Request a Quote

(800) 775-6525 Fax: (800) 421-2923
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Marco Compound # S1155
60 Durometer, Orange, AMS 3303 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 for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

Features:
- Meets AMS 3303G specifications
- 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 400° F (-54 to 205° C)

Specification:
AMS 3303G

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	AMS 3303G Requirements	Typical Test Results
Hardness, Shore A	60 +/- 5	61
Color	Orange	Orange
Tensile Strength, MPa (psi)	4.14 (600)	6.1 (885)
Ultimate Elongation, %	100	287

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HEAT RESISTANCE – A19, ASTM D 573 (70 hrs. @ 225°C)	**AMS 3303G Requirements**	**Typical Test Results**
Hardness Change, points, Shore A	-5 to +10	+2
Tensile Strength Change, %, max.	-15	-11
Ultimate Elongation Change, %, max.	-20	-16

COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	**AMS 3303G Requirements**	**Typical Test Results**
Permanent Set, %, max.	30	12

FLUID RESISTANCE –ASTM #1 Oil – EO16, ASTM D 471 (70 hrs. @ 150°C)	**AMS 3303G Requirements**	**Typical Test Results**
Hardness Change, points, Shore A	-15 to +5	-3
Tensile Strength Change, %, max.	-35	-11
Ultimate Elongation Change, %, max.	-25	-6
Volume Change, %	0 to 10	+8

FLUID RESISTANCE – ASTM #3 Oil, -EO36, ASTM D 471 (70 hrs. @ 150°C)	**AMS 3303G Requirements**	**Typical Test Results**
Hardness Change, points, Shore A, max.	----	-11
Volume Change, %, max.	----	+28

WATER RESISTANCE – (70 hrs. @ 100°C)	**AMS 3303G Requirements**	**Typical Test Results**
Hardness Change, points, Shore A, max.	+/-5	+3
Volume Change, %, max.	+/-5	+5

LOW TEMPERATURE BRITTLENESS	**AMS 3303G Requirements**	**Typical Test Results**
Test after 3 min. at -55° C	----	Non-Brittle