

# TECHNICAL DATA SHEET



## Nickel Catalyst based Polybutadiene Rubber

### Material:

Cisamer 01 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 and better abrasion resistance.

### ELASTOMER PROPERTIES

S. No.	Test	Unit	Typical Value	Test Method
1.1	Raw Mooney Viscosity	ML(1+4)@100 ° C	45	ASTM D 1646
1.2	Volatile Matter	Wt %	0.5	ASTM D 5668
1.3	Ash	Wt%	0.08	ASTM D 5667
1.4	Cis - content	%	96.5	FTIR

### ASTM D 3189\* COMPOUND PROPERTIES (FOR REFERENCE)

S. No.	Test	Unit	Typical Value	Test Method
2	Compound Mooney Viscosity	ML(1+4)@100 ° C	60	ASTM D 1646

### 3 Rheological Properties (ODR -160 ° C; ± 1 degree arc; 100 cpm)

3.1	Minimum Torque ML	lb.in	10.2	ASTM D 2084
3.2	Maximum Torque MH	lb.in	36	ASTM D 2084
3.3	Ts1	minutes	3.5	ASTM D 2084
3.4	Tc50	minutes	8.0	ASTM D 2084
3.5	Tc90	minutes	11.0	ASTM D 2084

### 4 Physical Properties (35 min. @ 145 ° C)

4.1	Tensile Strength	MPa	16.0	ASTM D 412
4.2	Modulus@300%	MPa	9.5	ASTM D 412
4.3	Elongation at Break	%	465	ASTM D 412

BR - 100; IRB #9 - 60; ZnO - 3; St. Acid - 2.0; Napthenic Oil - 15; S - 1.5; TBBS - 0.9

### 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 01 grade is 12 months from the date of manufacturing.



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