

SMI, Inc.

12219 SW 131 Avenue  
Miami, Florida 33186-6401 USA

Phone: (305) 971-7047  
Fax: (305) 971-7048

Attn: Gary Brierley  
Y2K Aviation  
Unit 1 Lynncastle Rd.  
Barleycastle Industrial Estate  
Appleton Thorn Warrington WA4 4SP  
UNITED KINGDOM

Date: 10-Apr-2004

SMI/REF: 04MAR254

Product: **AEROCARE 1-03 ESU SANITISER**  
Batch No: **Y402006Y** (received 30-Mar-2004)

Dilution: Ready to Use

Page 1 of 4

**AMS 1452B**  
**DISINFECTANT, AIRCRAFT; GENERAL PURPOSE**

3.2.1.1	Flash Point	<u>Conforms</u>
3.2.1.2	Storage Stability	
3.2.1.2.1	Elevated Temperature	<u>Informational</u>
3.2.1.2.2	Cold Temperature	<u>Informational</u>
3.2.2.1	Corrosion of Metal Surfaces	<u>Conforms</u>
3.2.2.1.1	Total Immersion Corrosion	<u>Conforms</u>
3.2.2.1.2	Sandwich Corrosion	<u>Conforms</u>
3.2.2.2.1	Effect on Transparent Plastic	<u>Conforms</u>
3.2.2.2.2	Effect on Painted Surfaces	<u>Conforms</u>
3.2.2.2.3	Effect on Rubber	<u>Conforms</u>
3.2.2.2.4	Effect on Vinyl Surfaces	<u>Conforms</u>
3.2.2.2.5	Effect on Tedlar Surfaces	<u>Conforms</u>

Respectfully submitted,



Patricia D. Viani, SMI Inc.

Client: Y2K Aviation  
Product: **AEROCARE 1-03 ESU SANITISER**  
Dilution: Ready to use  
AMS 1452B

Date: 10-APR-2004  
SMI/REF: 04MAR254

Page 2 of 4

### 3.2.1 Concentrated Disinfectant:

3.2.1.1 Flash Point: Shall be not lower than 100°C (210°F), determined in accordance with ASTM D56.

**Product: No flash observed to 212°F**

Result Conforms

3.2.1.2 Stability: Disinfectant shall meet the requirements of 3.2.1.2.1 and 3.2.1.2.2, determined in accordance with ASTM F 1104.

3.2.1.2.1 Elevated Temperature: Disinfectant shall evince no separation or stratification after exposure for 120 hr  $\pm 1$  at 50°C  $\pm 3$  (120°F  $\pm 5$ ).

*Complete ASTM F 1104 requires 12 months storage of product, with subsequent retest. This test was performed on un-aged product.*

**Product: No separation or stratification after exposure.**

Result Informational

3.2.1.2.2 Cold Temperature: Disinfectant shall evince no precipitation, stratification, layering, or separation after being exposed for 120 hrs  $\pm 10^\circ\text{C} \pm 3$  (15°F  $\pm 5$ ), warmed to room temperature, and the sample container inverted 3 times prior to evaluation.

*Complete ASTM F 1104 requires 12 months storage of product, with subsequent retest. This test was performed on un-aged product.*

**Product:**

**No precipitation, stratification, layering or separation after exposure.**

Result Informational

### 3.2.2 Concentrated Disinfectant and At Use Dilution:

3.2.2.1 Corrosion of Metal Surfaces:

3.2.2.1.1 Total Immersion Corrosion: Disinfectant shall neither show evidence of staining, pitting, or corrosion nor cause an average weight change of AMS 4049 alclad aluminum alloy panels greater than 0.3 mg/cm<sup>2</sup> per 24 hours, determined in accordance with ASTM F 483.

**Product: < 0.01 mg/cm<sup>2</sup>/24hrs**

Result Conforms

Client: Y2K Aviation  
Product: **AEROCARE 1-03 ESU SANITISER**  
Dilution: Ready to use  
AMS 1452B

Date: 10-APR-2004  
SMI/REF: 04MAR254

Page 3 of 4

3.2.2.1.2 Sandwich Corrosion: Specimens of AMS 4049 alclad aluminum alloy, after test, shall show a rating not worse than 1 or not worse than control panels using ASTM D 1193, Type VI water, determined in accordance with ASTM F 1110.

	RATING: AMS 4049 ALCLAD ALUMINUM
<b>PRODUCT</b>	<b>1</b>
<b>CONTROL</b>	<b>1</b>

Result                      Conforms

3.2.2.2 Effect on Aircraft Materials:

3.2.2.2.1 Effect on Transparent Plastics: Disinfectant shall not craze, stain, or discolor Type C acrylic plastic, determined in accordance with ASTM F484. Disinfectant shall not craze, stain, or discolor MIL-P-83310 polycarbonate plastic or polysulfone plastic, determined in accordance with test procedures specified in ASTM F484 on specimens stressed for 10 min.  $\pm$  1 to an outer fiber stress of 2000 psi (20MPa).

	PRODUCT
Type C Acrylic (MIL-P-25690)	<b>No craze, stain nor discoloration</b>
MIL-P-83310 Polycarbonate	<b>No craze, stain nor discoloration</b>

Result                      Conforms

3.2.2.2.2 Effect on Painted Surfaces: Disinfectant shall neither decrease the hardness of the paint film by more than two pencil hardness levels nor shall it produce any streaking, discoloration, or blistering of the paint film, determined in accordance with ASTM F502.

**Product: No decrease in film hardness.  
No evidence of streaking, discoloration or blistering.**

Result                      Conforms

Client: Y2K Aviation  
Product: **AEROCARE 1-03 ESU SANITISER**  
Dilution: Ready to use  
AMS 1452B

Date: 10-APR-2004  
SMI/REF: 04MAR254

Page 4 of 4

3.2.2.2.3 Effect on Rubber: Disinfectant shall neither cause more than 25% loss of tensile strength and 25% loss in elongation nor cause more than  $\pm$  15% change of volume, when tested on material specified by the purchaser, in accordance with ASTM D 471. The test conditioning shall be performed at room temperature and the immersion period shall be 24 hours.

**Rubber:** *AMS 3209 Chloroprene Rubber, 65-75*  
**Product:** *< 10% change in tensile strength*  
*< 10% change in elongation*  
*< 10% change in volume*

Result Conforms

3.2.2.2.4 Effect on Vinyl Surfaces: Disinfectant shall neither cause scratching nor more than a minimal color change or staining, when tested in accordance with ASTM F 2109.

**Product:** *No scratching nor discoloration*

Result Conforms

3.2.2.2.5 Effect on Tedlar Surfaces: Disinfectant shall neither cause scratching nor more than a minimal color change or staining, when tested in accordance with ASTM F 2109.

**Product:** *No scratching nor discoloration*

Result Conforms