

Technical Data Sheet

PBR 1220

High-Cis Poly butadiene Rubber (PBR)

High-Cis Polybutadiene rubber “1220” 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. 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.

Applications:

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

| Typical Properties ¹ | Units | Value | 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 |

¹To each shipping lot/delivery a quality certificate including data on properties of the product determined during release control is issued, scope of the testing which is covered by the quality certificate is each time agreed upon in the sales contract.

| Typical Properties ² | Units | Value | Test Method |
|---------------------------------|---------------------|---------|-------------|
| Compound Mooney viscosity | MU | Max 77 | ASTM D1646 |
| Tensile Strength (35 min) | Kgf/cm ³ | Min 150 | ASTM D412 |
| Elongation at Break(35 min) | % | Min 440 | ASTM D412 |
| 300% Modulus at 145°C | | | |
| 25 min | Kgf/cm3 | 68-108 | ASTM D412 |
| 35 min | Kgf/cm3 | 74-114 | ASTM D412 |
| 50 min | Kgf/cm3 | 74-114 | ASTM D412 |

²Compounding formula according ASTM D-3189