



## SBS Styrene Butadiene Styrene

**Description**  
Excellent flexibility and good electrometric properties when cold, abrasion resistant, broad processing range. Basic Thermo Plastic Rubber used for static applications

**Applications**  
Footwear, toys and household objects not suitable for out door applications.

**Types of grade available**  
Extrusion  
Moulding  
Blown Cellular

<b>General Processing</b>	
Drying Time	N/A
Drying Temperature	N/A
Type of Drier	N/A
Purging	DYNAPURGE K
Moisture Absorption	
Other Considerations	

<b>Processing Injection Moulding</b>	
Barrel Settings	205°C - 245°C for larger parts 260°C maybe required.
Injection speed	Medium
Injection Pressure	350 to 1500 kg/cm <sup>2</sup>
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 sorter the land length the better and use full round runners.

<b>Processing Extrusion</b>	
Barrel Settings	160 -190c
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.			
<b>Physical Properties</b>				
Density	.98	1.00	.92	.99
Shore A	60	85	30	75
Abrasion resistance – mm <sup>3</sup>	180	70	N/A	180
Tear strength – KN/m	25	12	14	40
Elongation at Break	500	580	850	450
Tensile Strength – MPa	4.8	6.0	3.8	6.4
Shrinkage	0.4% - 2.0% dependent upon thickness & hardness of the end product			
<b>Flammability</b>				
Flammability Rating	HB			
<b>Weatherability</b>				
Suitability for outdoor use	No			
<b>Fillers &amp; Additives</b>				
	Blowing agents and fillers			
<b>Chemical Resistance</b>				
Resistant to	Water, Aqueous Solutions, Strong Acids (except Nitric) Strong Bases, Milk, Beer & Wine			
Not resistant to	Oils, Fats, Petrol, Alcohols, Glycols & Freon			
<b>Food Contact Status</b>				
	Grades available			
<b>Colouring</b>				
	Easily coloured using universal masterbatches			
<b>REACH &amp; ROHS Compliance</b>				
	Yes			
<b>Bonding</b>				
	Can be bonded using a urethane based adhesive			
<b>Welding</b>				
	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.*