



MATERIAL REPORT

REPORT NUMBER:

DATE: 01/02/97

TITLE: Evaluation of Parker Compound V1475-75 to ASTM D2000
M2HK710 A1-10 B37 B38 EF 31 E078 Z1 Z2

PURPOSE: To determine if V1475-75 meets the requirements.

CONCLUSION: Compound V1475-75 meets the ASTM D2000 callout.

Recommended temperature limits: -15⁰F to 400⁰F

Recommended For

Petroleum, mineral, and vegetable oils
Silicone fluids
Aromatic hydrocarbons (benzene, toluene)
Chlorinated hydrocarbons
High vacuum
Ozone, weather, and aging resistance

Not Recommended For

Hot water and steam
Auto and aircraft brake fluids
Amines
Ketones
Low molecular weight esters and ethers



REPORT DATA

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	ASTM D2000 M2HK 710 A1-10 B37 B38 EF31 E078 Z1 Z2 <u>Pass / Fail Limits</u>	V1475-75 <u>Slab Results</u>
<u>Basic Physical Properties</u>		
Hardness	75 +/- 5 (Z1)	77
Tensile Strength, psi min	1450	1800
Elongation, % min	175	182
100% Modulus, MPa	Not required	1.88
<u>A1-10 Heat Aging, 70 HRS @ 250°C</u>		
Hardness Change, pts max	+10	+1
Tensile Change, % max	-25	+8
Elongation Change, % max	-25	-11
<u>B37 Compression Set, 22 HRS @ 175°C</u>		
% of Original Deflection, max	50	6
<u>B38 Compression Set, 22 HRS @ 200°C</u>		
% of Original Deflection, max	50	13
<u>EF31, ASTM Ref. Fuel C, 70 HRS @ 23°C</u>		
Hardness Change, pts	+/-5	-3
Tensile Change, % max	-25	-7
Elongation Change, % max	-20	-6
Volume Change, %	0 to +10	+4
<u>E078, Fluid Resistance, #101 Oil, 70 HRS @ 200°C</u>		
Hardness Change, pts	-15 to +5	-9
Tensile Change, % max	-40	-4
Elongation Change, % max	-20	-5
Volume Change, %	0 to +15	+11
<u>(Z2) Heat Resistance, 70 HRS @ 275°C</u>		
Hardness Change, pts max	+10	+5
Tensile Change, % max	-40	-8.6
Elongation Change, % max	-20	+2.2
<u>Basic Oil Immersion, ASTM #3 Oil, 70 HRS @ 150°C</u>		
volume change	+10 max	+3