



COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

08/22/2011

Title: Evaluation of Parker Compound N0300-90 in accordance with ASTM D2000 M6BG910 A14 EO14 EO34 Z1 Z2

Elastomer Type: Nitrile (NBR) N0300-90

Purpose: To obtain typical test data.

Color: Black

Recommended Temperature Range: -40°F to 180°F

Recommended For: Back up rings; Aliphatic hydrocarbons (propane, butane), petroleum oil, mineral oil, grease, diesel fuel, fuel oils, vegetable oils, HFA, HFB, & HFC hydraulic fluids, water, 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)



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as a felony under federal law."*

Original Physical Properties

	<u>Test Method</u>	<u>Spec Limits</u>	<u>Results</u>
Hardness, Shore A, pts	ASTM D2240	90 ± 5	89
Tensile Strength, MPa, Min	ASTM D412	10	21
Ultimate Elongation, % Min	ASTM D412	100	132
Modulus at 50% Elongation, MPa	ASTM D412	Report	7
Modulus at 100% Elongation, MPa	ASTM D412	Report	16

(A14) Heat Age - 70 hrs @ 100°C

Hardness Change, pts.	ASTM D573	±15	+6
Tensile Strength Change, %, Max		-20	+1
(Z2) Ultimate Elongation Change, %, Max		-60	-52

Compression Set - 70 hrs @ 100°C

Percent of Original Deflect, Max	ASTM D395 Method B	50	29
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(EO14) Fluid Resistance**IRM 901 Oil, (70 hrs @ 100°C)**

Hardness, Shore A, pts	ASTM D471	-5 to +15	+6
Tensile Strength, psi, Min		-25	+9
Ultimate Elongation, % Min		-45	-36
Volume Change, %		-10 to +5	-8

(EO34) Fluid Resistance**IRM 903 Oil, (70 hrs @ 100°C)**

Hardness, Shore A, pts	ASTM D471	0 to -20	+2
Tensile Strength, psi, Min		-45	-13
Ultimate Elongation, % Min		-45	-41
Volume Change, %		0 to +35	0

(Z1) Fluid Resistance**Distilled Water, (70 hrs @ 100°C)**

Hardness, Shore A, pts	ASTM D471	Report	0
Volume Change, %		Report	+1

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