

KBR-01, KBR-01L

High cis Butadiene Rubber (HBR)

Product Introduction

- Kumho KBR-01 and 01L are solution high-cis polybutadiene rubber (HBR) produced with Ziegler-Natta catalyst based.
- They have more than 95% of 1,4-cis content.
- Very low glass transition temperature around -100 °C

Product Properties

| Property | Typical value | | Test Method |
|--|---------------|---------|--------------|
| | KBR-01 | KBR-01L | |
| ML1+4@100 °C | 45 | 30 | ASTM D 1646 |
| cis content (%) | > 96 | > 95 | FT-IR METHOD |
| Volatile matter content (%) | Max 0.5 | Max 0.5 | ASTM D 5668 |
| Ash content (%) | Max 0.2 | Max 0.2 | ASTM D 5667 |
| Compound ML1+4@100 °C | 55 | 40 | ASTM D 1646 |
| Tensile strength (kg/cm ²) | 198 | 160 | ASTM D 412 |
| Elongation (%) | 540 | 550 | ASTM D 412 |
| 300% modulus (kg/cm ²) | 91 | 80 | ASTM D 412 |
| Specific gravity (g/cm ³) | 0.91 | 0.91 | ASTM D 297 |

* Test method : ASTM D 3189 method B

Carbon black : IRB#7, Petroleum oil : Aromatic

Press cured for 35min at 145 °C

Characteristics and Applications

- Excellent abrasion resistance, resiliency, aging resistance, and weather resistance make them the most widely used synthetic rubber along with SBR.
- Typical applications are tires, footwear, golf balls, belts, rubber hoses, and other mechanical rubber products.

Manufacturer location

- Yeosu plant in Korea

Product safety

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

Shelf life/Conditions

- 1 year 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)

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