Data Sheet: V90 AED Type B

MATERIAL: VITON® 90 SHORE AED TYPE B
NORSOK M-710 APPROVED

Provides low and stable compression set at high temperature.

COLOUR: BLACK

GENERAL SERVICE TEMPERATURE RANGE:  
-30°C to +250°C (Static)  
-15°C to +220°C (Dynamic)

SPECIFICATION: ASTM D2000 M2HK910 A1-10 B37 B38 EF31 F15 Z1 Z2  
Z1= No ACN content, 68.5% Fluorine content. Z2=TR Test

<table>
<thead>
<tr>
<th>PHYSICAL PROPERTIES</th>
<th>REQUIREMENT</th>
<th>TEST RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARDNESS SHORE A</td>
<td>90+/-5</td>
<td>92.5</td>
</tr>
<tr>
<td>TENSILE STRENGTH, psi</td>
<td>1450</td>
<td>2055 (14.17)</td>
</tr>
<tr>
<td>ELONGATION, %</td>
<td>100</td>
<td>154</td>
</tr>
<tr>
<td>MODULUS AT 100% psi (MPa)</td>
<td></td>
<td>1432 (9.87)</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY</td>
<td></td>
<td>1.88</td>
</tr>
<tr>
<td>A1-10 HEAT AGEING 70hrs @ 250°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HARDNESS CHANGE, POINTS</td>
<td>+10</td>
<td>0</td>
</tr>
<tr>
<td>TENSILE STRENGTH CHANGE %</td>
<td>-25</td>
<td>-5</td>
</tr>
<tr>
<td>ELONGATION CHANGE %</td>
<td>-25</td>
<td>+16</td>
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<tr>
<td>WEIGHT CHANGE %</td>
<td></td>
<td>-1.4</td>
</tr>
</tbody>
</table>

B37 COMPRESSION SET, METHOD B  
22hrs @ 175°C % 50 MAX 33.2

B38 COMPRESSION SET, METHOD B  
22hrs @ 200°C % 50 MAX 35

EF31 FUEL RESISTANCE, FUEL C. 70hrs @ 23°C  
HARDNESS CHANGE, POINTS +/-5 -3 |
TENSILE STRENGTH CHANGE % -25 -3 |
ELONGATION CHANGE % -20 +1  
VOLUME CHANGE % 0/+10 +1.9

F15 LOW TEMPERATURE BRITTLENESS POINT TEST  
3 MINS @ -25°C NO CRACKS PASS

Z2 LOW TEMPERATURE RETRACTION TEST (TR TEST)  
TESTING ELONGATION 50% EQUIPMENT OF MEASUREMENT: THERMOCOUPLE  
LENGTH OF SAMPLE: 51 mm RATE OF TEMPERATURE INCREASING: 1°C / min  
TEST TEMPERATURE: 26°C COOLANT: METHANOL

TR10 °C -14.4
### RESISTANCE OVERVIEW

<table>
<thead>
<tr>
<th>Material Type</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthetic and Mineral Lubricants</td>
<td>EXCELLENT</td>
</tr>
<tr>
<td>Aliphatic Hydrocarbons</td>
<td>EXCELLENT</td>
</tr>
<tr>
<td>Aromatic Hydrocarbons</td>
<td>EXCELLENT</td>
</tr>
<tr>
<td>Chemical Resistance</td>
<td>GOOD</td>
</tr>
<tr>
<td>Alcohol</td>
<td>POOR</td>
</tr>
</tbody>
</table>

*The above test results are based on test slabs / buttons. The results from the actual parts may be different.*

**Issue Date:** 22.04.2015