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INTERNATIONAL
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AEROSPACE MATERIAL SPECIFICATION

SAE AMS 7261/3C

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Submitted for recognition as an American National Standard

Superseding AMS 7261/3B

RINGS, SEALING, PHOSPHONITRILIC (FZ) FLUOROELASTOMER
High-Temperature-Fluid Resistant
85 - 95

1. SCOPE:

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

1.2 Classification: Rings having nominal hardness of 90 Durometer A, or equivalent.

2. APPLICABLE DOCUMENTS: See 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 equivalent	90 ± 5
3.2.1.2	Tensile Strength, minimum	900 psi (6.21 MPa)
3.2.1.3	Elongation, minimum	75%
3.2.1.4	Specific Gravity	Preproduction Value ± 0.02
3.2.1.5	Temperature Retraction TR_{10} Point, maximum	-55°C (-67°F)

3.2.2 Aromatic Fuel Resistance:		ASTM Reference Fuel B (ASTM D 471)
3.2.2.1 Hardness Change, Durometer "A" or equivalent	0 to -10	Temperature: 20° - 30°C (68° - 86°F) Time: 22 hours ± 0.25
3.2.2.2 Tensile Strength Change, maximum	-25%	
3.2.2.3 Elongation Change, maximum	-15%	
3.2.2.4 Volume Change	+1 to +20%	
3.2.3 Synthetic Lubricant Resistance: Ø		Medium: AMS 3021 Temperature: 150°C ± 3 (302°F ± 5)
3.2.3.1 Hardness Change, Durometer "A" or equivalent	0 to -10	Time: 70 hours ± 0.5
3.2.3.2 Tensile Strength Change, maximum	-20%	
3.2.3.3 Elongation Change, maximum	-15%	
3.2.3.4 Volume Change	+1 to +20%	
3.2.3.5 Compression Set, maximum	45%	
3.2.3.6 Temperature Retraction TR_{10} Point, maximum	-55°C (-67°F)	
3.2.4 Dry Heat Resistance:		Temperature: 175°C ± 3 (347°F ± 5)
3.2.4.1 Hardness Change, Durometer "A" or equivalent	-10 to +10	Time: 70 hours ± 0.5)
3.2.4.2 Tensile Strength Change, maximum	-20%	
3.2.4.3 Elongation Change, maximum	-20%	
3.2.4.4 Weight Loss, maximum	2%	
3.2.5 Compression Set:		
Percent of Original Deflection, maximum		
3.2.5.1 After 22 hours ± 0.25 at 175°C ± 3 (347°F ± 5)	55%	