AEROSPACE MATERIAL SPECIFICATION

AMS3265™	REV. F
Issued 1996-03 Revised 2020-09 Superseding AMS3265E	

(R) Sealing Compound, Polysulfide (T) Rubber,
Fuel Resistant, Non-Chromated Corrosion Inhibiting
for Intermittent Use to 360 °F (182 °C)

RATIONALE

Five-Year Review. Deleted viscosity of curing agent requirement. Added Class B-6 application time requirements. Changed corrosion test - stress assembly requirement and procedure. Added additional informational clarifications.

1. SCOPE

1.1 Form

This specification covers polysulfide rubber sealing compounds containing only non-chromated corrosion inhibitors, supplied as a two-component system which cures at room temperature.

1.2 Application

This product has been used typically in applications requiring contact with air pressure, fuel, and water, and for fillets, fastener seals, and faying surface seals, as well as initial sealing of faying surfaces, overcoating of fasteners, and sealing of seams and joints, but usage is not limited to such applications. Polysulfide rubber has a service temperature range of -65 to +250 °F (-54 to +121 °C), with short-term recurring exposures (cumulative total of approximately 6 hours) to 360 °F (182 °C). AMS3100 adhesion promoter may be applied prior to application of the sealant in accordance with recommendations from the sealant manufacturer for specific substrates.

1.3 Classification

Sealing compounds covered by this specification are classified as follows:

Class A - Suitable for application by brush. Available with the following application times in hours:

A-1/2
A-2
A-4

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: CustomerServiceatsae.org
SAE WEB ADDRESS: **http://www.sae.org**

For more information on this standard, visit
https://www.sae.org/standards/content/AMS3265F/

Class B - Suitable for application by extrusion gun or spatula. Available with the following application times in hours:

B-1/4
B-1/2
B-1
B-2
B-4
B-6
B-12

Class C - Suitable for application by brush, extrusion gun, roller or spatula. Available with the following application times in hours:

Notation: ( ) Assembly time in hours.

C-2(2)
C-8(24)
C-12(48)
C-48(168)
C-96(336)

1.4 Precautions

1.4.1 Safety - Hazardous Materials

Shall be in accordance with AS5502 (1.1).

2. APPLICABLE DOCUMENTS

Shall be in accordance with AS5502 (Section 2).

2.1 SAE Publications

Available from SAE International, 400 Commonwealth Drive, Warrendale, PA 15096-0001, Tel: 877-606-7323 (inside USA and Canada) or +1 724-776-4970 (outside USA), www.sae.org.

AMS2629	Fluid, Jet Reference
AMS3020	Oil, Reference, for “L” Stock Rubber Testing
AMS3021	Fluid, Reference, for Testing Di-Ester (Polyol) Resistant Material
AMS3100	Adhesion Promoter for Polysulfide Sealing Compounds
AMS3276	Sealing Compound, Integral Fuel Tanks and General Purpose, Intermittent Use to 360 °F (182 °C)
AMS4045	Aluminum Alloy Sheet and Plate, 5.6Zn - 2.5Mg - 1.6Cu - 0.23Cr, 7075: (-T6 Sheet, T651 Plate), Solution and Precipitation Heat Treated
AMS4049	Aluminum Alloy Sheet and Plate, 5.6Zn - 2.5Mg - 1.6Cu - 0.23Cr (Alclad 7075-T6 Sheet, T651 Plate), Solution and Precipitation Heat Treated
AMS4911	Titanium Alloy, Sheet, Strip, and Plate, 6Al - 4V Annealed
AMS5516	Steel, Corrosion-Resistant, Sheet, Strip, and Plate, 18Cr - 9.0Ni (SAE 30302), Solution Heat Treated

AMS-C-27725 Coating, Corrosion Preventative, for Aircraft Integral Fuel Tanks for Use to 250 °F (121 °C)

AS5127 Aerospace Standard Test Methods for Aerospace Sealants Methods for Preparing Aerospace Sealant Test Specimens

AS5127/1 Aerospace Standard Test Methods for Aerospace Sealants Two-Component Synthetic Rubber Compounds

AS5502 Standard Requirements for Aerospace Sealants and Adhesion Promoters

2.2 U.S. Government Publications

Copies of these documents are available online at https://quicksearch.dla.mil.

