



MATERIAL REPORT

DATE: 10/1/2000

TITLE: Evaluation of Parker Compound N1591-75 (formerly 67357) in various reference fuels and fuel / alcohol blends.

PURPOSE: To obtain results relative to subject specification.

CONCLUSION: Parker Compound N1565-75 offers very low swell in fuel and fuel / alcohol blends.

Recommended Temperature Range: -30 to 225 F

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

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

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>N1591-75 PLATENS</u>
Hardness, Shore A, pts.	75 ± 5	79
Tensile Strength, psi min	1500	1751
Ultimate Elongation, % min	100	357
UL Approved	Yes	Yes
 <u>COMPRESSION SET,</u> <u>22 HRS. @ 100 °C, METHOD B, Solid Button</u>		
% of Original Deflection, max.	25	12
 <u>AIR AGING, 70 HRS. @ 100 °C</u>		
Hardness Change, pts	± 10	+4
Tensile Strength Change, % max	-20 max	+9
Elongation Change, %, max	-40 max	-9
 <u>FLUID IMMERSION, FUEL A,</u> <u>70 HRS. @ R.T.</u>		
Hardness Change, pts	+10 max	+2
Tensile Strength Change, % max	-40 max	-9
Elongation Change, %, max	-40 max	-18
Volume Change, %	-1 to +25	- 1
 <u>FLUID IMMERSION, FUEL B,</u> <u>70 HRS. @ R.T.</u>		
Hardness Change, pts., max.	-25 max	-16
Tensile Strength Change, %, max.	-40 max	-21
Elongation Change, %, max	-40 max	-16
Volume Change, %, max	-1 to +25	+20
 <u>FLUID IMMERSION, n-HEXANE,</u> <u>70 HRS. @ R.T.</u>		
Hardness Change, pts., max.	± 10	+3
Tensile Strength Change, %, max.	-40 max	-10
Elongation Change, %, max	-40 max	-19
Volume Change, %, max	-1 to +25	0
 <u>FLUID IMMERSION, Fuel C / Methanol Blends</u> <u>70 HRS. @ RT</u>		
100% Fuel C, Volume Change, %	+40 max	+19
85% Fuel C / 15% Methanol, Volume Change, %	+40 max	+28
70% Fuel C / 30% Methanol, Volume Change, %	+40 max	+30
50% Fuel C / 50% Methanol, Volume Change, %	+40 max	+26
12% Fuel C / 85% Methanol, Volume Change, %	+40 max	+9
100% Methanol, Volume Change, %	+40 max	+5
 <u>FLUID IMMERSION, Fuel C / Ethanol Blends</u> <u>70 HRS. @ RT</u>		
100% Fuel C, Volume Change, %	+40 max	+19
85% Fuel C / 15% Ethanol, Volume Change, %	+40 max	+26
70% Fuel C / 30% Ethanol, Volume Change, %	+40 max	+25
50% Fuel C / 50% Ethanol, Volume Change, %	+40 max	+21
12% Fuel C / 85% Ethanol, Volume Change, %	+40 max	+21
100% Ethanol, Volume Change, %	+40 max	+7

