



AEROSPACE MATERIAL SPECIFICATION	AMS3217/7	REV. A
	Issued 1995-08 Reaffirmed 2007-07 Revised 2014-09 Superseding AMS3217/7	
Test Slabs, High Strength, Fluorosilicone (FVMQ) 55 - 65		

RATIONALE

AMS3217/7A results from a Five Year Review and update of this specification. Tradename information has been updated and specific gravity has been updated to reflect the current sales specification.

1. SCOPE

1.1 Form

This specification covers a high strength fluorosilicone (FVMQ) rubber stock in the form of molded test slabs.

1.2 Application

See AMS3217.

2. APPLICABLE DOCUMENTS

See AMS3217.

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 AMS3217.

3.2 Material

Shall be a fluorosilicone (FVMQ) compounded to the formulation shown in Table 1.

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2014 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
http://www.sae.org

SAE WEB ADDRESS:

SAE values your input. To provide feedback on this Technical Report, please visit
<http://www.sae.org/technical/standards/AMS3217/7A>

TABLE 1 - FORMULATION

Ingredients	Parts
Silastic® LS 2860 or equivalent ¹	100.0 (See 3.2.1)
Xiameter® RBM-9002 or equivalent ¹	1.0 (See 3.2.2)
Varox® DPH-50 or equivalent ¹	1.0 (See 3.2.2)

Press Cure: 10 minutes \pm 0.5 at
340 °F \pm 5 (171 °C \pm 3)

Oven Cure: 4 hours \pm 0.2 at
392 °F \pm 5 (200 °C \pm 3)

¹ Equivalent ingredients must be approved by AMS Committee "CE".

3.2.1 Weigh parts to the nearest 0.1 gram.

3.2.2 Weigh parts to the nearest 0.02 gram.

3.3 Processing

After the elastomer has banded on the rubber mill, the other ingredients shall be added in the order listed in 3.2.

3.3.1 The stock shall not be allowed to become hotter than can be handled with the bare hands; it is recommended that the stock be removed from the mill and cooled to room temperature before incorporating the final ingredient.

3.3.2 After all ingredients have been incorporated and the stock has been thoroughly milled, the stock shall be passed through the mill 10 times, crossblending after each pass.

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.

TABLE 2 - PROPERTIES

Paragraph	Property	Requirement	Test Method
3.4.1	Hardness, Durometer "A" or equivalent	60 \pm 5	ASTM D 2240
3.4.2	Tensile Strength, min	1200 psi (8.27 MPa)	ASTM D 412
3.4.3	Elongation, min	300%	ASTM D 412
3.4.4	Specific Gravity	1.46 \pm 0.03	ASTM D 297
3.4.5	Synthetic Lubricant Immersion:		AMS 3021 302 °F \pm 5 (150 °C \pm 3)
3.4.5.1	Volume Change	+4 to +10%	70 hours \pm 0.5

4. QUALITY ASSURANCE PROVISIONS

See AMS3217.