



# COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

## MATERIAL REPORT

Report Number: 87005

Test Date: 5/30/2012

**Title:** Evaluation of Parker Compound S0604-70

**Elastomer Type:** Silicone (VMQ, PVMQ)

**Purpose:** Testing to AMS3357

**Specification:** AMS3357

**Color:** Rust

**Recommended Temperature Range:** -65°F to 450°F

**Recommended For:** Animal, Vegetable oil, grease, high molecular weight chlorinated aromatic hydrocarbons (including flame resistant insulators, and coolant for transformers), moderate weather resistance, diluted salt solutions, and ozone.

**Not Recommended For:** Superheated water/steam over 250°F, acids and alkalis, low molecular weight chlorinated hydrocarbons, hydrocarbon based fuels, aromatic hydrocarbons (benzene, toluene), and low molecular weight silicone oils.

**Additional Approvals:**  
AMS 3304  
AMS 3357  
MIL-G-21569 Class 2  
A-A-59588 Class 2a, 2b, grade 70  
UL Approval

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

<u>Original Physical Properties</u>	<u>Test Method</u>	<u>Spec Limits</u>	<u>Results</u>
Hardness, Shore A, pts	ASTM D2240	70 ± 5	70
Tensile Strength, psi, Min	ASTM D412	800	1214
Ultimate Elongation, % Min	ASTM D412	150	190
Tensile Stress at 50% Elongation, Min	ASTM D412	200	311
Specific Gravity	ASTM D297	1.43 ± 0.03	1.41
<b>Compression Set</b>			
<b>22 hrs @ 175°C (347°F)</b>			
Percent of Original Deflect, Max	ASTM D395 Method B	35	15
<b>Dry Heat Resistance</b>			
<b>22 hrs @ 225°C (437°F)</b>			
Hardness Change, pts.		-5 to +10	+2
Tensile Strength Change, %		-15	-1
Elongation Change, %		-25	-12
Bend (flat)		No cracking	No Cracking
<b>Fluid Immersion</b>			
<b>IRM 901, 70 hrs @ 175°C (347°F)</b>			
Hardness Change, Shore A, pts.		-10 to +5	-4
Tensile Strength Change, %		-20	-7
Ultimate Elongation Change, %		-15	-15
Volume Change		0 to +15	+4
Decomposition		None	None
Surface Tackiness		None	None
<b>Tear Strength, Die B</b>			
Pounds force per inch, min	ASTM D624	60	84
<b>Low Temp Brittleness</b>			
Nonbrittle after 3 min @ -65°C (-85°F)	ASTM D2137	Pass	Pass