GLOBAL O-RING and SEAL
ALL-AROUND BETTER

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# Material Test Report

## Compound F70-B402 — Fluorosilicone, FDA, MIL-DTL-25988C

| Material Summary | | |
|---|---|---|
| Material Type: | Fluorosilicone | |
| Durometer: | 70 | |
| Color: | Blue | |
| Special Properties: | FDA Compliant | |
| | Meets MIL-DTL-25988C Type I, Class 1, Grade 70 | |
| Recommended Temperature Range (Static) | -60°C (-76 °F) to 176°C (348.8 °F) | |
| Cure System | Peroxide | |
| Meets Specification: | ASTM D2000 M2FK606 A19 EF31 EO36 F19 Z1 | |
| **Original Properties** | **Requirements** | **Typical Results** |
| Hardness, (Shore A) (ASTM D2240-15) | 70±5 | 72 |
| Tensile Strength, psi(MPa) (ASTM D412-16) | 870(6)(min) | 1030(7.10) |
| Elongation, (%) (ASTM D412-16) | 150(min) | 222 |
| Modulus at 100%, psi(MPa) (ASTM D412-16) | | 553(3.81) |
| Density, (Mg/m³) (CNS 5341-96, Method A) | | 1.58 |
| **HEAT AGE, A19 (70 hrs. @ 225°C)** | **Requirements** | **Typical Results** |
| Hardness Change, pts., ASTM D573-04 | +15(max) | +1 |
| Tensile Strength Change, %, ASTM D573-04 | -45(max) | -30 |
| Elongation Change, %, ASTM D573-04 | -45(max) | -22 |
| Weight Change, %, ASTM D573-04 | | -0.9 |
| **COMPRESSION SET, Z1 (22 Hrs @ 175 ℃)** | **Requirements** | **Typical Results** |
| ASTM 395-18,Method B | 25%(plied)(max) | 18.5 |
| **FUEL C RESISTANCE, EF31 (70 Hrs @ 23 ℃)** | **Requirements** | **Typical Results** |
| Hardness Change, pts., ASTM D471-16a | -15~0 | -11 |
| Tensile Strength Change, %, ASTM D471-16a | -60(max) | -7 |
| Elongation Change, %, ASTM D471-16a | -50(max) | -9 |
| Volume Change, %, ASTM D471-16a | 0~+25 | +21.2 |
| **IRM 903 OIL, EO36 (70 Hrs @ 150 ℃)** | **Requirements** | **Typical Results** |
| Hardness Change, pts., ASTM D471-16a | -10~0 | -4 |
| Tensile Strength Change, %, ASTM D471-16a | -35(max) | -7 |
| Elongation Change, %, ASTM D471-16a | -30(max) | -5 |
| Volume Change, %, ASTM D471-16a | 0~+10 | +3.6 |

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## Compound F70-B402 — Fluorosilicone, FDA, MIL-DTL-25988C

| LOW TEMP BRITTLENESS POINT, F19 | Requirements | Typical Results |
|---|---|---|
| 3 minute @ -55 ℃ (ASTM D2137-11, Method C) | | |
| Sample type: T-50, | | |
| Coolant : Isopropyl alcohol, | | |
| Low Temperature Property, | no crack | pass |

Compound Previously Known As: F70323

Report Date: 3/20/2023