



MATERIAL REPORT

REPORT NUMBER:

DATE: 06/17/98

TITLE: Evaluation of Parker Compound V1163-75 to ASTM D2000
M2HK 710 A1-10 B38 EF31 Z1 Z2 Z3

PURPOSE: To determine if V1163-75 meets the requirements.

CONCLUSION: Compound V1163-75 meets the ASTM D2000 callout.

Recommended temperature limits: -35⁰F to 400⁰F

Recommended For

Flex fuels, low temperature
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 B38 EF31 Z1 Z2 Z3 Pass / Fail Limits	V1163-75 Slab Results
<u>Basic Physical Properties</u>		
Hardness	75 +/- 5 (Z1)	76
Tensile Strength, MPa min	10	11.7
Elongation, % min	175	228
100% Modulus, MPa	Not required	5.4
<u>Heat Aging, 70 HRS @ 250°C</u>		
Hardness Change, pts max	+10	0
Tensile Change, % max	-25	+5
Elongation Change, % max	-25	-7
<u>Compression Set ASTM D395, Method B, 22 HRS @ 200°C, plies</u>		
% of Original Deflection, max	50	20.0
<u>Fluid Resistance, ASTM Ref. Fuel C, 70 HRS @ 23°C</u>		
Hardness Change, pts	+/-5	-4
Tensile Change, % max	-25	-19
Elongation Change, % max	-20	-4
Volume Change, %	0 to +10	+3.1
<u>(Z2) Fluid Immersion, 50/50 by volume Ref. Fuel C/Methanol, 70 HRS @ 23°C</u>		
Volume Change, % max	+20	+16.0
<u>(Z3) Low Temperature Retraction, ASTM D1329</u>		
TR-10 (degrees C), max	-20	-24