



Lion Elastomers LLC

1615 Main Street • P.O. Box 667 • Port Neches, TX 77651
800 / 535-9960 • www.lionelastomers.com

SBR 1500 Elastomer

Product Data

SBR 1500 is a general-purpose cold SBR with higher physicals and abrasion resistance than hot polymerized equivalents. It processes readily, provides the highest tensile strength available in cold SBR polymers, and is suitable for products which do not require resistance to staining and discoloration.

Unique Features

- ▶ Cold polymerized styrene-butadiene elastomer
- ▶ Highest tensile strength of all cold SBR products

Applications

- ▶ Conveyor and power belting
- ▶ General mechanical rubber goods
- ▶ Tread stocks for heavy-duty service

Typical Properties

<u>Property</u>	<u>Test Method</u>	<u>Typical</u>
Mooney viscosity, MML 1+4 (100°C)	ASTM D1646	46 - 56
Bound Styrene, Weight %	ASTM D5775	22.5 – 24.5
Organic acid, Weight %	ASTM D5774	4.9 – 7.1
Soap, Weight %	ASTM D5774	0.5 Max.
Ash, Weight %	ASTM D5667	0.75 Max.
Volatile matter, Weight %	ASTM D5668	0.75 Max.
Emulsifier	—	Rosin acid
Coagulant	—	Acid
Stabilizer	—	Staining
Specific gravity, g/cc (bale).....	—	0.94
Physical form*, lbs/bale	—	80.0 (36 kg)

SBR 1500 elastomer is a general-purpose cold SBR recommended for belting, tread stocks, and mechanical rubber goods.

Company Test Methods

* This product is available in 80 lb rectangular bales individually wrapped in 1.5 mil, low melting point film and shipped in cardboard containers or returnable aluminum OTD.

Note: Antioxidant is added to this polymer to provide protection during manufacture and storage. The end user's process may require additional antioxidant protection.

SBR 1500 Elastomer

Rheometric Properties (MDR 2000 rheometer)

Test Method – ASTM D5289**

<u>Property</u>	<u>Result</u>
M _L lbf-in	1.0 – 3.0
dN-m	1.1 – 3.4
M _H lbf-in	16.5 – 20.5
dN-m	18.6 – 23.2
t _s 1, minutes	3.2 – 5.2
t' 50, minutes	7.4 – 11.4
t' 90, minutes	13.5 – 18.5

<u>Test Formula (ASTM D3185 1A)</u>	<u>Quantity, Parts by Mass</u>	<u>Material</u>
SBR 1500 elastomer	100.00	
Zinc oxide	3.00	IRM 91A
Sulfur	1.75	IRM 031
Stearic acid	1.00	IRM 021
Oil furnace black	50.00	IRB #8
TBBS	1.00	IRM 003

** 160°C, 1°Arc

SBR 1500 is a general-purpose cold SBR with higher physicals and abrasion resistance than hot polymerized equivalents. It processes readily, provides the highest tensile strength available in cold SBR polymers, and is suitable for products which do not require resistance to staining and discoloration. It is commonly used as a general-purpose cold SBR for belting, tread stocks, and mechanical rubber goods applications.

Notice: All information supplied by or on behalf of Lion Elastomers LLC in relation to its products, whether in the nature of data, recommendations or otherwise, is supported by research and believed reliable, but Lion Elastomers LLC assumes no liability whatsoever in respect of application, processing or use made of the aforementioned information or products, or any consequence thereof. The buyer undertakes all liability in respect of the application, processing or use made of the aforementioned information or product, whose quality and other properties he shall verify, or any consequence thereof. No liability whatsoever shall attach to Lion Elastomers LLC for any infringement of the rights owned or controlled by a third party in intellectual, industrial or other property by reason of the application, processing or use of the aforementioned information or products by the buyer.