

Material Test Report

Compound F70-B401

Fluorosilicone, FDA, UL157

Material Summary		
Material Type:	Fluorosilicone	
Durometer:	70	
Color:	Blue	
Special Properties:	FDA Compliant, UL 157	
Recommended Temperature Range (Static)	-60°C (-76 °F) to 176°C (348.8 °F)	
Cure System	Peroxide	
Meets Specification:	ASTM D2000 M2FK606 A19 EF31 EO36 F19 Z1	
Original Properties	Requirements	Typical Results
Hardness, (Shore A) (ASTM D2240-15)	70±5	72
Tensile Strength, psi(MPa) (ASTM D412-16)	870(6)(min)	1030(7.10)
Elongation, (%) (ASTM D412-16)	150(min)	222
Modulus at 100%, psi(MPa) (ASTM D412-16)		553(3.81)
Density, (Mg/m ³) (CNS 5341-96, Method A)		1.58
HEAT AGE, A19 (70 hrs. @ 225°C)	Requirements	Typical Results
Hardness Change, pts., ASTM D573-04	+15(max)	+1
Tensile Strength Change, %, ASTM D573-04	-45(max)	-30
Elongation Change, %, ASTM D573-04	-45(max)	-22
Weight Change, %, ASTM D573-04		-0.9
COMPRESSION SET, Z1 (22 Hrs @ 175 °C)	Requirements	Typical Results
ASTM 395-18, Method B	25%(plied)(max)	18.5
FUEL C RESISTANCE, EF31 (70 Hrs @ 23 °C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-15~0	-11
Tensile Strength Change, %, ASTM D471-16a	-60(max)	-7
Elongation Change, %, ASTM D471-16a	-50(max)	-9
Volume Change, %, ASTM D471-16a	0~+25	+21.2
IRM 903 OIL, EO36 (70 Hrs @ 150 °C)	Requirements	Typical Results
Hardness Change, pts., ASTM D471-16a	-10~0	-4
Tensile Strength Change, %, ASTM D471-16a	-35(max)	-7
Elongation Change, %, ASTM D471-16a	-30(max)	-5
Volume Change, %, ASTM D471-16a	0~+10	+3.6

Material Test Report

Compound F70-B401

Fluorosilicone, FDA, UL157

LOW TEMP BRITTLENESS POINT, F19	Requirements	Typical Results
3 minute @ -55 °C (ASTM D2137-11, Method C)		
Sample type: T-50,		
Coolant : Isopropyl alcohol,		
Low Temperature Property,	no crack	pass

Report Date: 3/20/2023

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.