COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: MTR 176748
Test Date: 9/5/2013
Report Date: 7/21/2017

Title: Evaluation of Parker Compound N0674-70 in accordance with MIL-P-82745

Elastomer Type: Nitrile (NBR) N0674-70

Purpose: To show compliance with all phases of the specification.

Specification: MIL-P-82745

Color: Black

Recommended Temperature Range: -30°F to 250°F

Recommended For: Aliphatic hydrocarbons (propane, butane), petroleum oil, mineral oil, grease diesel fuel, fuel oils, vegetable oils, HFA, HFB, and HFC hydraulic fluids, water (below 212°F), salt & alkali solutions, and dilute acids.

Not Recommended For: Fuels of high aromatic content, aromatic hydrocarbons (benzene), chlorinated hydrocarbons (trichloroethylene), strong acids, glycols, ozone, weather, atmospheric aging, and polar solvents (ketone, acetone, acetic acid, ethylene-ester)

Certifications: MIL-P-82745, MIL-G-21569 CL 1, UL

REPORT DATA

Original Physical Properties	**TEST METHOD**	**Spec Limits**	**Test Results**
Hardness, Shore A, pts.	ASTM D2240	70±5	75
Tensile Strength, PSI	ASTM D412	1500	2381
Ultimate Elongation, %	ASTM D412	250	315
Compression Set			
22 hrs. @ 212°F (100°C)	ASTM D395		
Percent of Original Deflection, max	Method B	25	5
Oil IRM 901 Fluid Resistance			
70 hrs. @ 212°F (100°C)			
Hardness Change, pts.	ASTM D471	+3	0
Tensile Change, %		+20	+5
Elongation Change, %		+25	-11
Volume Change, %		+3	-3
Oil IRM 903 Fluid Resistance			
70 hrs. @ 212°F (100°C)			
Hardness Change, pts.	ASTM D471	-10 to +5	-4
Tensile Change, %		+45	+3
Elongation Change, %		+45	-9
Volume Change, %		+25	+8
Heat Resistance			
70 hrs. @ 212°F (100°C)			
Hardness Change, pts.	ASTM D573	+15	+2
Tensile Change, %		+30	+6
Elongation Change, %		+50	-20