Lion Elastomers LLC

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SBR 1888 Elastomer Product Data

SBR 1888 is a carbon black master batch (CBMB) based on SBR 1712 latex and 82.5 parts N-339 carbon black similar to SBR 1848 but extended with low PCA RAE extender oil. It provides tensile properties greater than equivalent CBMB produced with HAF or HAF-H carbon black, and superior abrasion resistance.

Unique Features

- Cold polymerized styrene-butadiene elastomer
- Carbon black master batch
- RAE extender oil

Applications

- Tire treading
- Mechanical rubber goods

Typical Properties

Property	Test Method*	Typical
Polymer, parts ……..	—	100
Carbon black, N-339 ……..	—	82.5
Oil, parts – RAE ……..	—	62.5
Mooney viscosity, UMS 4+4 (100˚C) …….	—	46 - 66
Bound Styrene, Weight % ……..	—	22.5 – 24.5
Organic acid, Weight % ……..	—	1.8 – 3.8
Soap, Weight % ……..	—	0.5 Max.
Ash, Weight % ……..	—	0.50 Max.
Volatile matter, Weight %	ZS 1008K	0.75 Max.
Carbon black, Weight % ……..	—	32.2 – 35.2
Emulsifier ……..	—	Mixed acid
Coagulant ……..	—	Acid
Stabilizer ……..	—	Staining
Specific gravity, g/cc (bale)…..……..	ASTM D-792	1.14
Physical form**, lbs/bale ……..	—	90.0 (41 kg)

SBR 1888 is a carbon black master batch based with N-339 carbon black and with low PCA RAE extender oil. It is recommended in a variety of rubber goods such as passenger tread compounds, retreads and mechanical rubber goods.

* Company Test Methods
** This product is available in 90 lb rectangular bales individually wrapped in 1.5 mil, low melting point film and shipped stretch wrapped on a wooden pallet. Bales are dipped.

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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Rheometric Properties (MDR 2000 rheometer)

Property	Result
M_L lbf-in	
dN-m	
M_H lbf-in	
dN-m	
t_s 1, minutes	
t' 50, minutes	
t' 90, minutes	

MRG Test Recipe (ASTM 3186)	Weight	Reference Material
SBR 1888 oil-extended, CBMB elastomer	245	
Zinc oxide	3.0	IRM 91A
Sulphur	1.75	NIST SRM 371
Stearic acid	1.5	NIST SRM 372
TBBS	1.25	NIST RM 8384

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