



COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: 157434
3/13/2016

Title: Evaluation of Parker Compound KA158-70

Elastomer Type: Hydrogenated Nitrile (HNBR, HSN)

Purpose: To obtain typical test data.

Specification: ASTM D2000 M2DH716 A26 B16 EO16 EO36 Z1 (Elongation min, 175%), Z2 (TR-10)

Color: Black

Recommended Temperature Range: -40°F to 300°F/325°F

Recommended For: Aliphatic hydrocarbons (propane, butane, petroleum oil, mineral oil and grease, diesel fuel, fuel oils) vegetable oils, animal fats, mineral oils, greases, HFA, HFB, and HFC hydraulic fluids, glycols, water, salt & alkali solutions, dilute acid bases and salt solutions at moderate temperatures, ozone, aging and weathering

Not Recommended For: Chlorinate hydrocarbons (trichloroethylene), strong acids, polar solvents (ketone, acetone, acetic acid, ethylene-ester), auto and aircraft brake fluids

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

REPORT DATA

Original Physical Properties

<u>Original Physical Properties</u>	<u>Test Method</u>	<u>Spec Limits</u>	<u>Results</u>
Hardness, Shore A, pts.	ASTM D2240	70 ± 5	72
Tensile Strength, PSI (Mpa)	ASTM D412	2321	3020
(Z1) Ultimate Elongation, %	ASTM D412	175	213.0

(A26) Heat Age

70 hrs. @ 302°F

Hardness Change, pts	ASTM D573	+10	+4
Tensile Strength Change, %		-25	-8
Ultimate Elongation Change, %		-30	+14

(B16) Compression Set (Plied)

22 hrs. @ 302°F

Percent of Original Deflection, Max	ASTM D395 Method B	30	8
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(EO16) Fluid Resistance

IRM 901, 70 hrs @ 302°F

Hardness Change, pts	ASTM D471	0 to +10	+2
Tensile Strength Change, %		-20	-2
Ultimate Elongation Change, %		-30	+9
Volume Change, %		±5	-1

(E036) Fluid Resistance

IRM 903, 70 hrs @ 302°F

Hardness Change, pts.	ASTM D471	-15	-10
Tensile Strength Change, %		-40	-8
Ultimate Elongation Change, %		-40	-5
Volume Change, %		+25	+22

(Z2) Low Temperature Resistance

TR-10, Temperature °F (°C)	ASTM D1329	-24 (-31)	-29 (-34)
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