

TECHNICAL DATA SHEET



Nickel Catalyst based Polybutadiene Rubber

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	Maximun 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

*ASTM D 3189 Modified Mixing Method B:

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