



Overview

SI800R13 is an 80 shore A silicone offering best-in-class low temperature performance at a competitive price. It has excellent resistance to compression set & environmental conditions.

Features & Benefits

- Ultra-low temperature resistance
- Low compression set
- Exceptional environmental resistance (O₂, O₃, & UV)
- ZZ-R-765 Class 1a & 1b

Service Temperature

- -82°C to 205°C (-118°F to 400°F)

Specification

- ASTM D 2000 7GE807 A19 B37 EA14 E036 F19

Test Data

Table 1. Physical Properties

Test	Requirements	Results
Color	Orange	Orange
Hardness, Shore A	80+/-5	80
Tensile Strength, psi (MPa)	725 min (5 min)	825 (5.7)
Elongation	150% min	215%
Brittleness Temp, °C		-87
TR-10 Temp, °C		-75



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

Test (Change)	Requirements	Results
Hardness, Shore A	+10 max	+8
Tensile Strength, %	-25 max	-23
Elongation, %	-30 max	+3

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

Test (Change)	Requirements	Results
Permanent Set, %	30 max	28

Table 4. EA14 - Water Resistance - 70 hrs at 100°C

Test (Change)	Requirements	Results
Hardness, Shore A	-5 to +5	+2
Volume, %	-5 to +5	+0.6

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

Test (Change)	Requirements	Results
Hardness, Shore A	-40 max	-25
Volume, %	+60 max	+47

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

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