

# Parco

## 4900-90 Nitrile Seals

### Need 90-Durometer Nitrile O-rings Tomorrow?

Parco is committed to being the leader in low cost, general-purpose, 90-durometer nitrile O-rings. In addition to our industry leading low prices, we've tripled our inventory and cut our minimums in half. So when you need 90-durometer nitrile O-rings, you no longer have to check multiple sources for available inventory and competitive prices. Make Parco your first choice for 90-durometer nitrile O-rings.

#### 4900-90 Meets Your Needs

##### 1. Excellent Physical Properties

Parco's 4900-90 nitrile O-rings have excellent physical properties (see test report on reverse side). We also provide traceability for batch numbers and cure dates with every shipment. For nearly 25 years, 4900-90 O-rings have been used in a wide variety of applications with great results. So when you specify 4900-90, rest assured that you've made the right choice.

##### 2. Exceptional Prices

Parco's 4900-90 prices are among the lowest in the industry. We work with the best suppliers, buy in large volumes, and sell in standard-quantity bags. Those features allow us to provide you with 90-durometer nitrile O-rings at a great price.

##### 3. Huge Inventory

We stock over 10 million pieces of 4900-90 O-rings in all 369 standard sizes. We've also made it easy to check stock. Using our website, you can view our inventory 24 hours a day. If we receive your order before 2:30 p.m. Pacific time, you can receive your parts as soon as the next business day.

#### Rely on Parco

Parco is a leading manufacturer of high-performance seals. We specialize in developing proprietary elastomeric compounds and bonding techniques. Parco's seals are available in more than 800 compounds.

Founded in 1941, Parco was the first manufacturer to specialize in O-rings. Our modern 154,000 square-foot facility is one of the largest plants in the world, making molded rubber seals. Parco also makes custom-molded elastomeric products, including rubber-to-metal bonded parts. In addition, Parco imports and resells molded rubber seals.

For more information on Parco's 4900-90 O-rings or to obtain samples, please contact a Parco customer service representative.

## Key Features

Parco's 4900-90 nitrile seals are ideal for use in a variety of general-purpose applications. Key features include the following:

- **Good resistance to extrusion:**  
Parco 90-durometer seals offer better extrusion resistance than 4900-70 seals in higher pressures.
- **Wide range of service temperatures:**  
Parco 4900-90 seals are suitable for applications ranging from -30 to +212°F.

## Chemical Resistance

| USE WITH                                      | DO NOT USE WITH  |
|---|--|
| Gasoline<br>Military Aircraft Hydraulic Fluid | Automatic Transmission Fluid<br>Hot Air<br>Ultraviolet Light |

## Typical Values for Compound 4900-90 General-purpose 90-durometer nitrile

| Section of Spec. | Physical Property  | Requirement <sup>1</sup> | Typical Value | ASTM <sup>2</sup> Test Method |
|------------------|--|--------------------------|---------------|-------------------------------|
|                  | <b>Original Properties</b>   |                          |               |                               |
|                  | Hardness, Shore A  | 90 ± 5                   | 89            | D2240                         |
|                  | Tensile strength, MPa (psi), min.  | 10(1450)                 | 13(1870)      | D412                          |
|                  | Ultimate elongation, pct., min.  | 100                      | 155           | D412                          |
| Basic            | <b>Heat Aging</b><br>70 hours at 125°C (257°F)                           |                          |               | D865                          |
|                  | Hardness change, pts., Shore A   | ±15                      | 4             |                               |
|                  | Tensile strength change, pct.  | ±30                      | 5             |                               |
|                  | Ultimate elongation change, pct., max.                                   | -50                      | -32           |                               |
| B14              | <b>Compression Set, Solid</b><br>22 hours at 100°C (212°F)               |                          |               | D395<br>Method B              |
|                  | pct. of original deflection, max.  | 25                       | 20            |                               |
| EO15             | <b>Fluid Aging, ASTM Oil No. 1</b><br>70 hours at 125°C (257°F)          |                          |               | D471                          |
|                  | Hardness change, pts., Shore A   | 0 to 10                  | 4             |                               |
|                  | Tensile strength change, pct., max.                                      | -20                      | -6            |                               |
|                  | Ultimate elongation change, pct., max.                                   | -35                      | -29           |                               |
|                  | Volume change, pct.  | -15 to 5                 | -8            |                               |
| EO35             | <b>Fluid Aging, IRM<sup>3</sup> 903 Oil</b><br>70 hours at 125°C (257°F) |                          |               | D471                          |
|                  | Hardness change, pts., Shore A   | ±10                      | -5            |                               |
|                  | Tensile strength change, pct., max                                       | -15                      | -11           |                               |
|                  | Ultimate elongation change, pct., max                                    | -30                      | -21           |                               |
|                  | Volume change, pct.  | 0 to 25                  | 7             |                               |
| F16              | <b>Low Temperature Property</b><br>Nonbrittle after 3 minutes at -35°C   | Pass                     | Pass          | D2137                         |

<sup>1</sup>Compound 4900-90 meets the requirements shown above for ASTM D2000 M4CH910 B14 EO15 EO35 F16 Z1. <sup>2</sup>ASTM is the acronym for the American Society for Testing and Materials. <sup>3</sup>IRM is the acronym for Industry Reference Material.

Source: Parco Test Report 7320C.

⚠ This brochure is intended as a guideline and reference. Appropriate testing and validation by users having technical expertise is necessary for proper use of Parco products.

# Parco

Parco, Inc., 1801 S. Archibald Ave., Ontario, California 91761  
909-947-2200 Fax 909-923-0288 parcoinc.com