



# MATERIAL REPORT

REPORT NUMBER: KT2156

DATE: 11/22/91

**TITLE:** Evaluation of Parker Compounds V1164-75 and V0747-75 to  
ASTM D2000 M2HK810 A1-10 B38 EF31 E078  
Z1 (75 +/- 5 durometer)

**PURPOSE:** To determine if V1164-75 and V0747-75 meet the callout.

**CONCLUSION:** Both compounds meet the requirements.

Recommended temperature limits: -15<sup>0</sup>F to 400<sup>0</sup>F

Recommended For

Petroleum, mineral, and vegetable oils  
Silicone fluids  
Aromatic hydrocarbons (benzene, toluene)  
Chlorinated hydrocarbons  
High vacuum  
Ozone, weather, 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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<u>ASTM D2000 ORIGINAL PHYSICALS</u>	<u>M2HK810 A1-10 B38 EF31 E078 Z1 (75 (±5) DURO)</u>	<u>V1164-75 PLATENS</u>	<u>0747-75 PLATENS</u>
Hardness (Z1)	75 ± 5	75	75
Tensile Strength, MPa (psi), min.	10 (1450)	13.2 (1913)	13.9 (2025)
Elongation, %, min.	150	185	185
Specific Gravity	As Reported	1.85 (± .02)	1.83 (± .02)
<u>A1-10 HEAT AGE 70 HRS. @ 250°C (482°F)</u>			
Hardness Change, %	+ 10	0	0
Tensile Change,	- 25	- 6	- 2
Elongation,%	- 25	+ 4	+15
<u>ASTM #3 OIL IMMERSION 70 HRS. @ 150°C (302°F)</u>			
Volume Change, %	+ 10	+ 2	+ 2.6
<u>COMPRESSION SET, PLIED 22 HRS. @ 175°C (347°F)</u>			
% of Original Deflection	35	11.5	11.9
<u>EF31 FUEL C IMMERSION 70 HRS @ 23°C (73°F)</u>			
Hardness Change, %	± 5	0	0
Tensile Change, %	-25	-16	-8
Elongation Change, %	-20	-10	-9
Volume Change, %	0 to +10	+3	+3.5
<u>EO78 ASTM SERVICE FLUID #101, ANDEROL 774, 70 HRS. @ 200°C (392°F)</u>			
Hardness Change, %	-15 to +5	-8	-8
Tensile Change, %	-40	-18.9	-15
Elongation Change, %	-20	-7.4	+20
Volume Change, %	0 to +15	+11.4	+13.1
<u>B38 COMPRESSION SET, PLIED 22 HRS. @ 200°C (392°F)</u>			
% of Original Deflection	50	14.5	12.6