**MATERIAL: PERFLUOROELASTOMER 70 SHORE**

Specific compound for Quad Ring / X Rings. Developed for food and pharmaceutical processing, automated CIP and SIP systems. In accordance with FDA 21 CFR 177.2600 requirements.

**COLOUR: WHITE**

**GENERAL SERVICE TEMPERATURE RANGE: -10°C to +230°C continuous (+260°C Peak)**

<table>
<thead>
<tr>
<th>PHYSICAL PROPERTIES</th>
<th>REQUIREMENT</th>
<th>TEST RESULT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARDNESS, SHORE A</td>
<td>70</td>
<td>ASTM D2240</td>
</tr>
<tr>
<td>TENSILE STRENGTH, MIN, MPa</td>
<td>15.9</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>ELONGATION, MIN, %</td>
<td>263</td>
<td>ASTM D412</td>
</tr>
<tr>
<td>100% MODULUS, MPa</td>
<td>6.3</td>
<td>ASTM D412</td>
</tr>
</tbody>
</table>

**PERMANENT SET**

70 hrs @ 200°C MAX, % 18 ASTM D395/B

**LOW TEMPERATURE FLEXIBILITY**

TR-10 -2 ASTM D1329

**AIR AGING: 70 hrs @ 250°C**

CHANGE IN HARDNESS, MAX PTS -1 ASTM D573
CHANGE IN TENSILE STRENGTH, % -1 ASTM D573
CHANGE IN ELONGATION, % +7 ASTM D573

**STEAM AGEING: 168 hrs @ 220°C**

CHANGE IN HARDNESS, MAX PTS -2 ASTM D471
CHANGE IN TENSILE STRENGTH, MAX, % -9 ASTM D471
CHANGE IN ULTIMATE ELONGATION, MAX, % +5 ASTM D471
CHANGE IN VOLUME, % +2.2 ASTM D471

**NITRIC ACID 65% IMMERSION: 168 hrs @ 80°C**

CHANGE IN HARDNESS, MAX PTS -10 ASTM D471
CHANGE IN TENSILE STRENGTH, MAX, % -30 ASTM D471
CHANGE IN ULTIMATE ELONGATION, MAX, % +5 ASTM D471
CHANGE IN VOLUME, % +10 ASTM D471

**POTASSIUM HYDROXIDE 50% IMMERSION: 168 hrs @ 20°C**

CHANGE IN HARDNESS, MAX PTS -2 ASTM D471
CHANGE IN TENSILE STRENGTH, MAX, % -10 ASTM D471
CHANGE IN ULTIMATE ELONGATION, MAX, % -15 ASTM D471
CHANGE IN VOLUME, % +0.4 ASTM D471

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

**Issue Date: 26.03.2014**