



SEBS

Styrene Ethylene Butadiene Styrene

Description
 SEBS-based compounds with excellent elastomeric properties and a rubberlike appearance, designed for injection moulding and co-moulding onto polyolefines. They have excellent U.V. stability and are also suitable for extrusion applications. There are many variants from pure transparent high elasticity grades to filled gasket grades.

Applications
 Car interiors, home furnishings, domestic electrical appliances, flippers & other diving equipment, ski-boots, skating shoes, gaskets, parts for tools, handles, door handles etc. Food grades and medical: tops for containers and bottles. Toys.

Types of grade available
 Shore A 10 - 60
 Translucent grades with excellent electrometric properties.
 Opaque grades with excellent all-round properties
 Co-moulding high flow grades
 Transparent grades
 High temperature grades
 Hard grades with high modulus
 Over moulding Polar resins
 Over moulding Polyamides

General Processing

Drying Time	N/A
Drying Temperature	N/A
Type of Drier	N/A
Purging	Using PP/LDPE
Moisture Absorption	NO
Other Considerations	Easy to process

Processing Injection Moulding

Barrel Settings	205°C - 245°C for larger parts 260°C maybe required.
Injection speed	Medium
Injection Pressure	350 to 1500 kg/cm ²
Back Pressure	Medium - High
Screw Speed	25 to 75 rpm
Tool Temperature	35-65 °C
Melt Temperature	175-200C

Processing Stability	Excellent			
Gate Considerations	Due to the flexibility of SEBS small gates can be used such as sub gates and pin gates			
Sprue & Runner Considerations	The shorter the land length the better and use full round runners.			
Processing Extrusion				
Barrel Settings	160 - 210°C			
Screw Speed	50- 100 rpm			
Screen Packs	Breaker plate/screens for higher back pressure and therefore smoother profile surface			
Haul-off / Cooling	Water bath chilled 10c			
Calibration	Suitable for use with a vacuum calibrator or sizing plates.			
Physical Properties				
Density	0.90	1.18	0.9	1.19
Shore A	95	90	25	25
Abrasion resistance – mm ³	95	250	200	300
Tear strength – KN/m	60	43	15	13
Elongation at Break	600%	670%	800%	680%
Compression set 72 hrs @23c	40%	35%	15%	21%
Tensile Strength – MPa	11.4	8.4	5.1	12.1
Shrinkage	0.4% - 2.0% dependent upon thickness & hardness of the end product			
Flammability				
Flammability Rating	HB			
Weatherability				
Suitability for outdoor use	YES			
Fillers & Additives				
	Plasticiser into eb phase, Reinforcing polymers, Fillers & and other modifying agents,			
Chemical Resistance				
Resistant to	Water, Aqueous Solutions, Strong Acids (except Nitric) Strong Bases, Milk, Beer & Wine			
Not resistant to	Oils, Fats, Petrol, Alcohols, Glycols & Freon			
Food Contact Status				
	Grades available			
Colouring				
	Easily coloured using universal masterbatches			

WEEE & ROHS Compliance	Yes
Bonding	Can be bonded using a urethane based adhesive
Welding	Can be welded by hot plate welding or high frequency welding

This information has been provided as a general guide and we suggest that you carry out your own specific tests to be sure that this material is suitable for your application.