

COMPOUND DATA SHEET

Parker O-Ring Division, North America

ENGINEERED SEAL PRODUCTS

CONTACT US

MATERIAL REPORT

LTR Report Number: 95609

Date: 7/11/2013

<u>Title:</u> Evaluation of Parker Compound S1224-70

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

| | Test | Spec | Test |
|-------------------------------------|--------------------|---------------|----------------|
| Original Physical Properties | <u>Method</u> | <u>Limits</u> | <u>Results</u> |
| Hardness, Shore A, pts. | ASTM D2240 | 70 ±5 | 70 |
| Tensile Strength, PSI | ASTM D412 | 725 | 1094 |
| Ultimate Elongation, % | ASTM D412 | 150 | 217 |
| (Z1) Specific Gravity | ASTM D297 | report | |
| (B37) Compression Set (Plied) | | | |
| 22 hrs. @ 347°F | | | |
| Percent of Original Deflection, Max | ASTM D395 Method B | 30 | 24 |
| (A19) Heat Age | | | |
| <u>70 hrs. @ 437°F</u> | | | |
| Hardness Change, pts. | ASTM D573 | +10 | +5 |
| Tensile Strength Change, % | | -25 | -21 |
| Ultimate Elongation Change, % | | -30 | -20 |
| (EA14) Fluid Resistance | | | |
| Water, 70 hrs @ 212°F | | | |
| Hardness Change, pts. | ASTM D471 | ± 5 | +4 |
| Volume Change, % | | ± 5 | -1 |
| (E016) Fluid Resistance | | | |
| IRM 901, 70 hrs @ 302°F | | | |
| Hardness Change, pts. | ASTM D471 | -0 to -15 | -5 |
| Tensile Strength Change, % | | -20 | +6 |
| Ultimate Elongation Change, % | | -20 | +8 |
| Volume Change, % | | 0 to +15 | +4 |
| (E036) Fluid Resistance | | | |
| IRM 903, 70 hrs @ 302°F | | | |
| Hardness Change, pts. | ASTM D471 | -40 | -22 |
| Volume Change, % | | +60 | +35 |
| (G11) Tear Resistance | | | |
| kN/m, min. | ASTM D624 | 9 | 21 |
| (F19) Low Temperature Resistance | | | |
| Nonbrillte after 3 min @ -67°F | ASTM D1329 | pass/fail | Pass |

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"The recording of false, fictitious, or fruaudulent statements or entries in this report may be punishable as a felony under federal law."