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Marco Compound # S1173 70 Durometer, Gray, Conductive Silicone Technical Datasheet

Common Names:

Silicone, VQM

General Description:

Silicones are excellent seal materials for extreme temperature in static applications. Marco compound S1173 is filled with nickel coated aluminum for electrical conductivity. 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:

- Nickel coated aluminum filled
- Electrically conductive
- Excellent heat and compression resistance
- Excellent resistance to oxygen, ozone and sunlight

Limitations:

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

Service Temperature:

-67 to 257° F (-55 to 125° C)

Typical Physical Properties

| ORIGINAL PROPERTIES | TEST METHOD | TYPICAL RESULTS |
|--------------------------------------|---------------|------------------------|
| Conductive Filler | | Nickel coated Aluminum |
| Conductive Filler Abbreviation | | Ni/Al |
| Elastomer Binder | | Silicone |
| Color | | Gray |
| Compression Set, % (70 hrs @ 100° C) | ASTM D395 | 35 |
| Durometer, Shore A | ASTM D2240 | 70 |
| Tensile Strength, psi | ASTM D 412 | 150 |
| Elongation, % (Min.) | ASTM D 412 | 100 |
| Tear Strength, lb/in (Min.) | ASTM D 624 | 35 |
| Specific Gravity, g/cc | ASTM D 792 | 2.00 |
| Volume Resistivity, Ohms-cm | Mil-DTL 83528 | .140 |