

Marco Compound # S1020

70 Durometer, Translucent, FDA Compliant 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 sales@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 400° F (-54 to 205° C)

Specification:

ASTM D2000 M5GE706 A19 B37 EO16 EO36

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	73
Color	Clear	Clear
Tensile Strength, psi	865	1,100
Ultimate Elongation, %	150	280

HEAT RESISTANCE – A19, ASTM D 573 (70 hrs. @ 225°C)	ASTM D2000	Typical Test
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	Requirements	Results
Hardness Change, points, Shore A	+10	+5
Tensile Strength Change, %, max.	-25	-5
Ultimate Elongation Change, %, max.	-30	-3

COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set, %, max.	25	11

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	-3
Tensile Strength Change, %, max.	-20	-10
Ultimate Elongation Change, %, max.	-20	-6
Volume Change, %	0 to 10	+7

FLUID RESISTANCE – ASTM #3 Oil, -EO36, ASTM D 471 (70 hrs. @ 150°C)	ASTM D2000 Requirements	Typical Test Results
Hardness Change, points, Shore A, max.	-30	-6
Volume Change, %, max.	+ 60	+14

Date: 2016-7-1

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