



Compound Data Sheet
O-Ring Division United States

MATERIAL REPORT

TITLE: General evaluation of Parker's General Purpose Nitrile Compound N1059-90.

PURPOSE: To provide a general physical and chemical attribute profile of this compound.

Temperature: -30 to 275 (F)

Parker O-Ring Division
2360 Palumbo Drive
Lexington, Kentucky 40509
(859) 269-2351

REPORT DATA

Original Physical Properties

	<u>Platens</u>
Hardness, Shore A	87
Tensile Strength, min, psi	3149
Elongation at Break, min.	100
Modulus @ 50%, psi	3149

Heat Aged ASTM D865

70 Hrs. @ 125° C (257°F)

Hardness Change, pts.	+6
Tensile Strength Change, max	-8.2
Elongation Change, max	-50
Surface Condition	No Cracks

Compression Set

ASTM D395, METHOD B

70 Hrs. @ 100° C (212° F) % of Deflection	15.1%
70 Hrs. @ 125° C (257° F) % of Deflection	41
70 Hrs. @ 150° C (302° F) % of Deflection	44

Immersion in ASTM No. 1 Oil ASTM D471

70 Hrs. @ 125°C (257°F)

Hardness Change, pts.	-2
Tensile Strength Change, % max	-6.6
Elongation Change, % max	-20
Volume Change, % max	-0.5

Immersion in ASTM No. 3 Oil ASTM D471

70 Hrs. @ 125°C (257°F)

Hardness Change, pts	-5
Tensile Strength Change, % max	-9.8
Elongation Change, % max	0
Volume Change, % max	+9.8

Immersion in 50/50 Ethylene Glycol/Water

ASTM D471 70 Hrs. @ 100°C (212°F)

Hardness Change, pts	-1
Tensile Strength Change, % max	+5.5
Elongation Change, % max	-20
Volume Change, % max	+2.8

Aging in Diesel #2

70 Hrs. @ 177°C (350°F)

Volume Change, % max	16.1
Compression Set, % max	38.1

TR-10 Testing (°C) ASTM D1329

-25