

Compound Data SheetO-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

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

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