



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	S70-B602	MATERIAL	Silicone
DUROMETER	70 Shore A	COLOR	Red
DESIGNATION	UL157	REPORT DATE	2025-05-08
TEMP RANGE	-55°C (-67°F) to 225°C (437°F)	CURE SYSTEM	Peroxide
SPECIFICATION	ASTM D2000 M4HK710 A1-11 B38 EF31 EO78 Z1		

PHYSICAL PROPERTIES					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
(Z1) Hardness (Shore A)	D2240-15, Type A	-	Shore A	75	75 ±5
Tensile Strength	D412-16, Method A	-	MPa (PSI)	16.5 (2,393)	10 (1,450) min
Elongation at Break	D412-16, Method A	-	%	204	175 min
100% Modulus	D412-16, Method A	-	MPa (PSI)	6.99 (1,014)	-
Density	CNS 5341-96, Method A	-	Mg/m ³	1.84	-

A1-11 – HEAT RESISTANCE					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573-04	70h @ 275°C (527°F)	points	1	10 max
Tensile Strength Change	D573-04	70h @ 275°C (527°F)	%	-22	-40 max
Elongation Change	D573-04	70h @ 275°C (527°F)	%	14	-20 max
Weight Change	D573-04	70h @ 275°C (527°F)	%	-5.9	-

B38 – COMPRESSION SET					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18, Method B	22h @ 200°C (392°F) (plied)	%	12.1	50 max

EF31 – FLUID RESISTANCE, ASTM FUEL C RESISTANCE					
PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70h @ 23°C (73°F)	points	-3	±5
Tensile Strength Change	D471-16a	70h @ 23°C (73°F)	%	-8	-25 max
Elongation Change	D471-16a	70h @ 23°C (73°F)	%	2	-20 max
Weight Change	D471-16a	70h @ 23°C (73°F)	%	3.5	0 to 10

E078 – FLUID RESISTANCE, ASTM NO. 101 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70h @ 200°C (392°F)	points	-8	-15 to 5
Tensile Strength Change	D471-16a	70h @ 200°C (392°F)	%	-2	-40 max
Elongation Change	D471-16a	70h @ 200°C (392°F)	%	5	-20 max
Weight Change	D471-16a	70h @ 200°C (392°F)	%	10.2	0 to 15

ADDITIONAL APPROVALS

FDA

Data shown is based on supplier testing of compound slabs/buttons and is provided for general reference only.