MATERIAL DATA SHEET

Global O-Ring and Seal, LLC

COMPOUND	A80-F101	**MATERIAL**	AFLAS®
DUROMETER	80 Shore A	**COLOR**	Black
DESIGNATION	General Purpose	**REPORT DATE**	2025-06-17
TEMP RANGE	-10°C (14°F) to 220°C (428°F)	**CURE SYSTEM**	Peroxide
SPECIFICATION	–		

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness (Shore A)	D2240	–	Shore A	**79**	80 ±5
Tensile Strength	D412	–	MPa (PSI)	**15 (2,176)**	14 (2,000) min
Elongation at Break	D412	–	%	**284**	–
Modulus at 100%	D412	–	MPa (PSI)	**5.78 (838)**	–
Specific Gravity	D297	–	g/cm^3	**1.62**	–

HEAT AGING

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D573	70 hr at 250°C (482°F)	pts	**5**	–
Tensile Strength Change	D573	70 hr at 250°C (482°F)	%	**-5**	–
Elongation Change	D573	70 hr at 250°C (482°F)	%	**12**	–

COMPRESSION SET

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Compression Set	D395	22 hr at 175°C (347°F)	%	**32**	–
Compression Set	D395	22 hr at 200°C (392°F)	%	**42**	–

FLUID RESISTANCE – FUEL C

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70 hr at 23°C (73°F)	pts	**-37**	–
Tensile Strength Change	D471	70 hr at 23°C (73°F)	%	**-65**	–
Elongation Change	D471	70 hr at 23°C (73°F)	%	**-52**	–
Volume Change	D471	70 hr at 23°C (73°F)	%	**59.5**	–

FLUID RESISTANCE – IRM901 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70 hr at 150°C (302°F)	pts	**2**	–
Tensile Strength Change	D471	70 hr at 150°C (302°F)	%	**8**	–
Elongation Change	D471	70 hr at 150°C (302°F)	%	**-2**	–
Volume Change	D471	70 hr at 150°C (302°F)	%	**1.7**	–

FLUID RESISTANCE – IRM903 OIL

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70 hr at 150°C (302°F)	pts	**-6**	–
Tensile Strength Change	D471	70 hr at 150°C (302°F)	%	**-8**	–
Elongation Change	D471	70 hr at 150°C (302°F)	%	**4**	–
Volume Change	D471	70 hr at 150°C (302°F)	%	**12.4**	–

FLUID RESISTANCE – MOBIL JET OIL II

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70 hr at 200°C (392°F)	pts	**-11**	–
Tensile Strength Change	D471	70 hr at 200°C (392°F)	%	**-22**	–
Elongation Change	D471	70 hr at 200°C (392°F)	%	**-17**	–
Volume Change	D471	70 hr at 200°C (392°F)	%	**15.6**	–

FLUID RESISTANCE – SERVICE LIQUID NO. 101

PROPERTY	TEST METHOD	CONDITION	UNITS	RESULT	REQUIREMENT
Hardness Change	D471	70 hr at 200°C (392°F)	pts	**-17**	–
Tensile Strength Change	D471	70 hr at 200°C (392°F)	%	**-24**	–
Elongation Change	D471	70 hr at 200°C (392°F)	%	**8**	–
Volume Change	D471	70 hr at 200°C (392°F)	%	**23**	–

ADDITIONAL APPROVALS

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