

Styreflex® 2G66 is a styrene-butadiene block copolymer (SBC) with the properties of a thermoplastic elastomer (S-TPE). Styreflex® 2G66 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 Styreflex® 2G66 are therefore: high transparency, excellent thermostability, very high elongation at break and high resilience. Styreflex® 2G66 is more polar than comparable SBS or SEBS grades and offers a good printability.

Applications: Styreflex® 2G66 is a very versatile material, suitable for a variety of applications: In multilayer (coextruded with PE-EVA), thin-gauge film for the supporting layer, Styreflex® 2G66 is used e.g. for packaging fresh meat. Styreflex® 2G66 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. Styreflex® 2G66 is also suited for two-component injection molding, especially with polystyrene, to which it has excellent adhesion. Styreflex® 2G66 and compounds based on Styreflex® may be used for conventional injection molding (eg. of toys) and the extrusion of profiles, flexible tubing and soft foams.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	14	cm ³ /10min	ISO 1133
Temperature	200	°C	-
Load	5	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	120	MPa	ISO 527
Yield stress	4	MPa	ISO 527
Yield strain	5	%	ISO 527
Nominal strain at break	>50	%	ISO 527
Charpy impact strength (+23°C)	no break	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	no break	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	no break	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at 1.5 mm nom. thickn.	HB	class	UL 94
Thickness tested	1.6	mm	-
Burning behav. at thickness h	HB	class	UL 94
Thickness tested	3.2	mm	-

Electrical Properties	Value	Unit	Test Standard
ISO Data			
Relative permittivity, 100Hz	2.5	-	IEC 62631-2-1
Relative permittivity, 1MHz	2.5	-	IEC 62631-2-1
Volume resistivity	>1E13	Ohm*m	IEC 62631-3-1
Surface resistivity	1E15	Ohm	IEC 62631-3-2

Other Properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.07	%	Sim. to ISO 62
Humidity absorption	0.07	%	Sim. to ISO 62
Density	1000	kg/m ³	ISO 1183

Film Properties	Value	Unit	Test Standard
ISO Data			
Elmendorf Tear resistance, parallel	650	N	ISO 6383-2
Elmendorf Tear resistance, normal	800	N	ISO 6383-2
Haze	1.4	-	ISO 14782
WVTR, 23°C/85%r.h.	0.27	g/(m ² *d)	ISO 15106-1/-2
Oxygen transmission rate, 23°C/0%r.h.	27.2	cm ³ /(m ² *d*bar)	ISO 15105-1/-2
Thickness of specimen	0.05	mm	-

Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Transfer Molding

Special Characteristics

Sterilizable

Certifications

Medical, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved, Drug Master File, Long term supply assurance, Food approval, Food approval 10/2011, Food Contact (FDA)

Applications

Medical

Injection Molding

PROCESSING

injection molding, Melt temperature, range: 190 - 220 °C

injection molding, Mold temperature, range: 30 - 50 °C

Film extrusion

PROCESSING

Extrusion, Blown film, Melt temperature: 170 - 190 °C

Extrusion, Flat film, Melt temperature: 170 - 240 °C

Disclaimer

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

Any information given on the chemical and physical characteristics of our products, including, without limitation, technical advice on applications, whether verbally, in writing or by testing the product, is given to the best of our knowledge and in good faith and does not exempt the buyer from carrying out their own investigations and tests in order to ascertain the product's specific suitability for the purpose intended. The buyer is solely responsible for confirming the suitability of the product for a particular application, its utilization and processing and must observe any applicable laws and government regulations. **NO EXPRESS OR IMPLIED RECOMMENDATION OR WARRANTY IS GIVEN WITH REGARD TO THE SUITABILITY OF THE PRODUCT FOR A PARTICULAR APPLICATION, SUCH AS, BUT NOT LIMITED TO, SAFETY-CRITICAL COMPONENTS OR SYSTEMS.**

Healthcare uses: the supply of any product by ALBIS for any medical, pharmaceutical or diagnostic application is conditional to an assessment by ALBIS in terms of compliance with ALBIS' internal risk management policy – even for products which are in general designated for use in Healthcare applications.

Important: irrespective of product type or designation, ALBIS does not recommend or support the use of any products it supplies which fall into the following medical, pharmaceutical or diagnostic application categories:

- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

At all times, our standard terms and conditions of sale apply.