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Attn:	Lewis Baker Duo Tech Limited P.O. Box 268 Bristol, BS15 0BB United Kingdom	Date: SMI/REF	09-Dec-2010 : 1010-881
Product:	DUOMAX (received 04-Nov-2010)		
Dilution:	As received	Page 1 o	f 3

## AMS 1550B CLEANER, WATER BASE, AIRCRAFT INTERIOR Hard Surface Materials

- 3.2 **PROPERTIES**
- 3.2.1.1. Sandwich Corrosion Conforms 3.2.1.2. **Total Immersion Corrosion** Conforms 3.2.2 Flash Point Conforms 3.2.3 Effect on Transparent Plastics Conforms 3.2.4 Effect on Painted Interior Surfaces Conforms 3.2.5 Effect on Unpainted Interior Surfaces Conforms Storage Stability 3.2.6 Not performed

Respectfully submitted,

Patricia D. Viani, SMI Inc.

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- 3.2.1 Effect on Metallic Surfaces:
- 3.2.1.1 <u>Sandwich Corrosion</u>: Specimens of AMS 4045\* and AMS 4049 aluminum alloy, after test, shall show a rating not worse than control panels tested using ASTM D 1193, Type IV, water, determined in accordance with ASTM F 1110.

AMS 4045 Anodized Aluminum*		AMS 4049 Aluminum
PRODUCT	1	1
CONTROL	1	1

\* AMS 4045 coupons were anodized in accordance with MIL-A-8625, per ASTM F1110.

Result Conforms

3.2.1.2 <u>Total Immersion Corrosion</u>: Panels, tested in accordance with ASTM F 483, shall neither exhibit evidence of corrosion nor weight change greater than that shown in Table 1 when tested at the highest concentration and temperature recommended for use by the manufacturer.

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ALLOY	WEIGHT CHANGE (mg/cm <sup>2</sup> /24hrs)	
	Allowed	PRODUCT
AMS 4045 Aluminum anodized per AMS 2470	0.3	+ 0.01
AMS 4049 Aluminum anodized per AMS 2470	0.3	+ 0.01

Result Conforms

3.2.2 Flash Point: Shall be not lower than 70°C (158°F) determined in accordance with ASTM D56.

PRODUCT: No flash to 100°C (212°F)

Result Conforms

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#### 3.2.3 Effect on Transparent Plastics:

3.2.3.1 The product shall not craze, stain, or discolor Type C acrylic plastic, determined in accordance with ASTM F484.

### PRODUCT: No visible craze, stain or discolor

Result Conforms

3.2.3.2 The product 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 30 min. <u>+</u> 2 to an outer fiber stress of 3.0 ksi (21MPa).

#### PRODUCT: No visible craze, stain or discolor

Result Conforms

3.2.4 <u>Effect on Painted Interior Surfaces</u>: Cleaner shall neither decrease the hardness of films of polyurethane paint or other paint specified by purchaser nor shall it produce any streaking, discoloration, or blistering of the paint film, determined in accordance with ASTM F502.

PRODUCT: No decrease in hardness; no streaking, discoloration or blistering of the paint film

Result Conforms

3.2.5 <u>Effect on Unpainted Interior Surfaces</u>: Cleaner, tested in accordance with ASTM F485, shall neither produce streaking nor leave any stains on AMS 4045 and AMS 4049 aluminum alloys which require polishing to remove. **PRODUCT: AMS 4045: No streaks nor stains** 

# AMS 4049: No streaks nor stains

Result Conforms

3.2.6 <u>Storage Stability</u>: Cleaner, tested in accordance with ASTM F 1104, shall not show evidence of precipitation, layering, or separation, and shall be restorable to its original appearance after 100 mL of cleaner is placed in a stoppered 100 mL cylinder and subjected to four inversion cycles. Cleaner shall conform to all other technical requirements of this specification after the storage stability period.

Result Not performed