Natural Rubber

**Description:** Natural Rubber is the product of the sap of the Hevea Tree.

**Characteristics:** Natural Rubber features high tensile strength; superior abrasion resistance and tear resistance and outstanding resilience properties. Natural Rubber features good resistance to organic acids and alcohols, with moderate resistance to aldehydes.

**Typical Applications:** Natural Rubber is mainly used for dampeners due to its ability to absorb vibration. It is pre-dominantly used for tires. They are commonly used in oil savers, water savers and pipe wiper applications.

**Limitations:** Due to its poor compression set performance at elevated temperatures and lack of resistance to petroleum fluids, Natural Rubber is not widely used in the sealing industry. The medical industry has moved away from using Natural Rubber due to allergic reactions reported after prolonged contact.

<table>
<thead>
<tr>
<th>ASTM D1418 Abbreviation</th>
<th>NR</th>
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<tbody>
<tr>
<td>ASTM D2000 Classification</td>
<td>AA</td>
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<tr>
<td>Polymer Nomenclature</td>
<td>Polyisoprene</td>
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</tbody>
</table>

**Physical Properties**

- **Durometer Hardness Range** 35 – 90 (Shore A)
- **Tensile Strength (psi)** 500 – 3500
- **Elongation @ Break (%)** 300% – 900%

**Thermal Properties**

- **Low Temperature Range (°F)** -50°F – -20°F
- **High Temperature Range (°F)** 180°F – 220°F