

TECHNICAL DATA SHEET



POLYBUTADIENE RUBBER

(Neodymium catalyst based Polybutadiene Rubber)

Material:

Cisamer 700 is a solution polymerized High Cis – 1,4 Polybutadiene rubber produced using complex stereospecific organometallic catalyst based on JSR technology. It provides better performance properties including low rolling resistance, better abrasion resistance versus other conventional PBR grades.

S.No.	Test	Unit	Typical Values	Test Method
Typical Elastomer Properties:				
1.1	Raw Mooney Viscosity	ML(1+4)@ 100 °C	43	ASTM D 1646
1.2	Volatile Matter	Wt%	0.3	ASTM D 5668
1.3	Ash	Wt%	0.07	ASTM D 5667
1.4	Cis – content	%	97	FTIR Method
ASTM D 3189* Compound Properties (For Reference)				
2	Compound Mooney Viscosity	ML(1+4)@100 °C	70	ASTM D 1646
Rheological Properties (MDR - 160 °C; ± 0.5 degree arc; 100 cpm)				
3.1	Minimum Torque ML	dN.m	3.0	ASTM D 5289
3.2	Maximum Torque MH	dN.m	19.5	ASTM D 5289
3.3	Ts 1	minutes	3.5	ASTM D 5289
3.4	Tc 50	minutes	8.5	ASTM D 5289
3.5	Tc 90	minutes	12.0	ASTM D 5289
Physical Properties (35 min. @ 145 °C)				
4.1	Tensile Strength	MPa	16.8	ASTM D 412
4.2	Modulus@300%	MPa	11.5	ASTM D 412
4.3	Elongation at Break	%	435	ASTM D 412

*ASTM D 3189 :

BR - 100; IRB#8 - 60; ZnO - 3; St. Acid - 2.0; Napthenic Oil - 15; S - 1.5; TBBS - 0.9

PACKAGING :

Cisamer 700 is supplied in 35 kg bales wrapped with polyethylene film for further packaging.

Shelf Life / Storage Condition:

Material should be covered and stored in a cool, dry and well ventilated place at a temperature below 40°C. Proper care needs to be taken so that the material does not get exposed to direct sunlight, ultraviolet light or rain water. For prolonged storage, it is recommended to cover the material with black polythene film to protect it from direct sunlight. Under proper storage conditions as described above, product shelf life of Relflex™ Cisamer PBR 700 grade is 12 months from the date of manufacturing.