



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	S70-A601	MATERIAL	Silicone
DUROMETER	70 Shore A	COLOR	Red
DESIGNATION	FDA	REPORT DATE	3/4/2022
TEMP RANGE	-55°C (-67°F) to 225°C (437°F)	CURE SYSTEM	Peroxide
SPECIFICATION	ASTM D2000 M5GE706 A19 B37 EA14 EO16 EO36 F19		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240	-	Shore A	69	70 ±5
Tensile Strength	D412	-	MPa (PSI)	6.5 (943)	5 (725) min
Elongation at Break	D412	-	%	221	150 min
Specific Gravity	D297-15(19)	-	g/cm ³	1.32	Report

A19 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573	70h @ 225°C (437°F)	pts	2	10 max
Tensile Strength Change	D573	70h @ 225°C (437°F)	%	-8	-25 max
Elongation Change	D573	70h @ 225°C (437°F)	%	-28	-30 max

B37 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set, ASTM, Method B	D395	22h @ 175°C (347°F)	%	13	30 max

EA14 – FLUID RESISTANCE, DISTILLED WATER

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70h @ 100°C (212°F)	pts	-2	±5
Volume Change	D471	70h @ 100°C (212°F)	%	1.7	±5

EO16 – FLUID RESISTANCE, IRM 901 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70h @ 150°C (302°F)	pts	-7	-15 to 0
Tensile Strength Change	D471	70h @ 150°C (302°F)	%	-4	-20 max
Elongation Change	D471	70h @ 150°C (302°F)	%	-6	-20 max

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Volume Change	D471	70h @ 150°C (302°F)	%	3	0 to 15

EO36 – FLUID RESISTANCE, IRM 903 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70h @ 150°C (302°F)	pts	-20	-40 max
Volume Change	D471	70h @ 150°C (302°F)	%	33.6	60 max

F19 – LOW-TEMPERATURE RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Low Temperature Brittleness	D2137	3 min. @ -55°C (-67°F)	-	pass	pass

ADDITIONAL APPROVALS

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