COMPOUND DATA SHEET

Parker O-Ring Division, North America

MATERIAL REPORT

Report Number: 98231
1/14/2014

Title: Evaluation of Parker Compound

Elastomer Type: Fluorocarbon (FKM) V0894-90

Purpose: To obtain typical test data.

Specification: ASTM D2000 M3HK914 A1-10 B38 EF31 EO78 Z1
Z1 = Specific Gravity

Color: Brown

Recommended Temperature Range: -15°F to 400°F

Recommended For: Mineral oil and grease, IRM 901 oil, IRM 902 oil, IRM 903 oil, nonflammable hydraulic fluids, silicone oils and greases, aliphatic hydrocarbons (propane, butane, natural gas), aromatic hydrocarbons (benzene, toluene), chlorinated hydrocarbons (trichloroethylene and carbon tetrachloride), gasoline, high vacuum, ozone, weather, and aging resistance.

Not Recommended For: Glycol based brake fluids, ammonia gas, amines, alkalis, superheated steam, and low molecular weight organic acids (formic and acetic acids).

REPORT DATA

Original Physical Properties	**Test Method**	**Spec Limits**	**Results**
Hardness, Shore A, pts.	ASTM D2240	90 ±5	89
Tensile Strength, PSI (Mpa)	ASTM D412	2031 (10)	2346
Ultimate Elongation, %	ASTM D412	100	121
(Z1) Specific Gravity	ASTM D297	2.30 ± .03	2.29
Fluid Resistance (Basic Requirement)			
IRM 903, 70 hrs @ 302°F			
Volume Change, %	ASTM D471	+10	+2
Compression Set (Basic Requirement)			
22 hrs @ 347°F	ASTM D395 Method B	35	20
(A1-10) Heat Age			
70 hrs. @ 482°F			
Hardness Change, pts.	ASTM D573	+10	+1
Tensile Strength Change, %		-25	-14
Ultimate Elongation Change, %		-25	-9
(B38) Compression Set (Plied)			
22 hrs. @ 392°F			
Percent of Original Deflection, Max	ASTM D395 Method B	50	24
(EF31) Fluid Resistance Fuel C, 70 hrs @ 73°F			
Hardness Change, pts.	ASTM D471	± 5	-4
Tensile Strength Change, %		-25	-14
Ultimate Elongation Change, %		-20	+3
Volume Change, %		0 to +10	+3
(E078) Fluid Resistance			
Service Fluid 101, 70 hrs @ 392°F			
Hardness Change, pts.	ASTM D471	-15 to +5	-9
Tensile Strength Change, %		-40	-16

Ultimate Elongation Change, %	-20	-6
Volume Change, %	0 to +15	+11