# S1005 MATERIAL SUMMARY

50 Durometer, Orange, General Use

Request a Quote

Silicones are excellent seal materials for extreme temperature in static applications. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

## ABOUT #S1005

S1005 is a 50A, general use silicone material. Silicones can be synthesized with a wide variety of properties and compositions.

## FEATURES

- Excellent heat and compression resistance
- Excellent resistance to oxygen, ozone and sunlight
- Good chemical resistance
- Resistance to fungal and biological attack
- Flexible
- Good electrical insulation

## APPLICATION EXAMPLES

- Extreme hot & cold applications
- Outdoor weathering applications

## ADDITIONAL INFORMATION

- Service Temperature of -65° to 400°F
- Cure System: Peroxide
- Spec: ASTM 2000 M5GE506 A19 B37 E016 E036

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## PHYSICAL PROPERTIES

| ORIGINAL PROPERTIES | ASTM D2000 Requirements | Typical Test Results |
|---|---|---|
| Hardness, Shore A | 50 +/- 5 | 50 |
| Color | Orange | Orange |
| Tensile Strength, MPa, psi | 6.0 (865) | 6.7 (965) |
| Ultimate Elongation, % | 250 | 380 |
| HEAT RESISTANCE – A19, ASTM D 573 (70 hrs. @ 225°C) | ASTM D2000 Requirements | Typical Test Results |
| Hardness Change, points, Shore A | 10 | 6 |
| Tensile Strength Change, %, max. | -25 | -13 |
| Ultimate Elongation Change, %, max. | -30 | -28 |
| COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C) | ASTM D2000 Requirements | Typical Test Results |
| Permanent Set, %, max. | 25 | 10 |
| FLUID RESISTANCE –ASTM #1 Oil – E016, ASTM D 471 (70 hrs. @ 150°C) | ASTM D2000 Requirements | Typical Test Results |
| Hardness Change, points, Shore A | 0 to -15 | -8 |
| Tensile Strength Change, %, max. | -20 | -13 |
| Ultimate Elongation Change, %, max. | -20 | -8 |
| Volume Change, % | 0 to10 | 7 |
| FLUID RESISTANCE – IRM 903 Oil, -E036, ASTM D 471 (70 hrs. @ 150°C) | ASTM D2000 Requirements | Typical Test Results |
| Hardness Change, points, Shore A, max. | -30 | -10 |
| Volume Change, %, max. | 60 | 29 |