 °F)	ASTM D 256	ft-lb/in	> 14
Hardness, Shore A	ASTM D 2240	-	80
Hardness, Shore D	ASTM D 2240	-	28
Thermal Properties			
Vicat Softening Temperature, B/1 (120 °C/h, 10N)	ASTM D 1525	°F	103
Optical Properties			
Haze	ASTM D 1003	%	28
Light Transmission at 550 nm	ASTM D 1003	%	77
Refractive Index, Sodium D Line	ASTM D 542	-	1.56
Other Properties			
Density (ASTM)	ASTM D 792	g/cm ³	0.98

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Property, Test Condition	Standard	Unit	Values
Water Absorption, Saturated at 23 °C	ASTM D 570	%	0.07
Processing			
Linear Mold Shrinkage	ASTM D 955	in/in	0.003 - 0.01
Melt Temperature Range	-	°F	338 - 464
Mold Temperature Range	-	°F	85 - 110

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.

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.