BR-1243 Nd F

Polybutadiene rubber

Synthetic cis-butadiene functionalized rubber BR-1243 Nd F is the polymerization product of butadiene in solution in the presence of neodymium catalyst; 1,4-cis — at least 97%; polydispersity — not more 2.6. The polymer is stabilized by non-staining antioxidant and contains no nitrosamines or substances that may be a source of nitrosamines.

**Appearance:** bale of white to beige color; weight of a bale — (30 ± 0.6) kg

**Package:** PE wrapping film (Vicat softening point <95 °C); metal container 1.26 MT or plastic container 0.45 MT

**Shelf life:** 1 (one) year since the date of manufacture

**Storage conditions:** at the temperature not higher than 30 °C, in place protected from direct sunlight and atmospheric precipitation

<table>
<thead>
<tr>
<th>Parameters</th>
<th>BR-1243 Nd F grade A</th>
<th>BR-1243 Nd F grade B</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mooney viscosity UML\textsubscript{1,4} (100 °C), UM</td>
<td>44 ± 5</td>
<td>47 ± 5</td>
<td>ASTM D 1646</td>
</tr>
<tr>
<td>Volatile matter, % wt</td>
<td>≤0.8</td>
<td>≤0.75</td>
<td>ASTM D 5668</td>
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<tr>
<td>Ash, % wt</td>
<td>≤0.7</td>
<td>≤0.7</td>
<td>ASTM D 5667</td>
</tr>
</tbody>
</table>

**Stress-strain properties in standard recipe on ASTM D 3189, 145 °C × 35 min.**

- **Tensile stress at 300 % elongation, MPa**
  - ≥9.0

- **Tensile strength, MPa**
  - ≥16.8

- **Ultimate elongation, %**
  - ≥360

**Curing characteristics of rubber compound:** Rheometer MDR 2000, measurement conditions: 160 °C, deformation of 0.5", MH at 30 min.

- **Minimum torque (ML), dNm**
  - 2.4–3.8

- **Maximum torque (MH), dNm**
  - 16.4–22.0

- **Scorch time (ts'1), min.**
  - 2.3–4.5

- **Time to 50 % of full cure (t’50), min.**
  - 5.5–8.5

- **Time to 90 % of full cure (t’90), min.**
  - 9.0–13.0

**Technical support service:** techservice@sibur.ru

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