



MATERIAL REPORT

DATE: 01/04/00

TITLE: Evaluation of Parker's Compound NA151-70

CONCLUSION: Compound NA151-70 meets or exceeds all requirements of subject specification.

Recommended Temperature Range: -30 to 250F

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

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

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

REPORT DATA

<u>Original Physical Properties, ASTM D1414, D2240</u>	<u>NA151-70 Test Results</u>
Hardness, Shore A, pts.	70
Tensile Strength, psi	2279
Ultimate Elongation, %	289
Modulus @ 100%, psi	629
Compression Set, ASTM D395 Method B (70 hrs. @ 257°F)	
Percent of Original Deflection (0.070 in C/S o-ring)	61
Percent of Original Deflection (0.103 in C/S o-ring)	55
Percent of Original Deflection (0.139 in C/S o-ring)	44
Percent of Original Deflection (0.210 in C/S o-ring)	33
Percent of Original Deflection (0.275 in C/S o-ring)	27
Percent of Original Deflection (½" buttons)	15
Dry Heat Resistance, ASTM D573 (70 hrs. @ 257°F)	
Hardness Change, pts.	+10
Tensile Change, %	-4
Elongation Change, %	-45
Fluid Immersion, ASTM D471 ASTM #1 Oil, (70 hrs. @ 302°F)	
Hardness Change, pts.	+3
Tensile Change, %	+3
Elongation Change, %	-22
Volume Change, %	-4
Fluid Immersion, ASTM D471 IRM 903 Oil, (70 hrs. @ 302°F)	
Hardness Change, pts.	-8
Tensile Change, %	-5
Elongation Change, %	-14
Volume Change, %	+14
Fluid Immersion, ASTM D471 Distilled Water, (70 hrs. @ 212°F)	
Hardness Change, pts.	-2
Tensile Change, %	-14
Elongation Change, %	-18
Volume Change, %	+9
Low Temperature, ASTM D1329	
TR-10, °F	-14
Low Temperature Brittleness, ASTM D2137	
Nonbrittle after 3 min. @ -27°F	Passed