## MATERIAL REPORT

Report Number: 103554
Test Date: 7/18/2014
Report Date: 7/25/2017
Title:
Evaluation of Parker Compound
Elastomer Type: Polyacrylate (ACM) AA150-70
Purpose: To obtain typical test data
Specification: ASTM D2000 M3DH706 B36 EO16 EO36 Z1 Z2
Z1 = Specific Gravity Z2 = TR-10

Color: Black
Recommended Temperature Range: $\quad-5^{\circ} \mathrm{F}$ to $350^{\circ} \mathrm{F}$

Recommended For: Mineral oil (engine, gear box, ATF oil), Ozone, weather, and aging resistance

Not Recommended For: $\quad$ Glycol based brake fluids (DOT 3 \& DOT 4), aromatics and chlorinated hydrocarbons, hot water, steam, acids, alkalis and amines

## REPORT DATA

| Original Physical Properties | Test Method | Spec Limits | Results |
| :---: | :---: | :---: | :---: |
| Hardness, Shore A, pts. | ASTM D2240 | $70 \pm 5$ | 70 |
| Tensile Strength, PSI | ASTM D412 | 870 | 1148 |
| Ultimate Elongation, \% | ASTM D412 | 100 | 186 |
| (Z1) Specific Gravity | ATM D297 | Report | 1.31 |
| Dry Heat Resistance 70 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right)$ |  |  |  |
| Hardness Change, pts | ASTM D573 | $\pm 15$ | +15 |
| Tensile Change, \% |  | $\pm 30$ | +29 |
| Elongation Change, \% |  | -50 | -13 |
| (B36) Compression Set 22 hrs. @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right)$ | ASTM D395 |  |  |
| Percent of Original Deflection, max | Method B | 50 | 35 |
| (EO16) Fluid Immersion, IRM 901 70 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right)$ |  |  |  |
| Hardness Change, pts. | ASTM D471 | -5 to +10 | +10 |
| Tensile Change, \% |  | -20 | +28 |
| Elongation Change, \% |  | -30 | -29 |
| Volume Change, \% |  | $\pm 5$ | -5 |
| (EO36) Fluid Immersion, IRM 903 70 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right)$ |  |  |  |
| Hardness change, pts. | ASTM D471 | -15 | -10 |
| Tensile Change, \% |  | -30 | +7 |
| Elongation Change, \% |  | -30 | +11 |
| Volume Change, \% |  | +25 | +10 |
| (Z2) Low Temperature Resistance |  |  |  |
| TR-10, ${ }^{\circ} \mathrm{F}\left({ }^{\circ} \mathrm{C}\right)$ | ASTM D2137 | Report | -11(-24) |

## Original Physical Properties

Hardness, Shore A, pts.
Tensile Strength, PSI
Ultimate Elongation, \%
(Z1) Specific Gravity
Dry Heat Resistance
70 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right)$
Hardness Change, pts
Tensile Change, \%
Elongation Change, \%
(B36) Compression Set
22 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right)$
Percent of Original Deflection, max
(EO16) Fluid Immersion, IRM 901
70 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right.$ )
Hardness Change, pts.
Tensile Change, \%
Elongation Change, \%
Volume Change, \%
(EO36) Fluid Immersion, IRM 903
70 hrs . @ $302^{\circ} \mathrm{F}\left(150^{\circ} \mathrm{C}\right.$ )
Hardness change, pts.
Tensile Change, \%
Elongation Change, \%
Volume Change, \%
(Z2) Low Temperature Resistance

Report
$-11(-24)$

