

## Styrolution Styroflex<sup>®</sup> 2G 66 SBC

Category : Polymer , Thermoplastic , Styrene-Butadiene , Styrene-Butadiene Copolymer, SBC

### Material Notes:

Description: Styroflex<sup>®</sup> 2G 66 is a styrene-butadiene block copolymer (SBC) with the properties of a thermoplastic elastomer (S-TPE). Styroflex<sup>®</sup> 2G 66 is the only S-TPE with a styrene content of at least 60 % styrene and a rubber fraction of at least 70 %. Characteristic properties of Styroflex<sup>®</sup> 2G 66 are therefore: high transparency, excellent thermostability, very high elongation at break and high resilience. Styroflex<sup>®</sup> 2G 66 is more polar than comparable SBS or SEBS grades and offers a good printability. Applications: Styroflex<sup>®</sup> 2G 66 is a very versatile material, suitable for a variety of applications: In multilayer (coextruded with PE-EVA), thin-gauge film for the supporting layer, Styroflex<sup>®</sup> 2G 66 is used e.g. for packaging fresh meat. Styroflex<sup>®</sup> 2G 66 is also used for the modification of styrenic polymers; e.g. blended with high impact polystyrene it improves the toughness and the stress cracking resistance (ESCR) significantly. Styroflex<sup>®</sup> 2G 66 is also suited for two-component injection molding, especially with polystyrene, to which it has excellent adhesion. Styroflex<sup>®</sup> 2G 66 and compounds based on Styroflex<sup>®</sup> may be used for conventional injection molding (eg. of toys) and the extrusion of profiles, flexible tubing and soft foams. Information provided by STYROLUTION, which is a joint venture between BASF and INEOS

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Styrolution-Styroflex-2G-66-SBC.php](http://www.lookpolymers.com/polymer_Styrolution-Styroflex-2G-66-SBC.php)

Physical Properties	Metric	English	Comments
Density	1.002 g/cc	0.03620 lb/in <sup>3</sup>	ISO 1183
Water Absorption	<= 0.070 %	<= 0.070 %	ISO 62
Moisture Absorption at Equilibrium	<= 0.070 %	<= 0.070 %	23 <sup>°</sup> C/50% RH; ISO 62
Melt Flow	3.006 g/10 min	3.006 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 190 <sup>°</sup> C	@Load 4.76 lb, Temperature 374 <sup>°</sup> F	
	13.026 g/10 min	13.026 g/10 min	ISO 1133
	@Load 5.00 kg, Temperature 200 <sup>°</sup> C	@Load 11.0 lb, Temperature 392 <sup>°</sup> F	
	14.028 g/10 min	14.028 g/10 min	ISO 1133
	@Load 2.16 kg, Temperature 230 <sup>°</sup> C	@Load 4.76 lb, Temperature 446 <sup>°</sup> F	

Mechanical Properties	Metric	English	Comments
Hardness, Shore A	84	84	ISO 868
Hardness, Shore D	34	34	ISO 868
Tensile Strength, Yield	4.00 MPa	580 psi	50 mm/min; ISO 527-1/-2
Elongation at Break	>= 300 %	>= 300 %	Nominal, 50mm/min; ISO 527-1/-2

Elongation at Yield Mechanical Properties	5.0 % Metric	5.0 % English	50 mm/min; ISO 527-1/-2 Comments
Tensile Modulus	0.120 GPa	17.4 ksi	ISO 527-1/-2
Flexural Strength	4.00 MPa	580 psi	ISO 178
Izod Impact, Notched	NB	NB	ASTM D256
Izod Impact, Notched (ISO)	2.00 kJ/m <sup>2</sup>	0.952 ft-lb/in <sup>2</sup>	ISO 180/A
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	NB	NB	ISO 180/A
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Charpy Impact Unnotched	<= NB	<= NB	ISO 179/1eU
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	<= NB	<= NB	ISO 179/1eU
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Charpy Impact, Notched	0.200 J/cm <sup>2</sup>	0.952 ft-lb/in <sup>2</sup>	ISO 179/1eA
	@Temperature -30.0 Â°C	@Temperature -22.0 Â°F	
	NB	NB	ISO 179/1eA
	@Temperature 23.0 Â°C	@Temperature 73.4 Â°F	
Dart Drop Test	>= 1000 g	>= 2.20 lb	Method B; ASTM D1709

Thermal Properties	Metric	English	Comments
Vicat Softening Point	35.0 Â°C	95.0 Â°F	VST/A/120; ISO 306
Flammability, UL94	HB	HB	IEC 60695-11-10
	@Thickness 1.60 mm	@Thickness 0.0630 in	
	HB	HB	IEC 60695-11-10
	@Thickness 3.20 mm	@Thickness 0.126 in	

Optical Properties	Metric	English	Comments
Haze	5.0 %	5.0 %	DIN 5036-3

Electrical Properties	Metric	English	Comments
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Electrical Properties	Metric	English	Comments
Surface Resistance	1.00e+15 ohm-cm	1.00e+15 ohm	IEC 60093
Dielectric Constant	2.5	2.5	IEC 60250
	@Frequency 1.00e+6 Hz	@Frequency 1.00e+6 Hz	
Dielectric Strength	2.5	2.5	IEC 60250
	@Frequency 100 Hz	@Frequency 100 Hz	
Dielectric Strength	120 kV/mm	3050 kV/in	K20/P50; IEC 60243-1

Processing Properties	Metric	English	Comments
Melt Temperature	170 - 190 Â°C	338 - 374 Â°F	Film extrusion
	170 - 240 Â°C	338 - 464 Â°F	Flat film extrusion
	190 - 220 Â°C	374 - 428 Â°F	Injection molding
Mold Temperature	30.0 - 50.0 Â°C	86.0 - 122 Â°F	Injection Molding

Descriptive Properties	Value	Comments
Color	Crystal Clear	
Commercial Status	Europe	
Gas Permeability	27.2 ml/m <sup>2</sup> XdXbar	0% RH, d=50 Âµm, DIN 53380
Primary Processing Technique	Injection Molding and Extrusion	
Tear Propagation Resistance	650 cN	d=50 Âµm, longitudinal
	800 cN	d=50 Âµm, transversal
Transparency	0.8	d=2mm, DIN 5036-3

## Contact Songhan Plastic Technology Co.,Ltd.

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