MIL-PRF-23377 Primer Coatings: Epoxy, High Solids

MIL-PRF-81733 Sealing and Coating Compound, Corrosion Inhibitive

MIL-PRF-85285 Coating, Polyurethane, Aircraft and Support Equipment

MIL-PRF-85582 Primer Coatings, Epoxy, Waterborne

2.3 PRI Publications

Available from Performance Review Institute, 161 Thorn Hill Road, Warrendale, PA 15086-7527, Tel: 724-772-1616, www.pri-network.org

PD2103 Aerospace Quality Assurance, Product Standards, Qualification Procedure, Sealants

PRI-QPL-AMS3265 Products Qualified Under AMS3265

3. TECHNICAL REQUIREMENTS

3.1 Materials

The basic ingredient used in the manufacture of these products shall be synthetic rubber of the polysulfide type with additive(s) for corrosion inhibition. The sealing compound shall cure by the addition of a curing agent to the base compound and shall not depend on solvent evaporation for curing. The material shall contain no lead compounds or hexavalent chromium compounds. The curing agent shall possess enough color contrast to the base compound to permit easy identification of an unmixed or incompletely mixed sealing compound. Neither the base compound nor the cured sealant shall be red or pink in color. The base compound shall be of uniform blend and shall be free of skins, lumps, and gelled or coarse particles.

3.2 Date of Packaging

Shall be in accordance with AS5502 (3.1).

3.3 Toxicological Formulations

Shall be in accordance with AS5502 (3.2).

3.4 Quality

Shall be in accordance with AS5502 (3.3).

3.5 Shelf Life

Shelf life shall be a minimum of 9 months from the date of packaging when stored below 80 °F (27 °C). Material may be retested for shelf life extension in accordance with 4.3.3.

3.5.1 Premixed and Frozen Material

Premixed and frozen material shall have a minimum storage life of 30 days at -40 °F (-40 °C) or lower, or 10 days at -10 to -40 °F (-23 to -40 °C) from date of mix/freeze. Recommendations for longer storage lives at lower temperatures may be provided by the manufacturer. The date of mix/freeze shall be within the shelf life of the unmixed material.

3.6 Properties

With the exception of the viscosity of base compound property, the base compound and the curing agent, when mixed in accordance with manufacturers' instructions and cured in accordance with 4.5.4.5, shall conform to the requirements shown in Table 1, when determined in accordance with the specified test methods.

Table 1 - Properties

Paragraph	Property	Requirement	Test Procedures (Paragraph)
3.6.1	Nonvolatile Content, by weight, min		AS5127/1 (5.1)
	Class A	84%	
	Class B	92%	
	Class C	88%	
3.6.2	Viscosity of Base Compound		AS5127/1 (5.3)
	Class A	100 to 600 poise	
	(Use No. 6 spindle at 10 rpm)	(10 to 60 Pa•s)	
	Class B	9000 to 16000 poise	
	(Use No. 7 spindle at 2 rpm)	(900 to 1600 Pa•s)	
	Class C	1500 to 4000 poise	
	(Use No. 6 spindle at 2 rpm)	(150 to 400 Pa•s)	
3.6.3	Flow (Class B only), max	0.75 inch (19 mm)	AS5127/1 (5.5.1)
3.6.4	Application Time, min		AS5127/1 (5.6)
	Class A - From the beginning of mixing, the viscosity shall not exceed 2500 poise (250 Pa•s)		AS5127/1 (5.6.1) (Use No. 7 spindle at 10 rpm)
	Class A-1/2	1/2 hour	
	Class A-2	2 hours	
	Class A-4	4 hours	
	Class B - From the beginning of mixing, not less than 15 g/min shall be extruded.		AS5127/1 (5.6.2)
	Class B-1/4	1/4 hour	
	Class B-1/2	1/2 hour	
	Class B-1	1 hours	
	Class B-2	2 hours	
	Class B-4	4 hours	
	Class B-6	6 hours	
	Class B-12	12 hours	

