MATERIAL REPORT

DATE: 09/22/99

TITLE: General evaluation of Parker Compound V8581-90.

PURPOSE: To obtain general data for Parker Compound V8581-90.

CONCLUSION: Parker Compound V8581-90 is a white general purpose perfluorinated material.

Recommended temperature limits: 5 to 572 °F

Recommended For
Aliphatic and aromatic hydrocarbons
Chlorinated hydrocarbons
Polar solvents (acetone, methylethylketone, dioxane)
Inorganic and organic acids
Water and steam
High vacuum with minimal loss in weight
Petroleum oil
Wet/dry chlorine

Not Recommended For
Fluorinated refrigerants (R11, 12, 13, 113, 114)
Uranium hexafluoride
Molten Metals
Gaseous and alkali metals
# REPORT DATA

<table>
<thead>
<tr>
<th>Original Physical Properties</th>
<th>V8581-90 Test Platen Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardness, Shore A, pts.</td>
<td>90</td>
</tr>
<tr>
<td>Tensile Strength, MPa</td>
<td>11.3</td>
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<tr>
<td>Elongation, %, min.</td>
<td>110</td>
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<tr>
<td>Modulus @ 100% Elongation, MPa</td>
<td>10.5</td>
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</tbody>
</table>

**Compression Set, 70 Hrs @ 200°C, ASTM D395 Method B, 2-214 O-Rings**

- Permanent Set, %: 33

**Low Temperature Retraction, ASTM D1329**

- TR-10 in degrees C: -1

**Volume Change, 70 Hrs @ RT, ASTM D471**

- Acetone, % Volume Change: 0.2
- Methyl Ethyl Ketone, % Volume Change: -0.1
- Methanol, % Volume Change: -0.2
- Benzene, % Volume Change: -0.1
- Toluene, % Volume Change: -0.4
- Dichloromethane, % Volume Change: 1.0
- Chloroform, % Volume Change: 0.8
- Ethyl Acetate, % Volume Change: -0.2
- MTBE, % Volume Change: 0.0