



400 COMMONWEALTH DRIVE, WARRENDALE, PA 15096

AEROSPACE MATERIAL SPECIFICATION

AMS 7261/1B

Issued 4-1-83
Revised 10-1-87

Superseding AMS 7261/1A

Submitted for recognition as an American National Standard

RINGS, SEALING, PHOSPHONITRILIC FLUOROELASTOMER
High-Temperature-Fluid Resistant
65 - 75
FZ Type

1. SCOPE:

1.1 Form: This specification covers one type of phosphonitrilic fluoroelastomer in the form of molded rings.

1.2 Classification: Rings having nominal hardness of 70 Durometer A or equivalent.

2. APPLICABLE DOCUMENTS: Shall be as shown in AMS 7261.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specification: The complete requirements for procuring the sealing rings described herein shall consist of this document and the latest issue of the basic specification, AMS 7261.

3.2 Properties: Shall be as follows:

3.2.1 As Received:

3.2.1.1 Hardness, Durometer "A" or equiv.	70 ± 5
3.2.1.2 Tensile Strength, min	900 psi (6.20 MPa)
3.2.1.3 Elongation, min	100%
3.2.1.4 Specific Gravity	Preproduction Value ± 0.02

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3.2.2 <u>Aromatic Fuel Resistance:</u>		ASTM Reference Fuel B (ASTM D471)
3.2.2.1 Hardness Change, Durometer "A" or equiv.	0 to -10	Temperature: 20° - 30°C (68° - 86°F) Time: 22 hr \pm 0.25
3.2.2.2 Tensile Strength Change, max	-25%	
3.2.2.3 Elongation Change, max	-15%	
3.2.2.4 Volume Change	+1 to +20%	
3.2.3 <u>Synthetic Lubricant Resistance:</u>		Medium: AMS 3021 fluid (See 8.1)
3.2.3.1 Hardness Change, Durometer "A" or equiv.	0 to -10	Temperature: 150°C \pm 3 (302°F \pm 5) Time: 70 hr \pm 0.5
3.2.3.2 Tensile Strength Change, max	-20%	
3.2.3.3 Elongation Change, max	-15%	
3.2.3.4 Volume Change	+1 to +20%	
3.2.4 <u>Dry Heat Resistance:</u>		Temperature: 175°C \pm 3 (347°F \pm 5) Time: 70 hr \pm 0.5
3.2.4.1 Hardness Change, Durometer "A" or equiv.	-10 to +10	
3.2.4.2 Tensile Strength Change, max	-20%	
3.2.4.3 Elongation Change, max	-45%	
3.2.4.4 Weight Loss, max	2%	
3.2.5 <u>Compression Set:</u>		
Percent of Original Deflection, max		
3.2.5.1 After 22 hr \pm 0.25 at 175°C \pm 3 (347°F \pm 5)	45%	
3.2.5.2 After exposure to AMS 3021 fluid as in 3.2.3	30%	
3.2.6 <u>Low-Temperature Resistance:</u>		
Temperature Retraction TR ₁₀ Point, max		-55°C (-65°F)