Table 1 - Properties (continued)

Paragraph	Property	Requirement	Test Procedures (Paragraph)
	Class C - From the beginning of mixing, not less than 30 g/min shall be extruded.		AS5127/1 (5.6.2)
	Class C-2 (2)	2 hours	
	Class C-8 (24)	8 hours	
	Class C-12 (48)	12 hours	
	Class C-48 (168)	48 hours	
	Class C-96 (336)	96 hours	
3.6.5	Assembly Time (Class C only)		AS5127/1 (5.7)
	Class C-2 (2)	2 hours	
	Class C-8 (24)	24 hours	
	Class C-12 (48)	48 hours	
	Class C-48 (168)	168 hours	
	Class C-96 (336)	336 hours	
3.6.6	Tack-Free Time (Measured from beginning of mixing), hours, max		AS5127/1 (5.8)
	Class A-1/2	10 hours	
	Class A-2	24 hours	
	Class A-4	48 hours	
	Class B-1/4	8 hours	
	Class B-1/2	12 hours	
	Class B-1	16 hours	
	Class B-2	24 hours	
	Class B-4	36 hours	
	Class B-6	72 hours	
	Class B-12	120 hours	
	Class C-2 (2)	24 hours	
	Class C-8 (24)	96 hours	
	Class C-12 (48)	N/A	
	Class C-48 (168)	N/A	
	Class C-96 (336)	N/A	
3.6.7	Cure Time to Hardness - Time to achieve 30 Durometer Type A Hardness, min		AS5127/1 (5.9)
	Class A-1/2	30 hours	
	Class A-2	72 hours	
	Class A-4	90 hours	
	Class B-1/4	16 hours	
	Class B-1/2	32 hours	
	Class B-1	48 hours	
	Class B-2	72 hours	
	Class B-4	90 hours	
	Class B-6	120 hours	
	Class B-12	240 hours	
	Class C-2 (2)	72 hours	
	Class C-8 (24)	168 hours	
	Class C-12 (48)	336 hours	
	Class C-48 (168)	8 weeks	
	Class C-96 (336)	16 weeks	
3.6.8	Specific Gravity, max average	1.65	AS5127/1 (6.1)

Table 1 - Properties (continued)

Paragraph	Property	Requirement	Test Procedures (Paragraph)
3.6.9	14-Day Hardness, min (Note 1)	40 Durometer A	AS5127/1 (6.2)
3.6.10	Hydrolytic Stability	30 Durometer A	AS5127/1 (6.6)
3.6.11	Shaving and Sanding (Class B only)	No rolling or tearing of the sealant, smooth finish	AS5127/1 (6.7)
3.6.12	Paintability	No separation from sealant	AS5127/1 (6.8)
3.6.13	Weathering	No cracking, chalking, peeling or loss of adhesion	AS5127/1 (6.9)
3.6.14	Resistance to Thermal Rupture, max	0.15 inch (3.8 mm) No blistering or sponging	AMS3265 (4.6.1)
3.6.15	Weight Loss & Flexibility		AS5127/1 (7.4)
	Weight Loss, max	10%	
	Flexibility	No cracking or checking	
3.6.16	Volume Swell, max	15%	AS5127/1 (7.5)
3.6.17	Low Temperature Flexibility	No visual evidence of cracking or checking; no loss of adhesion	AMS3265 (4.6.2)
3.6.18	Tensile Strength and Elongation (Class B), min		AS5127/1 (7.7)
3.6.18.1	Cure per 4.5.4.5	200 psi (1380 kPa), 200% elongation	
3.6.18.2	Cure per 4.5.4.5 + 12 days at 140 °F (60 °C) in AMS2629 Type 1	200 psi (1380 kPa), 200% elongation	
3.6.18.3	Cure per 4.5.4.5 + 12 days at 140 °F (60 °C) + 60 hours at 160 °F (71 °C) + 6 hours at 180 °F (82 °C) all in AMS2629 Type 1	125 psi (862 kPa), 100% elongation	
3.6.18.4	Cure per 4.5.4.5 + 12 days at 140 °F (60 °C) + 60 hours at 160 °F (71 °C) + 6 hours at 180 °F (82 °C) all in AMS2629 Type 1 followed by Standard Heat Cycle in Air as in 4.5.3	125 psi (862 kPa), 25% elongation	
3.6.18.5	Cure per 4.5.4.5 + Standard Heat Cycle as in 4.5.3	100 psi (690 kPa), 25% elongation	
3.6.18.6	Cure per 4.5.4.5 + 72 hours at Standard Conditions in AMS3021	200 psi (1380 kPa), 100% elongation	
3.6.18.7	Cure per 4.5.4.5 + 72 hours at Standard Conditions in AMS3020	200 psi (1380 kPa), 100% elongation	
3.6.19	Shear Strength (Class C only), min	150 psi (1034 kPa), 100% cohesive failure	AS5127/1 (7.8)

