

COMPOUND DATA SHEET

Parker O-Ring Division, North America

| | MATERIAL REPORT | | | |
|------------------------|--|---|--|--|
| | Report Number: 85102 Date: 1/24/2012 | CONTACT US | | |
| <u>Title:</u> | Evaluation of Parker Compound V1164-75 | | | |
| <u>Elastomer Type:</u> | Fluorocarbon (FKM) | | | |
| Purpose: | To obtain typical test data. | | | |
| Specification: | ASTM D2000 M6HK810 A1-10 B38 EF31 E088 Z1 (Shore A Hardness | ; 75 +/-5) | | |
| <u>Color:</u> | Black | | | |
| Recommended Ter | mperature Range:15°F to 400°F | | | |
| <u>Recommended For</u> | flammable hydraulic fluids, silicone oils and greases, aliphat hydrocarbons (propane, butane, natural gas), aromatic hydr (benzene, toluene), chlorinated hydrocarbons (trichloroethyl | Mineral oil and grease, ASTM No. 1 oil, IRM 902 oil, IRM 903 oil, non- flammable hydraulic fluids, silicone oils and greases, aliphatic hydrocarbons (propane, butane, natural gas), aromatic hydrocarbons (benzene, toluene), chlorinated hydrocarbons (trichloroethylene and carbon tetrachloride), gasoline, high vacuum, ozone, weather, and aging resistance. | | |
| Not Recommended | <u>d</u> For: Glycol based brake fluids, ammonia gas, amines, alkalis, su steam, and low molecular weight organic acids (formic and acids). | - | | |

Additional Approvals:

REPORT DATA

| | Test | Spec | Test |
|--|--------------------|---------------|----------------|
| Original Physical Properties | Method | <u>Limits</u> | <u>Results</u> |
| (Z1) Hardness, Shore A, pts. | ASTM D2240 | 75 ±5 | 78 |
| Tensile Strength, Mpa | ASTM D412 | 10 | 16 |
| Ultimate Elongation, % | ASTM D412 | 150 | 181 |
| Fluid Resistance (Basic Requirement) | | | |
| IRM 903, 70 hrs @ 302°F | | | |
| Volume Change, % | ASTM D471 | +10 | +2 |
| (A1-10) Heat Age | | | |
| <u>70 hrs. @ 482°F</u> | | | |
| Hardness Change, pts. | ASTM D573 | +10 | +1 |
| Tensile Strength Change, % | | -25 | -3 |
| Ultimate Elongation Change, % | | -25 | -3 |
| (B38) Compression Set (Plied) | | | |
| <u>22 hrs. @ 392°F</u> | | | |
| Percent of Original Deflection, Max | ASTM D395 Method B | 15 | 15 |
| (EF31) Fluid Resistance | | | |
| Fuel C, 70 hrs @ 73°F | - | | |
| Hardness Change, pts. | ASTM D471 | ± 5 | -2 |
| Tensile Strength Change, % | | -25 | -15 |
| Ultimate Elongation Change, % | | -20 | -4 |
| Volume Change, % | | 0 to +10 | +3 |
| (E088) Fluid Resistance | | | |
| SAE Fluid No. 2, Blend 7700 70 hrs @ 392°F | | | |
| Hardness Change, pts. | ASTM D471 | -15 to +5 | -8 |
| Tensile Strength Change, % | | -40 | -12 |
| Ultimate Elongation Change, % | | -20 | +7 |
| Volume Change, % | | +25 | +17 |

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