



MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	S70-B001	MATERIAL	Silicone
DUROMETER	70 Shore A	COLOR	Clear
DESIGNATION	USP Class VI	REPORT DATE	2020-02-25
TEMP RANGE	-60°C (-76°F) to 225°C (437°F)	CURE SYSTEM	Platinum
SPECIFICATION	-		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240-15 ^{E1}	-	Shore A	70	70 ±5
Tensile Strength	D412-16	-	MPa (PSI)	8.71 (1,263)	6 (870) min
Elongation at Break	D412-16	-	%	576	150 min
100% Modulus	D412-16	-	MPa (PSI)	2.23 (323)	-
Density	CNS 5341-96,Method A	-	Mg/m ³	1.17	-

A19 – HEAT RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573-04	70 Hrs @ 225°C (437°F)	points	3	10 max
Tensile Strength Change	D573-04	70 Hrs @ 225°C (437°F)	%	-24	-25 max
Elongation Change	D573-04	70 Hrs @ 225°C (437°F)	%	-29	-30 max
Weight Change	D573-04	70 Hrs @ 225°C (437°F)	%	-1.4	-

B37 – COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395-18,Method B	22 Hrs @ 175°C (347°F) (plied)	%	13.3	30 max

E016 – FLUID RESISTANCE, IRM 9010IL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 150°C (302°F)	points	-4	-15 to 0
Tensile Strength Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-3	-20 max
Elongation Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-5	-20 max
Volume Change	D471-16a	70 Hrs @ 150°C (302°F)	%	4.6	0 to 15

E036 – FLUID RESISTANCE, IRM 903 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471-16a	70 Hrs @ 150°C (302°F)	points	-20	-40 max
Tensile Strength Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-21	-
Elongation Change	D471-16a	70 Hrs @ 150°C (302°F)	%	-24	-
Volume Change	D471-16a	70 Hrs @ 150°C (302°F)	%	34.7	60 max

F19 – LOW-TEMPERATURE RESISTANCE

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Low Temperature Brittleness	D2137-11,Method C	3 minute @ -55°C (-67°F)	-	pass	pass

ADDITIONAL APPROVALS

-

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