

Lion Elastomers LLC

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SBR 1769 Elastomer

Product Data

SBR 1769 is an environmentally friendly version of SBR 1721 with the highest bound styrene content, and a naphthenic oil extender oil. It was developed for tire applications.

Unique Features

- Cold polymerized styrene-butadiene elastomer
- ► Highest bound styrene and naphthenic oil extender

Applications

- Passenger & heavy-service treads
- Retread rubbers and bicycle tires

Typical Properties

Property	Test Method*	<u>Typical</u>
Polymer, parts	_	100
Oil, parts – Naphthenic	_	37.5
Mooney viscosity, MML 1+4 (100°C)	_	45 - 55
Bound Styrene, Weight %	_	39.0 – 41.0
Organic acid, Weight %	_	4.1 – 5.7
Soap, Weight %	_	0.5 Max.
Ash, Weight %	_	0.70 Max.
Volatile matter, Weight %	ZS 1008K	0.75 Max.
Emulsifier	_	Mixed acid
Coagulant	_	Acid
Stabilizer	_	Staining
Specific gravity, g/cc (bale)	ASTM D-792	0.95
Physical form**, lbs/bale	_	80.0 (36 kg)

SBR 1769 is an environmentally friendly version of SBR 1721 replacing aromatic extender oil with a naphthenic oil. It is recommended for applications such as passenger and heavy-service treads, retread rubbers, and bicycle tires.

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

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^{*} 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.

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Rheometric Properties (MDR 2000 rheometer)

TBBS

<u>Property</u>	<u>Result</u>	
M _L lbf-in	1.2 - 3.2	
dN-m	1.4 - 3.6	
M _H lbf-in	10.6 – 14.6	
dN-m	12.0 – 16.5	
t _s 1, minutes	3.6 - 5.6	
t' 50, minutes	7.2 - 11.2	
t' 90, minutes	13.8 – 18.8	
MRG Test Recipe (ASTM 3185 2B)	<u>Weight</u>	Reference
		<u>Material</u>
SBR 1769 oil-extended elastomer	137.5	
Zinc oxide	3.0	IRM 91A
Sulphur	1.75	NIST SRM 371
Stearic acid	1.0	NIST SRM 372
Oil furnace black	68.75	IRB #8

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