

Technical Data Sheet

Product: POLYBUTADIENE RUBBER (NICKLE CATALYST BASED)

Description 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.

Application Relflex™ CISAMER PBR 01 is used in tyre treads, carcass & sidewalls, under-treads, conveyor belts, sportswear, golf balls, automotive components, shoe heels & soles, flexible rollers, and mechanical goods.

Specifications

Parameter	Value	Test Method
Elastomer properties		
Un-massed Mooney Viscosity - ML (1+4) @100°C, MU	45.0	ASTM D 1646
Volatile Matter, wt%	0.4	ASTM D 5668
Ash content, wt%	0.08	ASTM D 5667
Cis-content, %	96.5	FTIR
Compound properties- ASTM D3189 (For reference)		
Compound Mooney Viscosity - ML(1+4) @100°C, MU	60.0	ASTM D 1646
Rheological properties: ODR (160°C / ±1°arc / 100 cpm)		
Minimum Torque - M _L , lb-in	10.2	ASTM D 2084
Maximum Torque – M _H , lb-in	36.0	ASTM D 2084
tS1, min	3.5	ASTM D 2084
t50, min	8.0	ASTM D 2084
T90, min	11.0	ASTM D 2084
Physical properties (Curing – 35 min. @145°C)		
Tensile Strength, MPa	16.0	ASTM D 412
Modulus @ 300%, MPa	9.5	ASTM D 412
Elongation at Break, %	465	ASTM D 412

Packaging The 35 kg bales are wrapped in polyethylene film for further packaging in individual paper bags or MB5-size metal boxes, 30 bales in each box.

Storage and transportation 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 rainwater. For prolonged storage, it is recommended to cover the material with black polythene film to protect it from direct sunlight.

REACH registration no.: 01-2119471988-16-0123; **CAS no.:** 106-99-0; **EC no.:** 203-450-8 (1,3 Butadiene)