

Material Data Sheet

Arylast® 6680

COMPOUND: 6680

POLYMER: Fluorosilicone

DESCRIPTION: 70a Blue - Aerospace Grade Designed to Meet MIL-DTL-25988C Type 1/Class 1

Property		ASTM Method	Specification Limits	Typical Values	Units
Physical Properties (AS568-214 O-ring)	Hardness	D-2240	75 – 85	83	Shore A
	Specific Gravity	D-792		1.57	
	Tensile	D-1414	750 (5.17) min.	1051 (7.25)	psi (MPa)
	Elongation	D-1414	70 min.	194	%
	M100	D-1414		577 (3.98)	psi (MPa)
Compression Set (AS568-214 O-ring)	22 Hrs @ 347°F (175°C)	D-395B	45 max. (50 if under 0.110 inch/2.79mm)	20.6	%
	70 Hrs @ 75°F (23.9°C)		20 max. (25 if under 0.110 inch/2.79mm)	8.8	%
Heat Aging 70 Hrs @ 392°F (200°C) Air	Hardness Change	-D-573	+10 to -5	+3	Pts. Shore A
	Tensile Change		-20 max.	-11.1	%
	Elongation Change		-20 max.	-19.0	%
	Weight loss		-2 max.	-1.9	%
Immersion 70 Hrs @ 302°F (150°C) AMS3021	Hardness Change	D-573	+15 to -15	-8	Pts. Shore A
	Tensile Change		-30 max.	-10.7	%
	Elongation Change		-15 max.	-0.8	%
	Volume Change		1-15	+9.5	%
	Compression set		60 max. (65 if under 0.110 inch/2.79mm)	29.4	%
Immersion 22 Hrs @ 75°F (23.9°C) AMS2629 Type 1	Hardness Change	D-573	0 to -20	0	Pts. Shore A
	Tensile Change		-30 max.	-4.7	psi (MPa)
	Elongation Change		-30 max.	+12.3	%
	Volume Change		1-25	+5.0	%
TR-10			-70 (-56.7) max.	-83 (-63.9)	°F (°C)

Rev. None - 2024-04 BF