



# MATERIAL REPORT

DATE: 5/1/2000

**TITLE:** Evaluation of Parker Compound N1527-75 (formerly 67147) in various reference fuels and oils.

**PURPOSE:** To obtain results relative to subject specification.

**CONCLUSION:** Parker Compound N1565-75 offers outstanding oil resistance and moderate swell in fuel applications.

**Recommended Temperature Range:** -30 to 225 F

**Recommended for:** petroleum oils, cold water,  
Salt & Alkali solutions, weak acids

**Not Recommended for:** strong acids,  
glycols, ozone, polar solvents, gasoline

Parker O-Ring Division  
2360 Palumbo Drive  
Lexington, Kentucky 40512  
(859) 269-2351

## REPORT DATA

Report Number:

<u>ORIGINAL PHYSICAL PROPERTIES</u>	<u>Customer Specification</u>	<u>N1527-70 PLATENS</u>
Hardness, Shore A, pts.	70 ± 5	70
Tensile Strength, MPa.	10.0	14.3
Ultimate Elongation, % min	250	349
100% Modulus, MPa min	2.0	3.1
UL Approved	Yes	Yes
<u>AIR AGING, 70 HRS. @ 100 °C</u>		
Hardness Change, pts	± 15	+4
Tensile Strength Change, % max	-30 max	+2
Elongation Change, %, max	-50 max	-26
<u>COMPRESSION SET, 22 HRS. @ 100 °C, METHOD B, Plied Disk</u>		
% of Original Deflection, max.	25	15
<u>COMPRESSION SET, 22 HRS. @ 100 °C, METHOD B, Solid Button</u>		
% of Original Deflection, max.	25	7
<u>COMPRESSION SET, 70 HRS. @ 100 °C, METHOD B, Solid Button</u>		
% of Original Deflection, max.	25	11
<u>FLUID IMMERSION, FUEL A, 70 HRS. @ R.T.</u>		
Hardness Change, pts	± 10	-2
Tensile Strength Change, % max	-25 max	-6
Elongation Change, %, max	-25 max	-9
Volume Change, %	-5 to +10	+1
<u>FLUID IMMERSION, FUEL B, 70 HRS. @ R.T.</u>		
Hardness Change, pts., max.	0 to -30	-20
Tensile Strength Change, %, max.	-60 max	-50
Elongation Change, %, max	-60 max	-46
Volume Change, %, max	0 to +40	+28
<u>FLUID IMMERSION, ASTM #1 Oil 70 HRS. @ 100 °C</u>		
Hardness Change, pts	-5 to +10	+5
Tensile Strength Change, % max	- 25 max	+13
Elongation Change, %, max	- 45 max	-13
Volume Change, %	-10 to +5	-7
<u>FLUID IMMERSION, IRM 903 Oil 70 HRS. @ 100 °C</u>		
Hardness Change, pts, max	-10 to +5	-5
Tensile Strength Change, %, max.	-45 max	-3
Elongation Change, %, max	-45 max	-21
Volume Change, %, max	0 to +25	+6
<u>FLUID IMMERSION, DISTILLED WATER 70 HRS. @ 100 °C</u>		

Request a Quote

Hardness Change, pts, max  
Volume Change, %, max

$\pm 10$   
 $\pm 15$

-2  
+6

LOW TEMPERATURE BRITTLENESS

Non-brittle, 3' @ -24 C

No cracks

Pass