

### **S1043 MATERIAL SUMMARY**

50 Durometer, Orange, Low Temperature

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 #S1043**

S1043 is a soft 50A, low temperature silicone material. Silicones can be synthesized with a wide variety of properties and compositions.

#### **FEATURES**

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

#### **APPLICATION EXAMPLES**

- Extreme hot & cold applications
- Outdoor weathering applications

#### ADDITIONAL INFORMATION

- · Service Temperature of -103° to 400°F
- Cure System: Peroxide
- Spec: ASTM 2000 M5GE505 A19 B37 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.



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## **PHYSICAL PROPERTIES**

ORIGINAL PROPERTIES	ASTM D2000	Typical Test Results
Hardness, Shore A	50 +/- 5	55
Color	Orange	Orange
Tensile Strength, MPa (psi)	5.0 (720)	5.2 (750)
Ultimate Elongation, %	250	261
Specific Gravity		1.14
HEAT RESISTANCE – A19, ASTM D 573 (70 hrs. @ 225°C)	ASTM D2000	Typical Test Results
Hardness Change, points, Shore A	10	2
Tensile Strength Change, %, max.	-25	7
Ultimate Elongation Change, %, max.	-30	-2
COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	ASTM D2000	Typical Test Results
Permanent Set, %, max.	25	12
FLUID RESISTANCE –ASTM #1 Oil – E016, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000	Typical Test Results
Hardness Change, points, Shore A	0 to -15	-4
Tensile Strength Change, %, max.	-20	-12
Ultimate Elongation Change, %, max.	-20	-7
Volume Change, %	0 to+10	2
FLUID RESISTANCE – ASTM #3 Oil, -E036, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000	Typical Test Results
Hardness Change, points, Shore A, max.	-30	-24
Volume Change, %, max.	60	15
LOW TEMPERATURE RESISTANCE – F19, ASTM D 2137 Method A, 9.3.2	ASTM D2000	Typical Test Results
(Non-brittle after 3 min. @ -100°C)	Non-brittle	Non-brittle