Table 1 - Properties (continued)

Paragraph	Property	Requirement	Test Procedures (Paragraph)
3.6.20	Corrosion Test		AMS3265 (4.6.3)
	Stressed Assembly	No visible evidence of corrosion beyond specimen edges (Note 2)	
	Mixed-Metal Assemblies	No visible evidence of corrosion in fay surface (Note 3)	
3.6.21	Peel Strength, min	20 lbf/inch (3500 N/m), 100% cohesive failure	AMS3265 (4.6.4)
3.6.22	Repairability, min	10 lbf/inch (1750 N/m) 100% cohesive failure	AMS3265 (4.6.5)
3.6.23	Storage Stability		
3.6.23.1	Accelerated Storage		AS5127/1 (9.1)
	Viscosity of Base Compound	Same as 3.6.2	
	Flow	Same as 3.6.3	
	Application Time	Same as 3.6.4	
	Assembly Time (Class C only)	Same as 3.6.5	
	Tack Free Time	Same as 3.6.6	
	Cure Time to Hardness	Same as 3.6.7	
	Peel Strength (four aluminum panels, sulfuric acid anodized in accordance with AS5127 (6.3) and coated with AMS-C-27725 Type 2; immerse two panels in AMS2629 Type 1; two panels in AMS2629 Type 1, 3% saltwater; all at 140 °F (60 °C) for 7 days)	20 lbf/inch (3500 N/m)/ 100% cohesive failure	AS5127/1 (8.1)
3.6.23.2	Long-Term Storage		AMS3265 (4.6.6)
	Application Time	Same as 3.6.4	
	Tack-Free Time	Same as 3.6.6	
	Cure Time to Hardness	Same as 3.6.7	

Note 1: Does not apply for longer work life sealants including Classes B-12; C-12(48); C-48(168); C-96(336).
Note 2: If corrosion exists beyond specimen edges, test may be repeated with MIL-PRF-81733 sealant as a control. If sealant performs as good or better than control, test may be considered as passing.
Note 3: Corrosion is permitted under sealing compound fillet; fay surface specified refers to footprint of Metal A (Table 7).

4. QUALITY ASSURANCE PROVISIONS

4.1 Responsibility for Inspection

Shall be in accordance with AS5502 (4.1).

4.1.1 Source Inspection

Shall be in accordance with AS5502 (4.1.1).

4.1.2 Sampling and Testing

Shall be in accordance with AS5502 (4.3).

4.2 Classification of Tests

Shall be in accordance with AS5502 (4.2).

4.2.1 Qualification Tests

Shall be in accordance with AS5502 (4.2.1).

4.2.1.1 Qualification Requirements for Class B-2

Class B-2 shall be the first material that is qualified for each supplier of sealing compound. Class B-2 sealing compound shall be tested for and shall meet all technical requirements of this specification except for requirements unique to other classes of the sealing compound.

