



MATERIAL REPORT

DATE: 5/02/83

TITLE: Evaluation of Parker low temperature Nitrile Compound N0103-70 tested to the requirements of ASTM D2000/J200 line call out 5BG720 A14 B14 B34 EO14 EO34.

PURPOSE: To determine if N0103-70 meets the line call out.

CONCLUSION: Parker compound N0103-70 meets or exceeds the requirements of the above line call out.

Recommended Temperature Range: -55 to 225F

Recommended for: petroleum oils, water (up to 212F),
Salt & Alkali solutions, weak acids

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

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REPORT DATA

<u>ORIGINAL PHYSICALS</u>	<u>SPECIFICATION</u>	<u>PARKER COMPOUND</u>
	ASTM D2000 / SAE J200	
	5BG720 A14 B14	
	<u>B34 E014 E034</u>	<u>N0103-70</u>
Hardness, Shore A, pts.	70 ± 5	72
Tensile Strength, psi.	2000	2000
Elongation, %	250	260
A14 HEAT AGING		
<u>70 HRS. @ 100°C</u>		
Hardness Change, pts.	+15	+8
Tensile Strength Change, %	-20	-6.3
Elongation Change, %	-40	-21.2
B14 COMPRESSION SET,		
<u>22 HRS. @ 100°C (solid)</u>		
% of Original Deflection	25	25 (tested on plies)
B34 COMPRESSION SET,		
<u>22 HRS. @ 100°C (plies)</u>		
% of Original Deflection	25	25
E014 FLUID IMMERSION, ASTM OIL #1,		
<u>70 HRS. @ 100°C</u>		
Hardness Change, pts.	-5 to +15	+8
Tensile Strength Change, %	-25	-9.3
Elongation Change, %	-45	-25
Volume Change, %	-10 to +5	-10
EO34 FLUID IMMERSION, ASTM OIL #3,		
<u>70 HRS. @ 100°C</u>		
Hardness Change, pts.	-15 to 0	-2
Tensile Strength Change, %	-45	-12.6
Elongation Change, %	-45	-16.9
Volume Change, %	0 to +35	+ 3.8

All testing performed on 2-214 (.139 C.S.) O-RINGS