MATERIAL REPORT

REPORT NUMBER: KA8243
DATE: 10/30/90

TITLE: Evaluation of Parker Compound N0506-65 to Requirements of Specification AMS 7271G.

PURPOSE: To document conformance of first article testing.

CONCLUSION: Parker compound N0506-65 meets the requirements of specification AMS 7271G.

Recommended Temperature Range: -70 to 180F

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

**Report Number:** KA8243  
**COMPOUND:** N0506-65  
**SIZE:** 0023-9070GOVT/2-  
**KA:** 8243  
**AMS 7271G B/N:** 813332

#### AS RECEIVED

<table>
<thead>
<tr>
<th>Specification</th>
<th>Results</th>
</tr>
</thead>
</table>
| Hardness, Duro 'A' | 60 - 70 (%)  
| Tensile Strength, psi., min. | 1200  
| Elongation, % min. | 0  
| Specific Gravity | Report  
| Corrosion | Nil |

#### RESULTS

<table>
<thead>
<tr>
<th>Specification</th>
<th>Results</th>
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| Hardness, Duro 'A' | 66 (%)  
| Tensile Strength, psi., min. | 1284  
| Elongation, % min. | 252  
| Specific Gravity | 1.24  
| Corrosion | None |

#### AROMATIC AND NON-AROMATIC FUEL

**Fuel A, 70 hrs. @ 68 - 86°F**
- Volume Change, % max. | Positive swell +20

**Fuel B, 70 HRS. @ 68 - 86°F**
- Volume Change, % max. | +40 to +70 +60

**DUR AN AROMATIC FUEL AND DRY, 5 HRS. @ -53°F**
- Volume Change, % max. | -5 (+7)

#### LOW TEMPERATURE FLEXIBILITY

**As received, 5 hrs. @ -58°F**
- Pass

**AFTER AROMATIC FUEL AND DRY, 5 HRS. @ -53°F**
- Pass

#### DRY HEAT RESISTANCE

**70 HRS. @ 257°F +5°**
- Hardness Change | 0 to 15 +11 (77)
- Tensile Strength Change, % max. | -25 +2 (1311)
- Elongation Change, % max. | -50 -33 (169)

**Bend (Flat)**
- No cracking
- No cracking or checking

#### COMPRESSION SET,

**70 HRS. A 257°F + 5°**
- % of original deflection, max. | 85  
- ring cross section diameter, inch over 0.110, incl. | 76  
- over 0.110 | 75

#### SIMULATED COMPONENT TEST

- Pass  

#### DRY NECKDOWN TEST

- Pass  

#### WET NECKDOWN TEST

- Pass