

Material Data Sheet

Arylast® 9974

COMPOUND: 9974

POLYMER: FKM

<u>DESCRIPTION</u>: 75a Black – Aerospace Grade Designed to Meet AMS7410

Property		ASTM Method	Specification Limits	Typical Values	Units
Physical Properties (AS568-214 O-ring)	Hardness	D-2240	70 – 80	78	Shore A
	Specific Gravity	D-792		1.87	
	Tensile	D-1414	1300 (8.96) min.	1840	psi (MPa)
	Elongation	D-1414	120 min.	151	%
	M100	D-1414		297	psi (MPa)
Compression Set (AS568-214 O-ring)	22 Hrs @ 392°F (200°C)	D-395B	20 max.	12.1	%
	336 Hrs @ 392°F (200°C)		56 max.	54.5	%
Heat Aging 70 Hrs @ 518°F (270°C) Air	Hardness Change	-D-573	-10 to +5	+1	Pts. Shore A
	Tensile Change		-50 max.	-13.4	%
	Elongation Change		-20 max.	+74.4	%
	Weight Loss		-10 max.	-6.9	%
Immersion 70 Hrs @ 73°F (23°C) <u>ASTM Ref. Fuel B</u>	Hardness Change	- D-471	-10 max.	-3	Pts. Shore A
	Tensile Change		-35 max.	+27.0	%
	Elongation Change		-20 max.	-10.3	%
	Volume Change		+1 to +10	+5.9	%
Immersion 70 Hrs @ 392°F (200°C) <u>AMS3085 (Reference Oil</u> <u>300)</u>	Hardness Change	D-471	-10 max.	-2	Pts. Shore A
	Tensile Change		-30 max.	-9.2	%
	Elongation Change		-20 max.	+3.3	%
	Volume Change		0 to +10	+7.9	%
	Compression set 70 Hrs @ 392°F (200°C)		20 max.	15.2	%
	Compression set 336 Hrs @ 392°F (200°C)		35 max.	32.4	%
Immersion 70 Hrs @ 275°F (135°C)	Hardness Change	D-471	-10 max.	-3	Pts. Shore A
	Tensile Change		-30 max.	-12.5	%

The descriptions, design, and performance information, and recommended uses for the products, tests and data described herein are based generally on our design and manufacturing experience, product testing in specific conditions, and industry standards. The foregoing information is for general guidance only and does not constitute a guaranty or warranty of design or warranty of performance. All warranties regarding the products described herein will be given in writing at the time of sale of such products. Each purchaser of such products must decide if the products are suitable to the intended use of such purchaser. Armorlene®, Arylast™, Arylex®, dures®, CDI Products®, Fibrex®, Hythane®, Parradyne®, Permeon®, OptiPak®, Tuff Breed®, and WSP Extreme® are registered trademarks of J.H. Fenner & Co. Limited or other members of Fenner Group Holdings Limited, the divisional parent company of CDI Products, LLC, or its corporate parents (including Compagnie Générale des Etablissements Michelin SCA).



Material Data Sheet

Arylast® 9974

Property		ASTM Method	Specification Limits	Typical Values	Units
MIL-PRF-83282	Elongation Change		-20 max.	-5.9	%
	Volume Change		0 to +10	+3.3	%
	Compression set 70 Hrs @ 275°F (135°C)		20 max.	12.1	%
	Compression set 336 Hrs @ 275°F (135°C)		35 max.	12.5	%
Immersion 70 Hrs @ 275°F (135°C) <u>MIL-PRF-87257</u>	Hardness Change	D-471	-10 max.	-2	Pts. Shore A
	Tensile Change		-30 max.	-8.8	%
	Elongation Change		-20 max.	-1.1	%
	Volume Change		0 to +10	+3	%
	Compression set 70 Hrs @ 275°F (135°C)		20 max.	12.5	%
	Compression set 336 Hrs @ 275°F (135°C)		35 max.	12.1	%
Immersion 70 Hrs @ 275°F (135°C) <u>MIL-PRF-5606</u>	Hardness Change	D-471	-10 max.	-4	Pts. Shore A
	Tensile Change		-30 max.	-3.0	%
	Elongation Change		-20 max.	+2.2	%
	Volume Change		0 to +10	+1.5	%
	Compression set 70 Hrs @ 275°F (135°C)		20 max.	11.8	%
	Compression set 336 Hrs @ 275°F (135°C)		35 max.	12.5	%
TR-10			-47.0 (-43.9) max.	-49.7 (-45.4)	°F (°C)

Rev. None - 2024-04 BF