4.2.1.2 Qualification Requirements for Other Classes and Application Times

Once qualification for Class B-2 has been obtained, other classes and additional application times of qualified classes may be qualified. The formulation for other classes, and for other application times of qualified classes, shall be the same as Class B-2 except for minor variations necessary for conformance to viscosity and application time requirements. All compounds shall meet all technical requirements of this specification. Other classes of the sealing compound need only to be tested to the initial acceptance tests listed in Table 2, all peel strength tests listed in Table 8, and other tests as defined QPL agency. Any unique qualification tests for the sealant's class and application time shall also be tested per PD2103.

4.2.2 Initial Acceptance Tests

Requirements shown in Table 2 are initial acceptance tests and shall be performed on each batch per AS5502 (4.2.2.1).

Table 2 - Initial acceptance tests

Test	Requirement Paragraph
Nonvolatile Content	3.6.1
Viscosity of Base Compound (Note 1)	3.6.2
Flow (Class B only)	3.6.3
Application Time	3.6.4
Assembly Time (Class C only)	3.6.5
Tack-Free Time	3.6.6
Cure Time to Hardness	3.6.7
14-Day Hardness	3.6.9
Shear Strength (Class C only)	3.6.19
Peel Strength	3.6.21 and 4.6.4.2

Note 1: Testing not required on material packaged in sectionalized containers or small size containers less than 8 ounces (235 mL).

4.2.3 Final Acceptance Tests

Requirements shown in Table 3 are final acceptance tests and shall be performed on each lot of the final packaged product per AS5502 (4.2.2.2).

Table 3 - Final acceptance tests

Test	Requirement Paragraph
Flow (Class B only)	3.6.3
Application Time	3.6.4
Tack-Free Time	3.6.6
Cure Time to Hardness	3.6.7

4.3 Sampling and Testing

Shall be in accordance with AS5502 (4.3).

4.3.1 Qualification Tests

Sample batches shall be produced using production scaled equipment. Enough material, including any required adhesion promoters, shall be supplied to perform all required tests. Samples shall be identified as follows:

SEALING COMPOUND, POLYSULFIDE (T) RUBBER, FUEL RESISTANT, NON-CHROMATED, CORROSION INHIBITING FOR INTERMITTENT USE TO 360 °F (182 °C)
AMS3265F
CLASS_____
MANUFACTURER'S IDENTIFICATION_____
BATCH/LOT NUMBER_____
DATE OF PACKAGING_____
SHELF LIFE EXPIRATION DATE_____
STORE BELOW 80 °F (27 °C)

4.3.2 Acceptance Tests

Shall be in accordance with AS5502 (4.3.1).

4.3.2.1 Batch and Lot

A batch shall be defined as the quantity of material run through a mill or mixer at one time. A lot shall be defined as material from one batch of each component assembled (packaged) as finished product in one size and/or type of container at the same time. The lot, when used, shall be traceable to the batches of base compound and curing agent.

4.3.2.2 Initial and Final Acceptance Tests

Sufficient material of each batch shall be prepared for initial and final acceptance testing and shall be packaged in the same type containers that are being procured. After successful completion of the initial acceptance tests listed in Table 2, the batch shall be released for final packaging. During packaging, test kits from each lot shall be selected at random for final acceptance testing. Final acceptance testing shall be conducted on the final packaged product and consist of those tests outlined in Table 3.

4.3.2.3 Final Acceptance Tests for Different Types and/or Size Containers

If the batch is being packaged in different types and/or size containers, the final acceptance tests shall be conducted on each type and/or each size containers. If the sealing compound is being procured under different purchase orders, but the purchase orders call for the same type and size containers, it is only necessary to conduct the final acceptance tests one time.

4.3.3 Shelf Life Extension

4.3.3.1 Shelf-Life Testing

The tests to be conducted for shelf-life extension are listed in Table 4.

Table 4 - Shelf-life testing

Test	Requirement Paragraph
Appearance	3.1
Viscosity of Base Compound (Note 1)	3.6.2
Application Time	3.6.4
Tack-Free Time	3.6.6
Cure Time to Hardness	3.6.7
Peel Strength: two aluminum panels, sulfuric acid anodized per AS5127 (6.3), coated with AMS-C-27725 Type 2; all immersed in AMS2629, Type 1 for 7 days at 140 °F (60 °C)	3.6.21

Note 1: Testing not required on material packaged in sectionalized containers or small size containers less than 8 ounces (235 mL).

