

Data Sheet: HNBR90PC

MATERIAL: HYDROGENATED NITRILE 90 SHORE PEROXIDE CURED

COLOUR: BLACK

GENERAL SERVICE TEMPERATURE RANGE: -40°C to 150°C

SPECIFICATION: ASTM D2000-M3DH910 A26 B16 C12 EO16 EO36 Z1 (Z1 = Tensile Strength, min 2900 psi)

| PHYSICAL PROPERTIES | REQUIREMENT | TEST RESULT |
|---|-------------|-------------|
| HARDNESS SHORE A | 90+/-5 | 87 |
| TENSILE STRENGTH, psi | 2900 | 3449 |
| ELONGATION % | 100 | 159 |
| MODULUS @100%, psi (n/mm ²) | | 2047 |
| SPECIFIC GRAVITY | | 1.284 |

HEAT AGEING 70hrs @ 150°C

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|---------------------------|-----|-----|
| HARDNESS CHANGE, POINTS | +10 | +3 |
| TENSILE STRENGTH CHANGE % | -25 | 0 |
| ELONGATION CHANGE % | -30 | -19 |

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|---------------------------------|----|----|
| COMPRESSION SET 22hrs @ 150°C % | 30 | 19 |
|---------------------------------|----|----|

FLUID RESISTANCE, No.1 Oil 70hrs @ 150°C

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|---------------------------|--------|------|
| HARDNESS CHANGE, POINTS | -5/+10 | +2 |
| TENSILE STRENGTH CHANGE % | -20 | +4 |
| ELONGATION CHANGE % | -30 | -10 |
| VOLUME CHANGE % | +/-5 | -3.3 |

FLUID RESISTANCE, IRM903. OIL 70hrs @150°C

| | | |
|---------------------------|-----|------|
| HARDNESS CHANGE, POINTS | -15 | -6 |
| TENSILE STRENGTH CHANGE % | -30 | -2 |
| ELONGATION CHANGE % | -30 | -6 |
| VOLUME CHANGE % | +25 | +9.5 |

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| OZONE RESISTANCE 50pphm 70hrs @ 40°C | NO CRACK | PASS |
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LOW TEMPERATURE BRITTLENESS

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|---------------------------------|--|------|
| Non brittle after 3mins @ -40°C | | PASS |
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The above test results are based on test slabs / buttons. The results from the actual parts may be different.

Issue Date: 14.04.2014