

COMPOUND DATA SHEET



CONTACT US

MATERIAL REPORT

LTR Report Number: 85371

Date: 02/02/2012

<u>Title:</u> Evaluation of Parker Compound N1470-70

Elastomer Type: Acrylonitrile-Butadiene (NBR)

<u>Purpose:</u> To obtain typical test data.

Specification: ASTM D2000 M2BG714 B14 B34 EA14 EF11 E014 E034 Z1 (Specific Gravity) Z2

(TR-10)

Color: Black

Recommended Temperature Range: -40°F to 225°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 (up to 212°F), 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

Parker O-Ring Division, North America

REPORT DATA

| | Test | Spec | Test |
|-------------------------------------|--------------------|---------------|---------|
| Original Physical Properties | Method | <u>Limits</u> | Results |
| Hardness, Shore A, pts. | ASTM D2240 | 70 ±5 | 75 |
| Tensile Strength, PSI | ASTM D412 | 1450 | 2263 |
| Ultimate Elongation, % | ASTM D412 | 250 | 262 |
| (Z1) Specific Gravity | ASTM D297 | as received | 1.25 |
| (B14) Compression Set (Solid) | | | |
| 22 hrs. @ 212°F | | | |
| Percent of Original Deflection, Max | ASTM D395 Method B | 25 | 8 |
| (B34) Compression Set (Plied) | | | |
| 22 hrs. @ 212°F | | | |
| Percent of Original Deflection, Max | ASTM D395 Method B | 25 | 18 |
| Heat Age, (Basic Requirement) | | | |
| 70 hrs. @ 212°F | | | |
| Hardness Change, pts. | ASTM D573 | ± 15 | +3 |
| Tensile Strength Change, % | | ± 30 | +10 |
| Ultimate Elongation Change, % | | -50 | -11 |
| (EA14) Fluid Resistance | | | |
| Water, 70 hrs @ 212°F | | | |
| Hardness Change, pts. | ASTM D471 | ± 10 | +1 |
| Volume Change, % | | ± 15 | +3 |
| (EF11) Fluid Resistance | | | |
| Fuel A, 70 hrs @ 73°F | | | |
| Hardness Change, pts. | ASTM D471 | ± 10 | -4 |
| Tensile Strength Change, % | | -25 | -11 |
| Ultimate Elongation Change, % | | -25 | -13 |
| Volume Change, % | | -5 to +10 | +3 |
| (E014) Fluid Resistance | | | |
| IRM 901, 70 hrs @ 212°F | | | |
| Hardness Change, pts. | ASTM D471 | -5 to +10 | +2 |
| Tensile Strength Change, % | | -25 | +16 |
| Ultimate Elongation Change, % | | -45 | -3 |
| Volume Change, % | | -10 to +5 | -5 |

Parker O-Ring Division, North America

| (E034) Fluid Resistance | Test | Spec | Test |
|---------------------------------|---------------|---------------|----------------|
| IRM 903, 70 hrs @ 212°F | <u>Method</u> | <u>Limits</u> | <u>Results</u> |
| Hardness Change, pts. | ASTM D471 | -10 to +5 | -9 |
| Tensile Strength Change, % | | -45 | +6 |
| Ultimate Elongation Change, % | | -45 | -6 |
| Volume Change, % | | 0 to +25 | +14 |
| | | | |
| (Z2) Low Temperature Resistance | | | |
| TR-10, temperature °F | ASTM D1329 | report | -35 |

[&]quot;Purchaser use only. Reproduce only in full. Data pertains to items referenced only."

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