



COMPOUND DATA SHEET

Parker O-Ring Division, North America

MATERIAL REPORT

LTR Report Number: 94887
Date: 6/13/2013

Title: Evaluation of Parker Compound S0604-70

Elastomer Type: Silicone (VMQ, PVMQ)

Purpose: To obtain typical test data.

Specification: ASTM D2000 M7GE705 A19 B37 EA14 E016 E036 F19 G11 Z1 (Specific Gravity)

Color: Rust

Recommended Temperature Range: -65°F to 450°F

Recommended For: Animal, Vegetable oil, and grease, high molecular weight chlorinated aromatic hydrocarbons (including flame-resistant insulators, and coolant for transformers), moderate water resistance, diluted salt solutions, ozone, aging, and weather resistance.

Not Recommended For: Superheated water/steam over 250°F, acids and alkalis, low molecular weight chlorinated hydrocarbons (trichloroethylene), hydrocarbon based fuels, aromatic hydrocarbons (benzene, toluene), low molecular weight silicone oils.

Additional Approvals: AMS 3304
AMS 3357
MIL-G-21569 Class 2
A-A-59588 Class 2a, 2b, Grade 70

REPORT DATA

| <u>Original Physical Properties</u> | <u>Test Method</u> | <u>Spec Limits</u> | <u>Test Results</u> |
|-----------------------------------------|--------------------|--------------------|---------------------|
| Hardness, Shore A, pts. | ASTM D2240 | 70 ±5 | 69 |
| Tensile Strength, PSI | ASTM D412 | 725 | 1098 |
| Ultimate Elongation, % | ASTM D412 | 150 | 191 |
| (Z1) Specific Gravity | ASTM D297 | report | 1.42 |
| | | | |
| (B37) Compression Set (Plied) | | | |
| <u>22 hrs. @ 347°F</u> | | | |
| Percent of Original Deflection, Max | ASTM D395 Method B | 30 | 7 |
| | | | |
| (A19) Heat Age | | | |
| <u>70 hrs. @ 437°F</u> | | | |
| Hardness Change, pts. | ASTM D573 | +10 | +3 |
| Tensile Strength Change, % | | -25 | -4 |
| Ultimate Elongation Change, % | | -30 | -8 |
| | | | |
| (EA14) Fluid Resistance | | | |
| <u>Water, 70 hrs @ 212°F</u> | | | |
| Hardness Change, pts. | ASTM D471 | ± 5 | 0 |
| Volume Change, % | | ± 5 | -1 |
| | | | |
| (E016) Fluid Resistance | | | |
| <u>IRM 901, 70 hrs @ 302°F</u> | | | |
| Hardness Change, pts. | ASTM D471 | -0 to -15 | -4 |
| Tensile Strength Change, % | | -20 | +1 |
| Ultimate Elongation Change, % | | -20 | -4 |
| Volume Change, % | | 0 to +15 | +3 |
| | | | |
| (E036) Fluid Resistance | | | |
| <u>IRM 903, 70 hrs @ 302°F</u> | | | |
| Hardness Change, pts. | ASTM D471 | -40 | -20 |
| Volume Change, % | | +60 | +36 |
| | | | |
| (G11) Tear Resistance | | | |
| <u>kN/m, min.</u> | ASTM D624 | 9 | 14 |
| | | | |
| (F19) Low Temperature Resistance | | | |
| Nonbrillite after 3 min @ -67°F | ASTM D1329 | pass/fail | Pass |

"Purchaser use only. Reproduce only in full. Data pertains to items referenced only."

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