



MATERIAL REPORT

DATE: 05/18/01

TITLE: Evaluation of Parker's Compound NB107-90

CONCLUSION: Compound NB107-90 meets or exceeds all requirements of subject specification.

Recommended Temperature Range: -25 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

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

REPORT DATA

<u>Original Physical Properties, ASTM D1414, D2240</u>	NB107-90 <u>Test Results</u>
Hardness, Shore A, pts.	89
Tensile Strength, psi	2768
Ultimate Elongation, %	110
Modulus @ 100%, psi	875
Compression Set, ASTM D395 Method B (70 hrs. @ 212°F)	
Percent of Original Deflection	11
Compression Set, ASTM D395 Method B (70 hrs. @ 257°F)	
Percent of Original Deflection	23
Compression Set, ASTM D395 Method B (22 hrs. @ 300°F)	
Percent of Original Deflection	14
Compression Set, ASTM D395 Method B (22 hrs. @ 400°F)	
Percent of Original Deflection	17
Dry Heat Resistance, ASTM D573 (70 hrs. @ 257°F)	
Hardness Change, pts.	+2
Tensile Change, %	-5
Elongation Change, %	-40
Fluid Immersion, ASTM D471 ASTM #1 Oil, (70 hrs. @ 300°F)	
Hardness Change, pts.	0
Tensile Change, %	-21
Elongation Change, %	-25
Volume Change, %	0
Fluid Immersion, ASTM D471 IRM 903 Oil, (70 hrs. @ 300°F)	
Hardness Change, pts.	-5
Tensile Change, %	-28
Elongation Change, %	-25
Volume Change, %	+12
Fluid Immersion, ASTM D471 Distilled Water, (70 hrs. @ 212°F)	
Hardness Change, pts.	0
Tensile Change, %	0
Elongation Change, %	-10
Volume Change, %	0