



# 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

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## REPORT DATA

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