COMPOUND DATA SHEET

MATERIAL REPORT

LTR Report Number: 86034
Date: 4/10/2012

Title: Evaluation of Parker Compound N1059-90

Elastomer Type: Acrylonitrile-Butadiene (NBR)

Purpose: To obtain typical test data.

Specification: ASTM D2000 M2BG910 B14 B34 EA14 EF11 EF21 E014 E034 Z1 (Specific Gravity) Z2 (TR-10) Z3 (Min. Elongation 95%)

Color: Black

Recommended Temperature Range: -30°F to 275°F

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

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

Additional Approvals: N/A

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REPORT DATA

Original Physical Properties	Test Method	Spec Limits	Test Results
Hardness, Shore A, pts.	ASTM D2240	90 ±5	87
Tensile Strength, PSI	ASTM D412	1450	2284
Ultimate Elongation, %	ASTM D412	95	112
(Z1) Specific Gravity	ASTM D297	report	1.33
(B14) Compression Set (Solid)			
22 hrs. @ 212°F			
Percent of Original Deflection, Max	ASTM D395 Method B	25	16
(B34) Compression Set (Plied)			
22 hrs. @ 212°F			
Percent of Original Deflection, Max	ASTM D395 Method B	25	20
Heat Age, (Basic Requirement)			
70 hrs. @ 212°F			
Hardness Change, pts.	ASTM D573	± 15	+4
Tensile Strength Change, %		± 30	+25
Ultimate Elongation Change, %		-50	+4
(EA14) Fluid Resistance			
Water, 70 hrs @ 212°F			
Hardness Change, pts.	ASTM D471	± 10	-3
Volume Change, %		± 15	+5
(EF11) Fluid Resistance			
Fuel A, 70 hrs @ 73°F			
Hardness Change, pts.	ASTM D471	± 10	-2
Tensile Strength Change, %		-25	+19
Ultimate Elongation Change, %		-25	+3
Volume Change, %		-5 to +10	+3
(EF21) Fluid Resistance			
Fuel B, 70 hrs @ 73°F			
Hardness Change, pts.	ASTM D471	0 to -30	-16
Tensile Strength Change, %		-60	-26
Ultimate Elongation Change, %		-60	-23
Volume Change, %		0 to +40	+27

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(E014) Fluid Resistance	Test	Spec	Test
IRM 901, 70 hrs @ 212°F	**Method**	**Limits**	**Results**
Hardness Change, pts.	ASTM D471	-5 to +10	+1
Tensile Strength Change, %		-25	+21
Ultimate Elongation Change, %		-45	+9
Volume Change, %		-10 to +5	-1
(E034) Fluid Resistance			
IRM 903, 70 hrs @ 212°F			
Hardness Change, pts.	ASTM D471	-10 to +5	-6
Tensile Strength Change, %		-45	+18
Ultimate Elongation Change, %		-45	-1
Volume Change, %		0 to +25	+9
(Z2) Low Temperature Resistance			
TR-10, temperature °F	ASTM D1329	report	-9

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