

# Parco

## 4367-70 Nitrile Seals



### Need Seals to Meet AMS-P-83461?

#### 4367-70 Meets Your Needs

##### 1. Exceeds AMS-P-83461

Seals made from our 70-durometer nitrile compound 4367-70 exceed the requirements of AMS-P-83461 (see test report on reverse side). Parco supplies seals to 28 military and aerospace specifications. We are also one of only a few manufacturers approved to supply Qualified Products List (QPL) rubber seals. Our quality system is certified to ISO 9001, ISO/TS 16949, AC7115, and AS9100. So when you specify 4367-70, rest assured that you've made the right choice.

##### 2. Outstanding Resistance to Low Temperatures

Seals used in low temperatures may become hard and brittle, making them more susceptible to cracking. Parco's 4367-70 seals can be used in static sealing applications with continuous service temperatures as low as -65°F. The excellent low-temperature properties of 4367-70 seals enable them to resist cracking in low-temperature applications.

##### 3. Outstanding Resistance to High Temperatures

High temperatures can cause seals to undergo irreversible chemical changes, reducing resistance to compression set. To perform properly, most seals must resist taking a set from compression after being installed. When a seal takes a set, it no

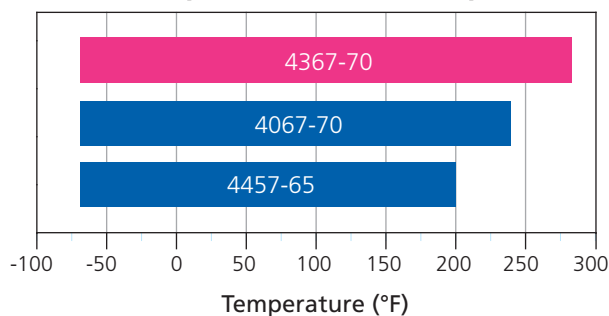
longer exerts force on the mating surfaces, resulting in leakage. 4367-70 seals are peroxide-cured, offering improved resistance to high temperatures over other low temperature nitrile compounds. 4367-70 seals can resist temperatures up to 275°F (see Figure 1).

#### Applications

Parco's 70-durometer nitrile compound 4367-70 is ideal for use in applications with exposure to both low and high temperatures. Seals made from 4367-70 can be used in dynamic sealing applications with continuous service temperatures as low as -61°F and as high as 275°F. 4367-70 offers excellent service with gasoline and military aircraft hydraulic fluid. Seals made from 4367-70 should not be exposed to automatic transmission fluid, hot air, or ultra violet light.

Fig. 1:

**Service Temperatures of Popular Low-Temperature Nitrile Compounds**



Source: Parco R & D Data.

*4367-70 seals offer improved resistance to high temperatures over other popular low-temperature nitrile compounds.*

## Key Features

Parco's 4367-70 nitrile seals are ideal for use in low temperatures and hydraulic fluids. Key features include the following

- **Meets popular militray specification:**  
Parco 4367-70 seals exceed the requirements for AMS-P-83461.
- **Excellent resistance to low temperatures:**  
Parco 4367-70 seals can be used in static applications with continuous service temperatures as low as -65°F.
- **Exceptional Prices:**  
Parco 4367-70 prices are among the lowest available.
- **Wide range of service temperatures:**  
Parco 4367-70 seals are suitable for applications ranging from -65 to +275°F.

## Chemical Resistance

USE WITH	DO NOT USE WITH
Gasoline Military Aircraft Hydraulic Fluid	Automatic Transmission Fluid Hot Air Ultraviolet Light

## Typical Values for Compound 4367-70 70-durometer nitrile for AMS-P-83461

Section of Spec.	Physical Property	Requirement <sup>1</sup>	Typical Value	ASTM <sup>2</sup> Test Method
	<b>Original Properties</b>			
	Hardness, Shore A	70 ± 5	70	D2240
	Tensile strength, MPa (psi), min.	6(870)	13.0(1878)	D412
Z1	Ultimate elongation, pct., min.	110	175	D412
Z2	Modulus at 100 pct., elongation, psi	Report	779	D412
Z3	Specific gravity	Report	1.22	D297
	<b>Heat Aging</b>			
	<b>70 hours at 100°C (212°F)</b>			D573
	Hardness change, pts., Shore A	±15	4	
	Tensile strength change, pct.	±30	-3	
	Ultimate elongation change, pct., max.	-50	-20	
	<b>Compression Set, Solid</b>			D395
B14	<b>22 hours at 100°C (212°F)</b>			Method B
	Pct. of original deflection, max.	25	18	
	<b>Fluid Aging, IRM<sup>3</sup> 901 Oil</b>			
	<b>70 hours at 100°C (212°F)</b>			D471
	Hardness change, pts., Shore A	-5 to 10	8	
	Tensile strength change, pct., max.	-25	16	
	Ultimate elongation change, pct., max.	-45	-9	
	Volume change, pct.	-10 to 5	-9	
	<b>Fluid Aging, IRM 903 Oil</b>			
	<b>70 hours at 100°C (212°F)</b>			D471
	Hardness change, pts., Shore A	-10 to 5	-2	
	Tensile strength change, pct., max.	-45	-33	
	Ultimate elongation change, pct., max.	-45	-24	
	Volume change, pct.	0 to 25	14	
	<b>Low Temperature Property</b>			
Z4	TR-10, °C (°F)	Report	-52(-61)	D1329

<sup>1</sup>Compound 4367-70 meets the requirements shown above for ASTM D2000 M2BG706 B14 EO14 EO34 Z1 Z2 Z3 Z4. Compound 4367-70 also meets the requirements for AMS-P-83461, *Packing, Preformed, Petroleum Hydraulic Fluid Resistant, Improved Performance At 275°F (135°C)*. <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 9240A.

⚠ 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.

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