

COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division United States

MATERIAL REPORT

Report Number: 117762 9/27/2016

Title: Evaluation of Parker Compound

Elastomer Type: Chloroprene (CR) C1278-80

Purpose: To obtain typical test data.

Specification: ASTM D2000 M2BC810 A14 EO14 EO34

Color: Black

Recommended Temperature Range: -35°F to 225°F

Recommended For: Paraffin based material with low DPI, silicone oil and grease,

water and water solvents at lower temperatures, refrigerants, ammonia, carbon dioxide, improved ozone, weathering and

aging resistance when compared with nitrile. Limited compatibility with naphthalene based mineral oil (IRM 902

and IRM 903), glycol based brake fluids

Not Recommended For: Aromatic hydrocarbons (benzene), chlorinated hydrocarbons

(trichloroethylene), and polar solvents (ketones, esters,

ethers)

"Purchaser use only. Reproduce only in full. Data pertains to items referenced only."

"The recording of false, fictitious, or fraudulent statements or entries in this report may be punishable as a felony under federal law."

REPORT DATA

Hardness, Shore A, pts. ASTM D2240 80 ± 5 80 Tensile Strength, PSI (Mpa) ASTM D412 1450 (10) 2010 Ultimate Elongation, % ASTM D412 100 149 (A14) Heat Age 70 hrs. @ 212°F Hardness Change, pts. ASTM D573 +15 0 Tensile Strength Change, % -15 -1 Ultimate Elongation Change, % -40 -5 (B14) Compression Set 22 hrs. @ 212°F Percent of Original Deflection, Max ASTM D395 Method B 35 16 (E014) Fluid Resistance IRM 901, 70 hrs. @ 212°F Hardness Change, pts ASTM D471 ±10 0 Tensile Strength Change, % -30 -4 Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 <	Original Physical Properties	Test Method	Spec Limits	Results
Ultimate Elongation, %	Hardness, Shore A, pts.	ASTM D2240	80 ± 5	80
(A14) Heat Age 70 hrs. @ 212°F Hardness Change, pts. ASTM D573 +15 0 Tensile Strength Change, % -15 -1 Ultimate Elongation Change, % -40 -5 (B14) Compression Set 22 hrs. @ 212°F Percent of Original Deflection, Max ASTM D395 Method B 35 16 (EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % -30 0 Ultimate Elongation Change, % -30 -4 Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -70 -37 Ultimate Elongation Change, % -70 -37 Ultimate Elongation Change, % -75 -35	Tensile Strength, PSI (Mpa)	ASTM D412	1450 (10)	2010
### Property of Company of Compan	Ultimate Elongation, %	ASTM D412	100	149
### Property of Company of Compan				
Hardness Change, pts. ASTM D573 +15 0 Tensile Strength Change, % -15 -1 Ultimate Elongation Change, % -40 -5 (B14) Compression Set 22 hrs. @ 212°F Percent of Original Deflection, Max ASTM D395 Method B 35 16 (EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % -30 0 Ultimate Elongation Change, % -30 -4 Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs. @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -70 -37 Ultimate Elongation Change, % -55 -35	(A14) Heat Age			
Tensile Strength Change, % - 15 - 1 Ultimate Elongation Change, % - 40 - 5 (B14) Compression Set 22 hrs. @ 212°F Percent of Original Deflection, Max ASTM D395 Method B 35 16 (EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % - 30 0 Ultimate Elongation Change, % - 10 to +15 - 1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts - 70 - 37 Ultimate Elongation Change, % - 70 - 37 Ultimate Elongation Change, % - 70 - 37 Ultimate Elongation Change, %	70 hrs. @ 212°F			
Ultimate Elongation Change, % - 40 - 5 (B14) Compression Set 22 hrs. @ 212°F Percent of Original Deflection, Max	Hardness Change, pts.	ASTM D573	+15	0
(B14) Compression Set 22 hrs. @ 212°F Percent of Original Deflection, Max	Tensile Strength Change, %		- 15	-1
22 hrs. @ 212°F Percent of Original Deflection, Max ASTM D395 Method B 35 16 (EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F ASTM D471 ±10 0 Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % - 30 - 4 Volume Change, % - 10 to +15 - 1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report - 12 Hardness Change, pts report - 12 Tensile Strength Change, % - 70 - 37 Ultimate Elongation Change, % - 55 - 35	Ultimate Elongation Change, %		- 40	-5
22 hrs. @ 212°F Percent of Original Deflection, Max ASTM D395 Method B 35 16 (EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F ASTM D471 ±10 0 Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % - 30 - 4 Volume Change, % - 10 to +15 - 1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report - 12 Hardness Change, pts report - 12 Tensile Strength Change, % - 70 - 37 Ultimate Elongation Change, % - 55 - 35				
Percent of Original Deflection, Max ASTM D395 Method B 35 16 (EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % -30 Ultimate Elongation Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -55 -35	(B14) Compression Set			
(EO14) Fluid Resistance IRM 901, 70 hrs. @ 212°F Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % -30 -4 Ultimate Elongation Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -55 -35	22 hrs. @ 212°F			
IRM 901, 70 hrs. @ 212°F Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % - 30 0 Ultimate Elongation Change, % - 30 - 4 Volume Change, % -10 to +15 - 1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F report - 12 Hardness Change, pts report - 12 Tensile Strength Change, % - 70 - 37 Ultimate Elongation Change, % - 55 - 35	Percent of Original Deflection, Max	ASTM D395 Method B	35	16
Hardness Change, pts. ASTM D471 ±10 0 Tensile Strength Change, % -30 0 Ultimate Elongation Change, % -30 -4 Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -55 -35	(EO14) Fluid Resistance			
Tensile Strength Change, % Ultimate Elongation Change, % -30 -4 Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -55 -35	IRM 901, 70 hrs. @ 212°F			
Ultimate Elongation Change, % -30 -4 Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, %	Hardness Change, pts.	ASTM D471	±10	0
Volume Change, % -10 to +15 -1 (E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report -12 Tensile Strength Change, % -70 -37 Ultimate Elongation Change, % -55 -35	Tensile Strength Change, %		- 30	0
(E034) Fluid Resistance IRM 903, 70 hrs @ 212°F Hardness Change, pts report - 12 Tensile Strength Change, % - 70 - 37 Ultimate Elongation Change, % - 55 - 35	Ultimate Elongation Change, %		- 30	- 4
IRM 903, 70 hrs @ 212°FHardness Change, ptsreport- 12Tensile Strength Change, %- 70- 37Ultimate Elongation Change, %- 55- 35	Volume Change, %		-10 to +15	- 1
Hardness Change, pts report - 12 Tensile Strength Change, % - 70 - 37 Ultimate Elongation Change, % - 55 - 35	(E034) Fluid Resistance			
Tensile Strength Change, % - 70 - 37 Ultimate Elongation Change, % - 55 - 35	IRM 903, 70 hrs @ 212°F			
Ultimate Elongation Change, % - 55 - 35	Hardness Change, pts		report	- 12
	Tensile Strength Change, %		- 70	- 37
Volume Change, % +120 +32	Ultimate Elongation Change, %		- 55	- 35
	Volume Change, %		+120	+32