NOT MEASUREMENT SENSTIVE

MIL-A-46146B AMENDMENT 3 28 October 1992 SUPERSEDING AMENDMENT 2 21 January 1992

MILITARY SPECIFICATION

ADHESIVES-SEALANTS, SILICONE, RTV, NONCORROSIVE (FOR USE WITH SENSITIVE METALS AND EQUIPMENT)

This amendment forms a part of MIL-A-46146B, dated 21 November 1990 and is approved for use by all Departments and Agencies of the Department of Defense

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3.3.2.1.1: Delete and substitute:

"3.3.2.1.1 <u>Heat resistance</u>. The cured silicone adhesive-sealant for Group I and Group II after exposure for 168 ± 4 hours (7 days ± 4 hours) at $392 \pm 4^{\circ}F$ (200 $\pm 2^{\circ}C$) shall meet the requirements for hardness, tensile strength and elongation as specified in table II when tested as specified in 4.5.3.1.2, except that the tensile strength and elongation for Group II material shall be 250 psi (min) and 300 percent (min), respectively. Group III material after exposure for 72 ± 4 hrs (3 days ± 4 hrs) at $600 \pm 4^{\circ}F$ (316 $\pm 2^{\circ}C$) shall have a hardness, Shore A (Durometer) of 60 max, tensile strength of 200 psi, min (1379KPa) and elongation of 100% min."

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Test	-	Requirements	· · ·	Test
Characteristic	Group I	Group II	Group III	Method
Uncured compound				
Total solids content	3.3.1	3.3.1	3.3.1	4.5.3.2.1
Application rate	3.3.1		3.3.1	4.5.3.2.2
Flow	3.3.1		3.3.1	4.5.3.2.3
Viscosity		3.3.1		ASTM D1084 Method B
Tack free time	3.3.1	3.3.1	3.3.1	4.5.3.2.5
Corrosion $1/2/$	3.3.1.1 (a)	3.3.1.1 (a)	3.3.1.1 (a)	4.5.3.2.6.1
Cured compound				
<u>cured compound</u>		<u>Groups I - II</u>		
Hardness		3.3.2.1		ASTM D2240
Tensile strength		3.3.2.1		ASTM D412
				(Die C)
Elongation		3.3.2.1		ASTM D412
				(Die C)
Peel strength		3.3.2.1		4.5.3.2.7
Dielectric strength 2		3.3.2.2	ASTM D149	

"TABLE VI. Quality conformance inspection.

1/ When authorized by the procuring activity shipment may be made prior to the completion of the corrosion test upon receipt of a letter (see 4.5.3.2.9) certifying that the sealing adhesive-sealant shall meet the corrosion test requirements of 3.3.1.1 a.

2/ Quality conformance inspection, for corrosion and dielectric strength, on lots of silicone adhesive-sealant, which are run in a continuous basis, shall be made at least every four months during manufacturer's test inspection."

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5.3: Delete and substitute:

"5.3 <u>Marking</u>. In addition to any special marking required by the contract or order herein, interior and exterior shipping containers shall be marked in accordance with MIL-STD-129 for military levels of protection. A label shall be attached to each exterior container of silicone adhesive-sealant and primer (if required) with additional data as follows:

- (a) Number and title of this specification.
- (b) Adhesive-sealant group and type.
- (c) Dates of manufacture and reinspection.

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(d) Cure time if other than that specified (see 4.5.2.2).

- (e) WARNING: relative to toxicity (see 3.5).
- (f) WARNING: as to fluid resistance (see 6.1.1)
- (g) Label attached to containers of silicone adhesive-sealant shall contain application instructions for adhesive-sealant and primer (see 3.4).
- (h) Each unit container of primer shall be marked as follows: "CAUTION: APPLY ONLY IN A WELL VENTILATED AREA. KEEP AWAY FROM HEAT, SPARKS, AND OPEN FLAME"
- (i) WARNING: FAILURE TO USE RECOMMENDED PRIMER ON SOME METALS MAY RESULT IN ADHESION FAILURE."

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6.9 <u>Supersession data</u>. This specification supersedes the following military specifications:

- a. MIL-A-46146A(1) 13 March 1991
- b. MIL-R-47211A(MI) 21 September 1989 Type III only

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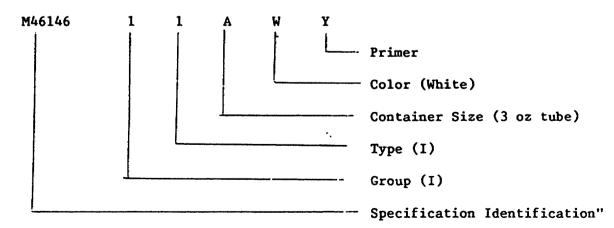
Table VIII: Delete and substitute:

"TABLE VIII. Military part number coding.

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Group	Code	Туре	Code	Container Size (Code	Color	Code	Primer Required	Code
I II III	1 2 3	I II	1 2	3 oz tube 5 oz tube 6 oz cartridge 12 oz cartridge pint 5 gallon pail 50 gallon drum	B C	White Translucent Gray	W T G	Yes No	Y N

Example:



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Revision A	Revision B
Type I Type II	Group I - General Purpose Type I - Thixotropic paste Type II - Self-leveling liquid
Type III - High Strength Non-corrosive	Group II - High Strength Type I - Thixotropic paste Type II - Self-leveling liquid
MIL-R-47211A(MI) Type III	Group III - High Temperature Type I - Thixotropic paste Type II - Self-leveling liquid"

"TABLE IX. Comparison data for revision A to revision B

Custodians: Army - MR Navy - AS Air Force - 11 Preparing activity: Army - MR

Project 8040-0527

Review activities: Army - AR, ME, AT, MI, SM, EA Navy - AS, SH, OS Air Force - 11, 99

User activities: Army - CE, MI, AL Navy - OS, SH, YD GSA-FSS - 10FTE

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