

AEROSPACE MATERIAL SPECIFICATION

Submitted for recognition as an American National Standard



AMS 3217/4A

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Superseding AMS 3217/4

Test Slabs, Fluoroelastomer (FKM) 65 - 75

1. SCOPE:

1.1 Form:

This specification covers a standard fluoroelastomer (FKM) rubber stock in the form of molded test slabs.

1.2 Application:

See AMS 3217.

2. APPLICABLE DOCUMENTS:

See AMS 3217.

3. TECHNICAL REQUIREMENTS:

3.1 Basic Specifications:

The complete requirements for test slabs described herein and their procurement shall consist of this document and the latest issue of the basic specification AMS 3217.

3.2 Material:

Shall be a fluoroelastomer (FKM) compounded to the formulation shown in Table 1.

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Table 1 - Formulation

Ingredients	Parts
Viton E60C [®] or equivalent*	100.0 (See 3.2.1)
Maglite D [®] or equivalent*	3.0 (See 3.2.2)
Sterling MT [®] , N990 or equivalent* (See 3.2.3)	20.0 (See 3.2.1)
Calcium Hydroxide, Reagent Grade	6.0 (See 3.2.2)
Press Cure: 10 minutes \pm 0.5 at 175 °C \pm 3 (347 °F \pm 5)	
Oven Cure: 24 hours \pm 0.5 at 230 °C \pm 3 (466 °F \pm 5)	
*Equivalent ingredients must be approved by Wright Laboratory (WL/MLSE), WPAFB, OH 45433-6533.	

3.2.1 Weigh parts to the nearest 0.1 gram.

3.2.2 Weigh parts to the nearest 0.02 gram.

3.2.3 ASTM D 1765 designation.

3.3 Processing:

After the elastomer has banded on the rubber mill, premix the other ingredients and add to the milling compound.

3.3.1 The stock shall not be allowed to become hotter than can be handled with the bare hands.

3.3.2 After all ingredients have been incorporated and the stock has been thoroughly milled, the stock shall be passed 10 times through a tight mill.

3.3.3 Suitable preforms shall be cut from the freshly milled stock and molded into test slabs as specified in ASTM D 3182, Figure 1.

3.4 Properties:

Shall be as shown in Table 2.