

Material Test Report

Compound S70-A601

Silicone, Red, FDA Compliant

Material Summary		
Material Type:	Silicone Rubber	
Durometer:	70	
Color:	Red	
Special Properties:	FDA Compliant 21 CFR 177.2600	
Recommended Temperature Range (Static)	-55°C (-67°F) to 200°C (392°F)	
Meets Specification:	ASTM D2000 M5GE706 A19 B37 EA14 EO16 EO36 F19	
Original Properties	Requirements	Typical Results
Hardness, Shore A, ASTM D2240-15	70 ± 5	69 to 71
Tensile Strength, psi, ASTM D412-16	725(min)	943 to 1116
Elongation, %, ASTM D412-16	150(min)	221 to 256
Specific Gravity (S.G), ASTM D297-15(19)	Report	1.32 to 1.40
HEAT AGE, A19 (70 hrs. @ 225°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D573-04	+10(max)	+2 to +3
Tensile Strength Change, %, ASTM D573-04	-25(max)	-8 to -11
Elongation Change, %, ASTM D573-04	-30(max)	-28 to -13
COMPRESSION SET, B37 (22 hrs. @ 175°C)	Requirements	Typical Results
Compression Set, %, ASTM D395-18, Method B	30(max)	13 to 20.0
WATER RESISTANCE, EA14 (70 hrs. @ 100°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	±5	-2 to -1
Volume Change, %, ASTM D471-16a	±5	+1.7 to +3
IRM 901 OIL, EO16 (70 hrs. @ 150°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-15~0	-7 to -6
Tensile Strength Change, %, ASTM D471-16a	-20(max)	-4 to -3
Elongation Change, %, ASTM D471-16a	-20(max)	-6 to +6
Volume Change, %, ASTM D471-16a	0~+15	+3 to +4.3
IRM 903 OIL, EO36 (70 hrs. @ 150°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-40(max)	-20 to -18
Volume Change, %, ASTM D471-16a	+60(max)	+33.6 to +37

Material Test Report

Compound S70-A601

Silicone, Red, FDA Compliant

LOW TEMP BRITTLENESS POINT TEST, F19	Requirements	Typical Results
(3 min. @ -55°C, ASTM D2137-11)		
Low Temperature Property	no crack	pass

Compound Previously Known As: S70610

Report Date: 3/4/2022

Information within this report is believed to be accurate and reliable. However, Global O-Ring and Seal makes no warranty, expressed or implied, that parts supplied in this material will perform satisfactorily in specific applications. It's the customer's responsibility to evaluate prior to use.