



Marco Compound # S1083

70 Durometer, Translucent, Platinum Cured, FDA & USP Class VI 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 engineering@marcorubber.com for assistance in selecting a specialized compound when increased resistance to temperature, lubricants, or physical properties is required.

Features:

- FDA & USP Class VI compliant
- Excellent heat and compression resistance
- Excellent resistance to oxygen, ozone and sunlight
- Good chemical resistance
- Resistance to fungal and biological attack
- Available in lower durometers
- Platinum cure

Limitations:

- Not recommended for dynamic application
- Concentrated solvents, oils, concentrated acids, diluted sodium hydroxide.
- Poor abrasion resistance
- Low strength
- High gas permeability

Cure System:

Platinum

Service Temperature:

-65 to 400° F

Specification:

ASTM D2000 M5GE706 G11 A19 B37 EA14 F19

PHYSICAL PROPERTY STANDARDS

ORIGINAL PROPERTIES	ASTM D2000 Requirements	Typical Test Results
Hardness, Shore A	70 +/- 5	71
Color	Translucent	Translucent
Tensile Strength, psi	870 min.	1,340
Ultimate Elongation, %	150 min.	600

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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	-24
Ultimate Elongation Change, %, max.	-30	-5

COMPRESSION SET – B37, ASTM D 325 Method B (22 hrs. @ 175°C)	ASTM D2000 Requirements	Typical Test Results
Permanent Set, %, max.	25	12.5

WATER RESISTANCE – EA14, ASTM D 471-06 (70 hrs. @ 100°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

LOW TEMPERATURE BRITTLINESS POINT- F19, ASTM D2137-94 (3 min. @ -55° C)	ASTM D2000 Requirements	Typical Test Results
Non-Brittle	Pass	Pass

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