Request a Quote

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Marco Compound # S1164

50 Durometer, FDA Conforming, Red Silicone with Internal Silicone Oil
Technical Datasheet

Common Names:
Silicone, VQM

General Description:
Silicones are excellent seal materials for extreme temperature in static applications. Marco's S1164 compound is FDA conforming and contains internal silicone oil for increased lubricity. Silicones can be synthesized with a wide variety of properties and compositions. Please contact engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

Features:
- Internally lubricated with silicone oil
- FDA conforming
- Excellent heat and compression resistance
- Excellent resistance to oxygen, ozone and sunlight
- Good chemical resistance
- Resistance to fungal and biological attack
- 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

Cure System:
Peroxide

Service Temperature:
-65 to 400° F (-54 to 205° C)

Specification:
ASTM 2000 M5GE506 A19 B37 EO16 EO36

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	50 +/- 5	53
Color	Red	Red
Tensile Strength, MPa (psi)	6.0 (865)	7.8 (1131)

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Ultimate Elongation, %	250	410
Specific Gravity		1.19

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	-11
Ultimate Elongation Change, %, max.	-30	-17

COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	**ASTM D2000 Requirements**	**Typical Test Results**
Permanent Set, %, max.	25	18

FLUID RESISTANCE –ASTM #1 Oil – EO16, 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	-11
Ultimate Elongation Change, %, max.	-20	-16
Volume Change, %	0 to10	+9

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	-21
Volume Change, %, max.	+60	+19