4.3.3.2 Time and Limits of Shelf Life Extensions

If the tests are being performed at the end of the stated shelf life to extend the shelf-life of the sealing compound and all tests are passed the shelf life may be extended an additional 3 months. Up to three extensions are permitted.

4.4 Approval

Shall be in accordance with AS5502 (4.4).

4.5 Test Methods

4.5.1 Standard Tolerances

Unless otherwise specified herein, standard tolerances of AS5127 (Section 3) “Standard Tolerances” shall apply.

4.5.2 Standard Conditions

Standard laboratory conditions shall be as specified in AS5127 (Section 4).

4.5.3 Standard Heat Cycle

When directed herein, the standard heat cycle to which sealants shall be exposed shall be performed six times:

4 hours at 260 °F (127 °C), plus
40 minutes at 320 °F (160 °C), plus
1 hour at 360 °F (182 °C)
Cool to less than 100 °F (38 °C) between cycles.

4.5.4 Preparation of Test Specimens

4.5.4.1 Cleaning and Surface Preparation of Test Panels

Test panels shall be cleaned and prepared with materials, surface treatments, and coatings per AS5127 (Section 6) prior to application of sealant for testing.

4.5.4.2 Preparation of Sealing Compound

Sealing compound shall be prepared in accordance with AS5127/1 (Section 4) “Preparation of Sealing Compound” and subparagraphs (4.1) “Qualification Testing,” (4.2) “Acceptance Testing,” and (4.3) “Thawing of Quick-Frozen Sealing Compound.”

4.5.4.3 Application of Adhesion Promoter

When AMS3100 adhesion promoter is used, it shall be applied in accordance with AS5127 (6.9) “Application of Adhesion Promoter.” If adhesion promoter is used for qualification and initial acceptance testing, the adhesion promoter product shall be reported.

4.5.4.4 Application of Sealing Compound

Unless otherwise specified herein, freshly mixed sealing compound shall be applied to test panels in accordance with AS5127 (6.10) “Application of Sealing Compound.” For Class A material, the sealant may be applied in layers with a time equal to the application life used between applications to permit release of solvents.

4.5.4.5 Curing of Sealing Compounds

Shall be in accordance with AS5127 (6.11). For qualification testing, Classes A and B sealing compounds shall be cured for 14 days at Standard Conditions (4.5.2). For acceptance testing, Classes A and B sealing compounds may be given an accelerated cure for 48 hours at standard conditions (4.5.2) followed by 24 hours at 140 °F (60 °C). For qualification testing and acceptance testing of Class C sealing compounds, accelerated cure shall be 48 hours at standard conditions (4.5.2), followed by the number of hours listed in Table 5 at 140 °F (60 °C) according to the sealing compound designation.

Table 5 - Class C accelerated cure times

Sealing Compound	Hours at 140 °F (60 °C)
Class C-2 (2)	24
Class C-8 (24)	24
Class C-12 (24)	24
Class C-48 (168)	168
Class C-96 (336)	336

4.6 Test Procedures

Standard test methods are in accordance with AS5127 and AS5127/1. In the event of a conflict between the text of this document and AS5127 and/or AS5127/1, the text of this document takes precedence.

4.6.1 Resistance to Thermal Rupture

Resistance to thermal rupture shall be conducted in accordance with AS5127/1 (7.2). The air circulating oven shall be preset at 250 °F (121 °C) and the clamp fixture shall be placed in the oven at 10 +1/-0 psi (69 +6.9/-0 kPa) for 30 minutes.

4.6.2 Low Temperature Flexibility

Low temperature flexibility shall be conducted in accordance with AS5127/1 (7.6). At the end of the cure in accordance with 4.5.4.5, two of the four prepared panels shall be conditioned per the following:

120 hours at 140 °F (60 °C) in AMS2629 Type 1, followed by
60 hours at 160 °F (71 °C) in AMS2629 Type 1, followed by
6 hours at 180 °F (82 °C) in AMS2629 Type 1.

