



## Marco Compound # S1024

### 50 Durometer, Blue, FDA Compliant Silicone

### Technical Datasheet

#### **Common Names:**

Silicone, VQM

#### **General Description:**

Silicones are excellent seal materials for extreme temperature in static applications. Silicones can be synthesized with a wide variety of properties and compositions. Please contact [engineering@marcorubber.com](mailto:engineering@marcorubber.com) for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

#### **Features:**

- FDA compliant
- 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

#### **Limitations:**

- Not recommended for dynamic application
- Concentrated solvents, oils, concentrated acids, diluted sodium hydroxide.
- Poor abrasion resistance
- Low strength
- High gas permeability

#### **Service Temperature:**

-65 to 437° F (-54 to 225° C)

#### **Specifications**

ASTM D2000 M5GE 50S A19 B37 EO16 EO36

#### EXCEEDS THE FOLLOWING PHYSICAL PROPERTY REQUIREMENTS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	50 +/- 5	54
Color	Blue	Blue
Tensile Strength, MPa	5.0	6.0
Ultimate Elongation, %	250 Min.	267
Specific Gravity		1.144

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

<b>HEAT RESISTANCE – (70 hrs. @ 225°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, Shore A	+10 Max.	+2
Tensile Strength Change, %, max.	-25	-21
Ultimate Elongation Change, %, max.	-30	-27

<b>COMPRESSION SET – ASTM D 325 Method B (22 hrs. @ 175°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Permanent Set, %, max.	25	21

<b>FLUID RESISTANCE –ASTM #1 Oil – ASTM D 471 (70 hrs. @ 150°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, Shore A	0 to -15	-6
Tensile Strength Change, %, max.	-20	-18
Ultimate Elongation Change, %, max.	-20	+30
Volume Change, %	0 to+10	+3

<b>FLUID RESISTANCE –ASTM #3 Oil – ASTM D 471 (70 hrs. @ 150°C)</b>	<b>ASTM D2000 Requirements</b>	<b>Typical Test Results</b>
Hardness Change, points, Shore A	-30	--21
Volume Change, %	+60	+19

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