

# Technical Data Sheet

## Product: High Cis Polybutadiene Rubber (PBR-1220)

### Description

High-Cis Polybutadiene rubber is produced by a technology of solution polymerization based on Ziegler-Natta (Cobalt) catalyst. It has more than 96% of 1,4 Cis content and very low glass transition temperature. Cured PBR-1220 has excellent properties such as abrasion resistance, tear strength, resilience, weathering resistance and low rolling resistance (good fuel economy) due to its low glass transition temperature (Tg typically <-90°C).

### Application

PBR-1220 is appropriate for rubber compounds used in the production of tire, floor coverings, footwear, children toys, rubber hose, belts and golf balls.

### Specifications

Property/Unit	Specification	Test Method
Mooney Viscosity (ML 1+4 @ 100 °C), MU	41-49	ASTM D1646
Cis Content, wt%	min 96	Internal method
Volatile Material, wt%	max 0,75	ASTM D1416
Ash Content, wt%	max 0,3	ASTM D1416
Compound Mooney viscosity, mu	max 77	ASTM D1646
Tensile Strength (35 min), Kgf/cm <sup>3</sup>	min 150	ASTM D412
Elongation at Break (35 min), %	min 440	ASTM D412
300% Modulus at 145°C		
25 min, Kgf/cm <sup>3</sup>	68-108	ASTM D412
35 min, Kgf/cm <sup>3</sup>	74-114	
50 min, Kgf/cm <sup>3</sup>	74-114	

### Packaging

Produced in the form of bales 35 (±0.5) kg each, individually packed in PE film (thickness: 0.046mm~0.054mm, melting point≤110°C). Bales packed in a separate crate (36 bales, total 1260 (±18) kg).

### Storage and transportation

Rubber is stored indoors at a temperature not higher than +30 °C. During storage, the rubber must be protected from contamination, direct sunlight, and precipitation.