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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Original Physical Properties	**Test Method**	**Spec Limits**	**Results**
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
Compression Set - 70 hrs (275 ± 5°F Air)			
Percent of Original Deflect, Max	ASTM D395 Method B	67	37
Compression Set – 60 days (75 ± 5°F Air)			
Percent of Original Deflect, Max	ASTM D395 Method B	25	9
Compression Set – 60 days 75 ± 5°F ARM 201 (AMS-3020)			
Percent of Original Deflect, Max	ASTM D395 Method B	20	6
Fluid Resistance ARM 201 (AMS-3020) oil - 70 hrs @ 275°F	ASTM D471		
Hardness, Shore A, pts		+5 to -10	-9
Tensile Strength, decrease %		50	-11
Elongation decrease, %		-35	-1
Volume Change, %		+10 to +20	14
Compression set 25% deflection % of original deflect, max%		35	21
TR-10 °F, max		-49	-49
Fluid Resistance MIL-H-83282 Oil - 70 hrs @ 275°F	ASTM D471		
Hardness, Shore A, pts		+5 to -10	-4
Tensile Strength, decrease %		40	7
Elongation decrease, %		35	0
Volume Change, %		0 to +15	6
Compression set 25% deflection % of original deflect, max%		45	21
TR-10 °F, max		-49	-49