



MATERIAL REPORT

REPORT NUMBER: KK2203

DATE: 03/05/98

TITLE: Evaluation of Parker Compound V8545-75 to the testing requirements of AMS 7257 C

PURPOSE: To verify that Parker Compound V8545-75 meets all phases of the specification.

CONCLUSION: Parker Compound V8545-75 meets all phases of the specification.

Recommended temperature limits: 5 to 572 °F

Recommended For

Aliphatic and aromatic hydrocarbons

Chlorinated hydrocarbons

Polar solvents (acetone, methylethylketone, dioxane)

Inorganic and organic acids

Water and steam

High vacuum with minimal loss in weight

Petroleum oil

Wet/dry chlorine

Not Recommended For

Fluorinated refrigerants (R11, 12, 13, 113, 114)

Uranium hexafluoride

Molten Metals

Gaseous and alkali metals



Compound Data Sheet
Parker O-Ring Division United States

REPORT DATA

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	AMS 7257C	2-214
<u>Original Physical Properties, ASTM D1414</u>	<u>Requirements</u>	<u>O-Rings</u>
		<u>Results</u>
Hardness, Shore A, pts	70 to 80	79
Tensile Strength, psi, (MPa), min	1500 (10.3)	1859
Elongation, %, min	120	175
<u>Heat Aging (70 hrs. @ 290°C), ASTM D573</u>		
Hardness Change, pts, max	-5 to +5	-1
Tensile Strength Change, %, max	-20	+10
Elongation Change, %, max	-15	-2
Weight Loss, %, max	5	3.3
<u>Compression Set (70 hrs. @ 125°C), ASTM D1414</u>		
Permanent Compression Set, %, max	40	31
<u>Fluid Aging</u>		
<u>AMS 3021 (70 hrs. @ 175°C), ASTM D471</u>		
Hardness Change, pts, max	-5 to +5	-2
Tensile Strength Change, %, max	-10	-6
Elongation Change, %, max	-15	+2
Volume Change, %	0 to +5	+1.2
<u>Fluid Aging</u>		
<u>AS 1241 Type IV Class 1 (70 hrs. @ 125°C), ASTM D471</u>		
Hardness Change, pts, max	-15 to 0	-2
Tensile Strength Change, %, max	-40	-12
Elongation Change, %, max	-15	+23
Volume Change, %	0 to +15	+5.1
<u>Fluid Aging</u>		
<u>ASTM Fuel B (70 hrs. @ 68 to 86 °F), ASTM D471</u>		
Hardness Change, pts, max	-5 to +5	+1
Tensile Strength Change, %, max	-20	+6
Elongation Change, %, max	-15	+8
Volume Change, %	0 to +5	+0.3
<u>Low Temperature Resistance</u>		
TR ₁₀ point, °C, (°F), max	+5 (+41)	+0.6

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