



GLOBAL O-RING AND SEAL, LLC

Compound A80

Tetrafluoroethylene-Propylene (AFLAS)

Material Description

This elastomer is a copolymer of tetrafluoroethylene (TFE) and propylene. AFLAS is unique due to its resistance to petroleum products, steam, phosphate esters and brake fluids. In some respects, it exhibits media compatibility properties similar to ethylene propylene and fluorocarbon. It has fair resistance to brake fluids and phosphate esters while exhibiting good resistance to petroleum oils.

Cure system: Peroxide-cured

Standard AFLAS compounds are peroxide-cured.

Other Common Variations

- AFLAS is useful for seal applications requiring petroleum resistance, steam and amine resistance such as those applications encountered in the petroleum industry.
- AFLAS also has good resistance to petroleum and brake fluid or petroleum and phosphate ester.

SERVICE TEMPERATURES

Standard Low Temperature	-10°C (14°F)
Standard High Temperature	220°C (428°F)
Brittle Point	-40°C (-40°F)
Peak Exposure Temperature	260°C (500°F)

PERFORMS WELL WITH:

- Petroleum fluids
- Brake fluids
- Bases
- Phosphate esters
- Amines
- Engine oils
- Steam and hot water
- Pulp and paper liquids

DOESN'T PERFORM WELL IN:

- Aromatic fuels
- Ketones
- Chlorinated hydrocarbons

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TEST REPORT FOR COMPOUND A80				
MATERIAL: AFLAS				
DUROMETER: 80				
COLOR: BLACK				
ASTM* D2000 M2HK810 B38				
SECTION OF SPEC.	PROPERTIES	REQUIREMENTS	RESULTS	ASTM TEST
	ORIGINAL PHYSICAL PROPERTIES			
	Hardness, Shore A	80±5	80	D2240
	Tensile Strength, psi (MPa)	1450 (10) (min.)	2097	D412
	Ultimate Elongation, percent, min.	150	334	D412
	HEAT AGE RESISTANCE			
	70 hours at 250°C (482°F)			
Basic	Hardness Change, points, max.	±15	+6	D573
	Tensile Strength Change, %, max.	±30	-3	
	Elongation Change, percent, max.	-50	-25	
B38	COMPRESSION SET			D395, Method B
	22 hours at 175°C (347°F), percent	50	44	

