



Marco Compound # S1002

70 Durometer, Orange, Mil Spec Compliant

Technical Datasheet

Common Names:

Silicone, VQM

General Description:

Silicones are excellent seal materials for extreme temperature in static applications. Marco compound S1002 is specifically formulated to meet AMS 3304; A-A-59588 (ZZ-R-765). 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:

- Meets AMS 3304; A-A-59588 (ZZ-R-765) CL 2A, 2B GR 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:

-85 to 400° F (-62 to 204° C)

PHYSICAL PROPERTY STANDARDS

| ORIGINAL PROPERTIES | AMS 3304 / A-A-59588 Requirements | Typical Test Results |
|------------------------|--------------------------------------|-------------------------|
| Hardness, Shore A | 70 +/- 5 | 72 |
| Color | Orange | Orange |
| Tensile Strength, psi | 650 Min. | 1055 |
| Ultimate Elongation, % | 125 Min. | 257 |
| Specific Gravity, g/cc | ----- | 1.28 |

| COMPRESSION SET – ASTM D 325 Method B (22 hrs. @ 175°C) | AMS 3304 / A-A-59588 Requirements | Typical Test Results |
|---|--------------------------------------|-------------------------|
| Permanent Set, % Max. | 25 | 18 |

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.

Request a Quote

| AIR AGING – ASTM D 573 (70 hrs. @ 437°F) | AMS 3304 / A-A-59588 Requirements | Typical Test Results |
|---|--|-----------------------------|
| Hardness Change, pts Shore A | ± 10 | +5 |
| Tensile Strength Change, % | -25 Max. | -16 |
| Elongation Change, % | -40 Max. | -20 |

| LOW TEMPERATURE RESISTANCE – ASTM D 2137 Method A, 9.3.2 | AMS 3304 / A-A-59588 Requirements | Typical Test Results |
|---|--|-----------------------------|
| Non-brittle after 3 min. @ -65° C | Pass | Pass |

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