



Overview

SI700R02 is an orange FDA compliant, Peroxide cured, 70 shore A Silicone VMQ rubber designed for use in food and a wide range of industry applications.

Features & Benefits

- FDA compliant to 21 CFR 177.2600
- Comparable to Parker S1138-70
- Good resistance to ozone, detergent, salt water, vegetable, and animal oils and much more.
- Available in a variety of colors and durometers and shapes.

Service Temperature

- -60°C to 205°C (-75°F to 400F)

Specification

- ASTM D 2000 M7GE705 A19 B37 E016 E036 F19

Test Data

| Table 1. Physical Properties | | |
|-------------------------------------|--------------|------------|
| Test | Requirements | Results |
| Color | Orange | Orange |
| Hardness, Shore A | 70+/-5 | 70 |
| Tensile Strength, psi (MPa) | 725 min | 946 (6.52) |
| Elongation | 150% min | 210% |
| Specific Gravity, g/cm ³ | | 1.32 |



Table 2. A19 - Heat Aging - 70 hrs at 225°C

| Test (Change) | Requirements | Results |
|---------------------|--------------|---------|
| Hardness, Shore A | +10 max | +6 |
| Tensile Strength, % | -25 max | -9 |
| Elongation, % | -30 max | -27 |

Table 3. B37 - Compression Set - 22 hrs at 175°C

| Test (Change) | Requirements | Results |
|------------------|--------------|---------|
| Permanent Set, % | 30 max | 11 |

Table 4. E016 - IRM 901 Oil Resistance - 70 hrs at 150°C

| Test (Change) | Requirements | Results |
|---------------------|--------------|---------|
| Hardness, Shore A | -10 to 0 | -4 |
| Tensile Strength, % | -30 max | +12 |
| Elongation, % | -20 max | +1 |
| Volume, % | 0 to +15 | +4.2 |

Table 5. E036 - IRM 903 Oil Resistance - 70 hrs at 150°C

| Test (Change) | Requirements | Results |
|-------------------|--------------|---------|
| Hardness, Shore A | -40 max | -19 |
| Volume, % | +60 max | +39 |

Table 6. F19 - Low Temp Brittleness Test - 3 mins at -55°C

| Test (Change) | Requirements | Results |
|---------------|--------------|-------------|
| Brittleness | Non-Brittle | Non-Brittle |