



MATERIAL PROPERTY DATA SHEET
S500-70 SILICONE

GENERAL PROPERTIES

S500-70 offers outstanding temperature resistance across a broad range, from -80°F to +440°F. This inert, FDA grade silicone is ideal for use in food handling and medical applications. S500-70 also provides excellent resistance to sunlight, ozone, oxygen, UV light and moisture meeting many industry standards including MIL-SPEC.

<u>ASTM D2000</u> <u>Designation</u>	<u>PHYSICAL PROPERTIES</u>	<u>REQUIREMENTS</u>	<u>TYPICAL RESULTS</u>
GE	<u>ORIGINAL PROPERTIES</u>		
	Durometer, Shore A	70 +/- 5	70
	Tensile, MPa (psi), Minimum	6 (870)	6.2 (995)
	Elongation, % Minimum	150	284
	Specific Gravity	-	1.39
	Color	-	Red
A19	<u>HEAT AGE, D573, 70 HRS @ 225°C</u>		
	Durometer Change, Points	+10	+4
	Tensile Strength Change, % Maximum	-25	-7
	Elongation Change, % Maximum	-30	-14
	Bend flat, no cracking or checking	Pass	Pass
B37	<u>COMPRESSION SET, METHOD B, 22 HRS @ 175°C</u>		
	Deflection, % Maximum	25	12
EA14	<u>WATER RESISTANCE, D471, IRM 901 OIL, 70 HRS @ 150°C</u>		
	Durometer Change, Points	+/- 5	-3
	Volume Change, %	+/- 5	+4
EO16	<u>FLUID RESISTANCE, D471, IRM 901 OIL, 70 HRS @ 150°C</u>		
	Durometer Change, Points	0 to -15	-5
	Tensile Change, % Maximum	-20	-6
	Elongation Change, % Maximum	-20	-4
	Volume Change, %	+10 / -0	+6
	Decomposition	None	None
	Surface Tackiness	None	None
EO36	<u>FLUID RESISTANCE, D471, IRM 903 OIL, 70 HRS @ 150°C</u>		
	Durometer Change, Points	-30	-14
	Volume Change, %	+60	+37
F19	<u>LOW-TEMP RESISTANCE, D2137, METHOD C, 9.3.3</u>		
	Nonbrittle after 3 min at -55°C	Pass	Pass
	Nonbrittle after 3 min at -65°C (-85°F)	-	Pass
G11	<u>TEAR RESISTANCE, D624, DIE B</u>		
	Tensile < 7.0 MPa, Minimum kN/m	9	19



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SPECIFICATIONS MET

ASTM D2000 M5GE 706 A19 B37 EA14 EO16 EO36 F19 G11

REACH SVHC 219

RoHS 2015/863

California Proposition 65

Dodd-Frank Consumer Protection Act: No conflict materials (Tantalum, Tin, Tungsten & Gold)

A-A-59588B Class 2A & 2B, Grade 70 (Formally ZZ-R-765)

FDA 21 CFR 177.2600

AMS 3304 Rev J