

NdBR-40, NdBR-60

Ultra High cis Polybutadiene Rubber (NdBR)

Product Introduction

- Kumho NdBR is ultra high cis polybutadiene rubber, produced by 1, 3-butadiene polymerization with a novel neodymium catalyst.
- They have more than 97% of 1,4-cis content.
- Very low glass transition temperature around -100 °C

Product Properties

| Property | Typical value | | Test Method |
|-----------------------------|---------------|---------|--------------|
| | NdBR-40 | NdBR-60 | Test Method |
| ML1+4@100℃ | 43 | 63 | ASTM D 1646 |
| cis content (%) | > 97 | > 97 | FT-IR METHOD |
| Volatile matter content (%) | Max 0.5 | Max 0.5 | ASTM D 5668 |
| Ash content (%) | Max 0.5 | Max 0.5 | ASTM D 5667 |
| Compound ML1+4@100 ℃ | 65 | 93 | ASTM D 1646 |
| Tensile strength (kg/cm2) | 220 | 230 | ASTM D 412 |
| Elongation (%) | 520 | 510 | ASTM D 412 |
| 300% modulus (kg/cm2) | 100 | 110 | ASTM D 412 |

^{*} Test method: ASTM D 3189 method B

Carbon black: IRB#7. Petroleum oil: Aromatic

Press cured for 35min at 145 °C

Characteristics and Applications

- Kumho NdBR provides excellent abrasion resistance, low heat build-up and high resilience, which are very much demanded property for tire as well as golf ball application.
- Typical applications are tires, golf balls, footwears, belts, rubber hoses.

Manufacturer location

- Yeosu plant in Korea

Product safety

- Relevant safety data and references can be found in the safety data sheet.

Shelf life/Conditions

- 2 years from the production date at temperatures not exceeding 35 °C, keeping away from direct sunlight, humidity

Packaging

- Bale weight : 35kg (Wrapped by polyethylene film)

- Box weight : 1,050kg (30 bales)