

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 #S1000

S1000 is a 70A silicone material that is FDA Compliant to 21 CFR 177.2600. Silicones can be synthesized with a wide variety of properties and compositions.

FEATURES

- FDA Compliant to 21 CFR 177.2600
- 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

- Food applications
- Extreme hot & cold applications
- Outdoor weathering applications

ADDITIONAL INFORMATION

- Service Temperature of -75° to 400°F
- Cure System: Peroxide
- Spec: ASTM 2000 M7GE705 A19 B37 EA14 E016 E036 F19

This information is accurate and reliable to the best of our knowledge. However, Marco Rubber makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use.

PHYSICAL PROPERTIES

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	68
Color	Orange	Orange
Tensile Strength, psi	725	899
Ultimate Elongation, %	150	219
HEAT RESISTANCE – A19, ASTM D 573 (70 hrs. @ 225°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A	10	3
Tensile Strength Change, %, max.	-25	-9
Ultimate Elongation Change, %, max.	-30	-26
COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set, %, max.	30	12
FLUID RESISTANCE, Water – EA14, ASTM D 471 (70 hrs. @ 100°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A	+/- 5	-2
Volume Change, %	+/- 5	3
FLUID RESISTANCE – ASTM #1 Oil – E016, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A	-15 to 10	-5
Tensile Strength Change, %, max.	-20	9
Ultimate Elongation Change, %, max.	-20	7
Volume Change, %	0 to 15	5
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	-12
Tensile Strength Change, %, max.	-20	-15
Ultimate Elongation Change, %, max.	-20	7
Volume Change, %, max.	60	36
LOW TEMPERATURE RESISTANCE – F19, ASTM D 2137 Method A, 9.3.2	ASTM D2000 Requirements	Typical Test Results
(Non-brittle after 3 min. @ -55°C)	Pass	Pass