Natural Rubber (Pure Gum)

ASTM D1418 & ISO 1629 Designation: NR
ASTM D2000, SAE J200 Type/Class: AA
Mil-R-3065 (Mil-Std 417) Class: RN

Advantages: Excellent dynamic, mechanical and fatigue properties; high strength, resilience and abrasion properties.

Limitations: Suffers from poor oxidation, ozone, oil and solvent resistance. Temperature resistance is also relatively poor.

<table>
<thead>
<tr>
<th>Physical &amp; Mechanical Properties</th>
<th>Chemical Resistance</th>
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<tbody>
<tr>
<td>Durometer or Hardness Range: 30-95 Shore A</td>
<td>Acids, Dilute: Fair to Excellent</td>
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<tr>
<td>Tensile Strength Range: 500 - 3,500 PSI</td>
<td>Acids, Concentrated: Poor to Good</td>
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<tr>
<td>Elongation (Range%): 300% - 800%</td>
<td>Acids, Organic (Dilute): Fair to Good</td>
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<tr>
<td>Abrasion Resistance: Good to Excellent</td>
<td>Acids, Organic (Concentrated): Good</td>
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<tr>
<td>Adhesion to Metal: Excellent</td>
<td>Alcohols: Good to Excellent</td>
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<td>Adhesion to Rigid Materials: Excellent</td>
<td>Aldehydes: Good</td>
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<td>Compression Set: Excellent</td>
<td>Alkalies, Dilute: Fair to Excellent</td>
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<tr>
<td>Flex Cracking Resistance: Excellent</td>
<td>Alkalies, Concentrated: Fair to Good</td>
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<tr>
<td>Impact Resistance: Good to Excellent</td>
<td>Amines: Poor to Fair</td>
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<tr>
<td>Resilience/Rebound: Excellent</td>
<td>Animal &amp; Vegetable Oils: Poor to Good</td>
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<tr>
<td>Tear Resistance: Good to Excellent</td>
<td>Brake Fluids, Non-Petroleum Based: Good</td>
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<tr>
<td>Vibration Dampening: Good to Excellent</td>
<td>Diester Oils: Poor</td>
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</tbody>
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Thermal Properties

General Temperature Range -70°F to 250°F
Min. for continuous Use (Static): -60°F
Brittle Point: -80°F
Max. for Continuous Use (Static): 220°F

Environmental Performance

Colorability: Poor
Flame Resistance: Fair to Good
Gas Permeability: Fair to Good
Odor: Good to Excellent
Ozone Resistance: Poor
Oxidation Resistance: Good
Radiation Resistance: Fair to Good
Steam Resistance: Good
Sunlight Resistance: Poor to Fair
Weather Resistance: Poor to Fair
Water Resistance: Excellent

Ketones (MEK, acetone): Fair to Good
Lacquer Solvents: Poor
LP Gases & Fuel Oils: Poor
Mineral Oils: Poor
Oil Resistance: Poor
Petroleum Aromatic: Poor
Petroleum Non-Aromatic: Poor
Refrigerant Ammonia: Good
Refrigerant Halofluorocarbons: R-12, R13
Refrigerant Halofluorocarbons w/ Oil: Poor
Silicone Oil: Good
Solvent Resistance: Fair