



Compound

**19701****SILICONE  
70 DUROMETER  
RUST RED COLOR****PRODUCT DATA SHEET**

Compound 19701 is a 70 durometer rust red colored Silicone elastomer, it exhibits excellent low temperature flexibility. It has good resistance to heat and compression set.

This compound will meet or exceed the specifications listed and has the following physical properties:

ASTM D2000 6 GE 705 A19 B37 EO16 F19 G11 EA14  
7 GE 707 A19 B37 EO16 F19 G11 EA14  
5 GE 709 A19 B37 EO16 F19 G11 EA14

ZZ-R-765 Class 1a & 1b, 2a & 2b Grade 70  
A-A-59588 Class 1a & 1b, 2a & 2b Grade 70  
AMS 3337

**Original Properties**

Modulus @ 100% Elongation	459 psi	3.2 MPa
Tensile Strength	949 psi	6.5 MPa
Ultimate Elongation	207 %	
Hardness, Shore A	69 Durometer	
Specific Gravity	1.54 grams/cc	
Brittleness Temperature	< -132 °F	< -91 °C
Tear Resistance, Die B	78 ppi	13.7 kN/m
Tear Resistance, Die C	68 ppi	11.9 kN/m

**Compression Set**

Solid: 22 hrs @ 347°F (175°C)	9.1 %
Solid: 70 hrs @ 302°F (150°C)	10.1 %
Plied: 22 hrs @ 347°F (175°C)	16.9 %
Plied: 70 hrs @ 302°F (150°C)	14.5 %

**HEAT AGED: 70 hrs @ 392°F (200°C)**

Change - Tensile Strength	- 1.7 %
Change - Elongation	- 22.2 %
Change - Hardness, Shore A	+ 2

**HEAT AGED: 70 hrs @ 437°F (225°C)**

Change - Tensile Strength	+ 0.6 %
Change - Elongation	- 20.8 %
Change - Hardness, Shore A	+ 4

**HEAT AGED: 22 hrs @ 437°F (225°C)**

Change - Tensile Strength	- 0.6 %
Change - Elongation	- 14.5 %
Change - Hardness, Shore A	+ 2



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**DISTILLED WATER AGED: 70 hrs @ 212°F (100°C)**

Change - Hardness, Shore A 0  
Change - Volume + 1.1 %

**ASTM OIL #1: 70 hrs @ 212°F (100°C)**

Change - Tensile Strength - 4.3 %  
Change - Elongation - 5.3 %  
Change - Hardness, Shore A - 4  
Change - Volume + 4.8 %

**ASTM OIL #1: 70 hrs @ 302°F (150°C)**

Change - Tensile Strength - 11.8 %  
Change - Elongation - 15.5 %  
Change - Hardness, Shore A - 5  
Change - Volume + 6.3 %

**ASTM OIL #1: 70 hrs @ 347°F (175°C)**

Change - Tensile Strength - 9.0 %  
Change - Elongation - 1.9 %  
Change - Hardness, Shore A - 6  
Change - Volume + 7.2 %

**ASTM OIL #3: 70 hrs @ 302°F (150°C)**

Change - Hardness, Shore A - 21  
Change - Volume + 53.2 %

**OZONE: 168 hrs @ 50 mPA - ASTM D1149,D518 METHOD A**

NO CRACKING PASS

**TORSIONAL STIFFNESS: 72 hrs @ -75°C**

TSR 1.4