

SMI, Inc.

12219 SW 131 Avenue
Miami, Florida 33186-6401 USA

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

Attn: Joe Drake
DeCon7 Systems, LLC
7575 E Redfield Rd, Suite 235
Scottsdale, AZ 85260

Date: 26-Jan-2015

SMI/REF: 1410-264AB

Product: **A – DECON 7 PART 1** (received 12 December 2014)
B – DECON 7 PART 2 (received 12 December 2014)

Dilution: 50/50 (50% PART 1 mixed with 50% PART 2)

Page 1 of 5

Boeing D6-7127 Rev P incorporating PDD 6-8 (21 June 12)
CLEANING INTERIORS OF COMMERCIAL
TRANSPORT AIRCRAFT
Category: Disinfectants

11.3.1	Sandwich Corrosion	<u>Does not conform</u>
11.3.2	Immersion Corrosion Test	<u>Does not conform</u>
11.3.3	Rubber Test	<u>Conforms</u>
11.3.4	Sealant Test	<u>Conforms</u>
11.3.5	Painted Surface Test	<u>Conforms</u>
11.3.6	Tedlar Surface Test	<u>Conforms</u>
11.3.7	Vinyl Surface Test	<u>Conforms</u>
11.3.8	Fabric and Carpet Test	<u>Conforms</u>
11.3.9	Leather and Naugahyde Test	<u>Conforms</u>
11.3.10	Flash Point Test	<u>Informational</u>
11.3.11	Polycarbonate Crazing Test	<u>Does not conform</u>

Respectfully submitted,



Patricia D. Viani, SMI Inc.

11.3.1 Sandwich Corrosion Test: Corrosion in excess of that on the control panel constitutes failure when tested in accordance with Section 12.1.

	Clad 7075-T6 Aluminum (AMS 4049)	Bare 7075-T6 Aluminum (AMS 4045) anodized per Mil-A-8625 Type I
PRODUCT	4*	4*
Control	1	1

Result *Does not conform

11.3.2 Immersion Corrosion Test: The average weight change of each test specimen shall not exceed ± 10 mg in a 24 hour immersion period when tested in accordance with Section 12.2.

	PRODUCT (mg loss per 1"x2" panel)	RESULT
Clad 2024-T3 Aluminum (QQ-A-250/5)	+ 1.6	PASS
Bare 2024-T3 Aluminum (QQ-A-250/4) alodined per MIL-C-5541	3.0	PASS
Bare 2024-T3 Aluminum (QQ-A-250/4) anodized per MIL-A-8625 Ty I	+ 6.2	PASS
Bare 7178-T6 Aluminum (QQ-A-250/14) anodized per MIL-A-8625 Ty I	+ 16.4*	FAIL

Result *Does not conform

11.3.3 Rubber Test: Changes in properties shall not exceed the following, when tested in accordance with Section 12.3:

PROPERTY	MAX. CHANGE ALLOWED	PRODUCT
Tensile Strength	25 % loss	< 5%
Elongation	25 % loss	15%
Volume	$\pm 15\%$ change	< 5%

24 hour immersion at room temperature

Result Conforms

11.3.4 Sealant Test: The sealant shall not lift at the edges or lose adhesion when tested in accordance with Section 12.4. (*Immersion time 70 ± 2 hours at 120°F ± 5°F*)

Sealant: BMS 5-95

Water control on Sealant BMS 5-95:

No lifting or loss of adhesion when pried away from edge

PRODUCT: Sealant did not lift at the edges or lose adhesion.

Result Conforms

11.3.5 Painted Surface Test: When tested in accordance with Section 12.5 and Section 7c., the following is required:

- a. Paint film hardness shall not decrease more than 2 pencil hardnesses.
- b. Greater than minimal color change or staining constitutes test failure.

Application method: paragraph 12.5.2(b)

**PRODUCT: Paint film hardness: 0 pencil hardness change
Color change: none**

Result Conforms

11.3.6 Tedlar Surface Test: When tested in accordance with Section 12.6 and Section 7c., the following is required:

- a. Scratching of exposed specimens constitutes test failure.
- b. Greater than minimal color change or staining constitutes test failure.

Application method: paragraph 12.6.2(b)

PRODUCT: No scratching, color change, or staining of specimens.

Result Conforms

11.3.7 Vinyl Surface Test: When tested in accordance with Section 12.7 and Section 7c., the following is required:

- a. Cracking, or brittleness of exposed specimens constitutes test failure.
- b. Greater than minimal color change or staining constitutes test failure.

Application method: paragraph 12.7.2(b)

PRODUCT: No scratching, color change, or staining of specimens.

Result Conforms

11.3.8 Fabric and Carpet Test: When tested in accordance with Section 12.8 and Section 7c., the following is required:

Application method: paragraph 12.8.2(b)

Upholstery:

- a. Greater than minimal color change or staining constitutes test failure.

No color change or staining

Result Conforms

- b. Flammability: maximum values:

PROPERTY	MAXIMUM VALUE	PRODUCT
Extinguishing Time	15 seconds	12 seconds
Burn Length	8 inches	6 inches
Drip Extinguish Time	5 seconds	5 seconds

Result Conforms

Carpet:

- a. Greater than minimal color change or staining constitutes test failure.

No color change or staining

Result Conforms

- b. Flammability: maximum values:

PROPERTY	MAXIMUM VALUE	PRODUCT
Extinguishing Time	15 seconds	< 3 seconds
Burn Length	8 inches	3 inches
Drip Extinguish Time	5 seconds	< 3 seconds

Result Conforms

11.3.9 Leather and Naugahyde Test: When tested in accordance with Section 12.9 and Section 7c., the following is required:

Application method: paragraph 12.9.2(b)

Leather:

- a. *Scratching or brittleness of exposed specimen constitutes test failure.*
No cracking or brittleness of exposed specimen.
- b. *Greater than minimal color change or staining constitutes test failure.*
Gray Scale Grade 5 (No perceived difference in color or contrast between original material and tested specimen).

Result Conforms

Naugahyde:

- a. *Scratching or brittleness of exposed specimen constitutes test failure.*
No cracking or brittleness of exposed specimen.
- b. *Greater than minimal color change or staining constitutes test failure.*
Gray Scale Grade 4.5 (Slight difference in color or contrast between original material and tested specimen).

Result Conforms

11.3.10 Flash Point Test: All cleaning candidates having a flash point shall be approved by Fire Protection Engineering before they can be evaluated for use.

PRODUCT: No flash to IBP (initial boiling point = 94°F).

Result Informational

11.3.11 Polycarbonate Crazing Test: Any cracking or crazing of the polycarbonate sheet constitutes failure, when tested in accordance with Section 12.11. (Strain = 0.008; 10 minute exposure)

LEXAN 9600: PRODUCT: Visible cracking

BMS8-400 BAC 70913: PRODUCT: Visible cracking

Result Does not conform