



COMPOUND DATA SHEET

Parker O-Ring & Engineered Seals Division, North America

MATERIAL REPORT

Report Number: 369970

Test Date: 7/16/2019

Title: Evaluation of Parker Compound NM756-75 to AMS-P-83461

Elastomer Type: Nitrile (NBR)

Purpose: To obtain typical test data.

Specification: AMS-P-83461

Color: Black

Recommended Temperature Range: -65°F to 250°F

Recommended For: Aliphatic hydrocarbons (propane, butane, petroleum oil, mineral oil and grease, diesel fuel, fuel oils) vegetable oils, mineral oils, greases, HFA, HFB, and HFC hydraulic fluids, water, salt & alkali solutions, and dilute acids

Not Recommended For: Fuels of high aromatic content, aromatic hydrocarbons (benzene), chlorinated hydrocarbons (trichloroethylene), strong acids, glycols, ozone, weather, atmospheric aging, and polar solvents (ketone, acetone, acetic acid, ethylene-ester)



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<u>Original Physical Properties</u>	<u>Test Method</u>	<u>Spec Limits</u>	<u>Results</u>
Hardness, (Shore A)	ASTM D2240	75 ± 5	76
Tensile Strength, mins, psi	ASTM D412	1350	1743
Elongation, (%)	ASTM D412	125	147
Modulus @ 100% Elongation, min	ASTM D412	650	903
Specific Gravity (g/cm ³)			1.26
TR-10 °F, max	ASTM D1329	-49	-53
*Corrosion and adhesion		Slight corrosion allowed on 4130 steel, none on other metals.	Pass
 <u>Compression Set - 70 hrs (275 ± 5°F Air)</u>			
Percent of Original Deflect, Max	ASTM D395 Method B	67	37
 <u>Compression Set – 60 days (75 ± 5°F Air)</u>			
Percent of Original Deflect, Max	ASTM D395 Method B	25	9
 <u>Compression Set – 60 days 75 ± 5°F ARM 201 (AMS-3020)</u>			
Percent of Original Deflect, Max	ASTM D395 Method B	20	6
 <u>Fluid Resistance</u>			
<u>ARM 201 (AMS-3020) oil - 70 hrs @ 275°F</u>			
Hardness, Shore A, pts	ASTM D471	+5 to -10	-9
Tensile Strength, decrease %		50	-11
Elongation decrease, %		-35	-1
Volume Change, %		+10 to +20	14
Compression set 25% deflection		35	21
% of original deflect, max%			
TR-10 °F, max		-49	-49
 <u>Fluid Resistance</u>			
<u>MIL-H-83282 Oil - 70 hrs @ 275°F</u>			
Hardness, Shore A, pts	ASTM D471	+5 to -10	-4
Tensile Strength, decrease %		40	7
Elongation decrease, %		35	0
Volume Change, %		0 to +15	6
Compression set 25% deflection		45	21
% of original deflect, max%			
TR-10 °F, max		-49	-49