



**Compound Data Sheet**  
**O-Ring Division United States**

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# **MATERIAL REPORT**

REPORT NUMBER: KB4480  
DATE: 2/85

**TITLE:** Evaluation of Parker Compound N0507-90 to the requirements of MIL-P-5510C specification.

**PURPOSE:** To document conformance to acceptance test.

**CONCLUSION:** Parker compound N0507-90 meets the requirements of MIL-P-5510C specification.

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## REPORT DATA

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| <u>ORIGINAL PHYSICAL PROPERTIES</u>                                 | <u>MIL-P-5510C<br/>SPECIFICATION</u> | <u>Compound: N0507-90<br/>O-RINGS</u> |
|---|--------------------------------------|---------------------------------------|
| Hardness, Shore A, pts.   | 85 - 95                              | 90                                    |
| Tensile Strength, psi.  | 1450 - 1717                          | 1469                                  |
| Elongation, %   | 80 - 102                             | 81                                    |
| Tensile Stress (modulus)<br>@ 50% elongation, psi                   | 1024 - 1536                          | 1043                                  |
| <u>OIL AGED, 168 HRS @ 158°F +/- 1.8<br/>IN MIL-H-5606</u>          |                                      |                                       |
| Hardness change, pts  | - 5 to + 5                           | 87 (-3)                               |
| Tensile strength change, %  | - 15 max                             | 1303 (-11.3)                          |
| Elongation change, %  | - 20 max                             | 79 (- 2.5)                            |
| Volume change, %  | + 1.9 to + 5.9                       | + 3.9                                 |
| <u>COMPRESSION SET, 25% COMPRESSION<br/>168 HRS. @ 158°F IN AIR</u> |                                      |                                       |
| % Deflection  | 35 max                               | 10.3                                  |