Compound Data Sheet
O-Ring Division United States

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

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