

## TECHNICAL DATA SHEET



### POLYBUTADIENE RUBBER (NICKLE CATALYST BASED)

**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. The 35Kg bales wrapped in polyethylene film for further packaging.

No.	Parameter	Unit	Typical Value	Test Method
<b>1.0 ELASTOMER PROPERTIES</b>				
1.1	Un-massed Mooney Viscosity – ML(1+4) @ 100°C	MU	45.0	ASTM D1646
1.2	Volatile Matter	wt%	0.4	ASTM D5668
1.3	Ash Content	wt%	0.08	ASTM D5667
1.4	Cis-content	%	96.5	FTIR
<b>2.0 COMPOUND PROPERTIES – ASTM D3189 (For reference)</b>				
2.1	Compound Mooney Viscosity – ML(1+4) @ 100°C	MU	60.0	ASTM D1646
<b>3.0 RHEOLOGICAL PROPERTIES: ODR (160° C / ± 1° arc / 100 cpm)</b>				
3.1	Minimum Torque - M <sub>L</sub>	lb-in	10.2	ASTM D2084
3.2	Maximum Torque - M <sub>H</sub>	lb-in	36.0	ASTM D2084
3.3	tS1	min.	3.5	ASTM D2084
3.4	t50	min.	8.0	ASTM D2084
3.5	t90	min.	11.0	ASTM D2084
<b>4.0 PHYSICAL PROPERTIES (Curing - 35 min. @145° C)</b>				
4.1	Tensile Strength	MPa	16.0	ASTM D412
4.2	Modulus @ 300%	MPa	9.5	ASTM D412
4.3	Elongation at Break	%	465	ASTM D412

BR - 100; IRB #9 - 60; ZnO - 3.0; Steric Acid – 2.0; Napthenic Oil – 15.0; Sulfur – 1.5; TBBS Acc. – 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, product shelf life of Relflex™ Cisamer PBR01 grade is 12 months from the date of manufacturing.