

## General Features

- Good compression set resistance
- Excellent heat resistance
- Very good general chemical resistance and heat resistance
- Good low temperature flexibility


## Application

A general purpose FKM elastomer with very good general chemical resistance, including coolants, lubricating oils, and other moderately high pH environments.
514AD provides good resistance to all petroleum and ester based oils and lubricants while providing good compression set resistance, and low temperature flexibility.


Quad-Ring ${ }^{\oplus}$ Brand Seals


Quad ${ }^{\circledR}$ Brand O-Ring Seals


Quad ${ }^{\circledR}$ Ground Rubber Balls


Equi-Flex ${ }^{\text {TM }}$ Rod Wiper/ Scraper

Original Properties

| Property | Unit | Required | Obtained | ASTM <br> Test Method |
| :--- | :---: | :---: | :---: | :---: |
| Hardness | Shore A | $70 \pm 5$ | 72 | D 2240 |
| Tensile | MPa | 10 min | 14.5 | D 412 |
| Elongation at break | $\%$ | 175 min | 279 | D 412 |
| 100\% Modulus | MPa |  | 4.0 | D 412 |
| Tear Strength, Die C | $\mathrm{kN} / \mathrm{m}$ |  | 18.4 | D 624 |
| Specific Gravity |  |  | 1.84 | D 297 |

Air Age

| Property | Unit | Obtained | ASTM <br> Test Method |
| :--- | :---: | :---: | :---: |
| Change after $70 \mathrm{~h} @ 250^{\circ} \mathrm{C}$ |  |  | D 573 |
| $\Delta$ Hardness | Shore A | 3 |  |
| $\Delta$ Tensile | $\%$ | 0.3 |  |
| $\Delta$ Elongation | $\%$ | -13.3 |  |

## FKM Elastomer Compound 514AD

Fluid Immersion

| Property | Unit | Obtained | ASTM <br> Test Method |
| :---: | :---: | :---: | :---: |
| Reference Fuel C |  |  |  |
| Change after 70h @ $23^{\circ} \mathrm{C}$ |  |  | D 471 |
| $\triangle$ Hardness | Shore A | -2 |  |
| $\triangle$ Tensile | \% | -15.2 |  |
| $\triangle$ Elongation | \% | -9.7 |  |
| $\Delta$ Volume | \% | 3.7 |  |
| Property | Unit | Obtained | ASTM <br> Test Method |
| Service Liquid 101 |  |  |  |
| Change after $70 \mathrm{~h} @ 200^{\circ} \mathrm{C}$ |  |  | D 471 |
| $\triangle$ Hardness | Shore A | -7 |  |
| $\triangle$ Tensile | \% | -11.8 |  |
| $\triangle$ Elongation | \% | -9.7 |  |
| $\Delta$ Volume | \% | 12.4 |  |

## Compression Set Resistance

| Property | Unit | Obtained | ASTM <br> Test Method |
| :--- | :---: | :---: | :---: |
|  |  |  | D 395, Method B |
| $22 \mathrm{~h} \mathrm{@} 175^{\circ} \mathrm{C}$ | $\%$ | 9.8 |  |
| $22 \mathrm{~h} \mathrm{@} 200^{\circ} \mathrm{C}$ | $\%$ | 19.0 |  |

## Low Temperature

| Property | Obtained | ASTM <br> Test Method |
| :---: | :---: | :---: |
| Non-brittleness, $3 \mathrm{~min} @-25^{\circ} \mathrm{C}$ | Pass | D 2137 |