At the completion of the fluid exposure, the specimens shall be removed from the fluid. All four specimens shall be exposed to the standard heat cycle as in 4.5.3 after which all four panels shall be immediately placed in a low temperature flexibility fixture and tested in accordance with AS5127/1 (7.6).

4.6.3 Corrosion Testing

4.6.3.1 Stressed Assembly

Corrosion testing shall consist of stressed aluminum assemblies undergoing exposure to a corrosive environment. Two test assemblies shall be prepared in accordance with Table 6. Assemblies shall be tested in accordance with AS5127/1 (7.10.1).

Table 6 - Preparation sequence for cyclic loading corrosion test assemblies

Sequence Step	Assembly Preparation
1	Apply approximately 0.005 inch (0.13 mm) sealing compound to one side of each panel by spatula. After 1 to 2 hours, the coated sides of the panels shall be mated.
2	Apply sealing compound to threaded fasteners and install wet into the freshly mated panels. Torque fasteners to 40 inch-pounds ± 5 inch-pounds (4.6 N•m ± 0.58 N•m).
3	Apply sealing compound by extrusion gun into the butt joint.
4	Apply sealing compound over and around the fastener head, backs (nuts) and all edges.
5	Apply sealing compound over the entire assembly to a thickness of 0.005 to 0.010 inch (0.13 to 0.26 mm). Any class of the qualifying sealing compound may be used for this application.
6	Cure per 4.5.4.5 the assembly at standard conditions (4.5.2).
7	After curing, scribe an “X” with approximately 0.75 inch (19 mm) lengths on one half of the front side of each assembly as shown in AS5127/1 (Figure 17) ensuring that the scribe does not contact any of the fastener countersinks.

4.6.3.2 Mixed-Metal Assemblies

All sealant classes shall be subjected to mixed couple corrosion testing. Two test panels of each couple indicated in Table 7 shall be prepared in accordance with 4.5.4, assembled per AS5127/1 (7.10.2) and AS5127/1 (Figure 18), and tested in accordance with AS5127/1 (7.10.3).

Table 7 - Mixed couple assemblies

Assembly	Metal B (AS5127/1, Figure 18)	Metal A (AS5127/1, Figure 18)
1	Aluminum 1/	Titanium 2/
2	Aluminum 1/	Aluminum 3/
3	Aluminum 1/	Carbon/Epoxy 4/

1/ AMS4045 chemically treated in accordance with AS5127 (6.2).
2/ AMS4911 cleaned in accordance with AS5127 (6.6).
3/ AMS4049 (Alclad) chemically treated in accordance with AS5127 (6.2).
4/ AS4/3501-6 or IM7/977-3 prepared in accordance with AS5127 (6.7.2).

4.6.4 Peel Strength

The type and quantity of panels listed in Table 8 shall be used for the evaluation of peel strength. The panels shall be prepared in accordance with AS5127/1 (8.1) and AS5127/1 (Figure 22).

4.6.4.1 Fuel/Saltwater Heat Cycle

The fuel/saltwater heat cycle used for peel specimen exposure shall consist of the following cycle, which shall be repeated six times.

100 hours at 140 °F (60 °C) in AMS2629 Type 1, 3% by weight saltwater, followed by
10 hours at 160 °F (71 °C) in AMS2629 Type 1, 3% by weight saltwater, followed by
1 hour at 180 °F (82 °C) in AMS2629 Type 1, 3% by weight saltwater.

Cool to less than 100 °F (38 °C) between cycles and directly transfer to fresh test fluid for each succeeding cycle.

4.6.4.2 Acceptance Tests (Only)

Prepare two AMS4045 aluminum alloy panels measuring 0.040 x 2.75 x 6 inches (1.02 x 69.8 x 152 mm) sulfuric acid anodized in accordance with AS5127 (6.3) and coated with AMS-C-27725, Type 2; after curing, panels shall be immersed in AMS2629, Type 1 for 7 days at 140 °F (60 °C).