BR-1243 Nd HV
Polybutadiene rubber

Synthetic cis-butadiene rubber BR-1243 Nd is a product of polymerization of butadiene in the presence of neodymium catalyst; 1,4-cis — at least 97%. 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 — \((30 \pm 1) \text{ kg}\)

**Package:** PE wrapping film (Vicat softening point \(<95 \text{ °C}\)), metal containers 1.26 MT or plastic containers 0.54 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 HV</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mooney viscosity UML (_{1+4}) (100 °C), UM</td>
<td>58–68</td>
<td>ASTM D 1646</td>
</tr>
<tr>
<td>Volatile matter, % wt</td>
<td>&lt;0.8</td>
<td>ASTM D 5668</td>
</tr>
<tr>
<td>Ash, % wt</td>
<td>&lt;0.7</td>
<td>ASTM D 5667</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tensile stress at 300% elongation, MPa</td>
<td>(\geq 11.0)</td>
</tr>
<tr>
<td>Tensile strength, MPa</td>
<td>(\geq 16.8)</td>
</tr>
<tr>
<td>Ultimate elongation, %</td>
<td>(\geq 360)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum torque (ML), dNm</td>
<td>2.4–3.8</td>
</tr>
<tr>
<td>Maximum torque (MH), dNm</td>
<td>16.4–22.0</td>
</tr>
<tr>
<td>Scorch time (ts'1), min.</td>
<td>2.3–4.5</td>
</tr>
<tr>
<td>Time to 50% of full cure (t'25), min.</td>
<td>5.5–8.5</td>
</tr>
<tr>
<td>Time to 90% of full cure (t'90), min.</td>
<td>9.0–13.0</td>
</tr>
</tbody>
</table>

Technical support service: techservice@sibur.ru

Issue: 14-November-2019