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# Marco Compound # S1128 70 Durometer, Orange, A-A-59588 (2A/B-70) Compliant High Temperature 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 <a href="mailto:engineering@marcorubber.com">engineering@marcorubber.com</a> for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

#### Features:

- High Temperature
- Meets A-A-59588 Class 2A and 2B Grade 70
- 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 600° F (-54 to 315° C)

### **ASTM Specification:**

ASTM 2000 M5GE706 A19 B37 EO16 EO36 Z1 (Z1 = High Temp.)

#### PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	69
Color	Orange	Orange
Tensile Strength, psi	865	940
Ultimate Elongation, %	150	220
Specific Gravity		1.18

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<b>HEAT RESISTANCE –</b> A19, ASTM D 573 (70 hrs. @ 225°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A	+10	+5
Tensile Strength Change, %, max.	-25	+1
Ultimate Elongation Change, %, max.	-30	-6

COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set, %, max.	25	20

FLUID RESISTANCE -ASTM #1 Oil - EO36, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A	0 to -15	-5
Tensile Strength Change, %, max.	-20	-14
Ultimate Elongation Change, %, max.	-20	+1
Volume Change, %	0 to +10	+2

FLUID RESISTANCE - IRM 903 Oil, -EO36, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A, max.	-30	-19
Volume Change, %, max.	+ 60	+13

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