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Date:

05-Oct-2022

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Product:

AEROCLEAN IC 230 (received 15-Aug-2022)

Dilution:

As received

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BOEING SPECIFICATION SUPPORT STANDARD BSS7434

CHEMICAL COMPATIBILITY OF CLEANING PRODUCTS AND INTERIOR PARTS/MATERIALS OF COMMERCIAL TRANSPORT AIRCRAFT

(Version: Original issue, 04-Jun-2019) Supersedes Boeing D6-7127

(Note: Boeing D6-7127 was cancelled and superseded by BSS7434 on 04-Jun-2019)

5.1	Sandwich Corrosion	Conforms
5.2	Immersion Corrosion Test	Conforms
5.3	Rubber Test	Conforms
5.4	Sealant Test	Conforms
5.5	Painted Surface Test	Conforms
5.6	Tedlar Surface Test	Conforms
5.7	Vinyl Surface Test	Conforms
5.8	Fabric and Carpet Test	Conforms
5.9	Leather and Naugahyde Test	Conforms
5.10	Flash Point Test	Informational
5.11	Polycarbonate Crazing Test	Conforms

Respectfully submitted,

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PROCEDURE

7.a Cleaning materials must be tested in accordance with BAC5150 test requirements.

5.1 / 7.1 Sandwich Corrosion Test

Requirement (BAC5150 / 11.3.1): Corrosion in excess of that on the control panel constitutes failure when tested in accordance with the procedures section for sandwich corrosion in BSS7434.

	CLAD 7075-T6 ALUMINUM (AMS 4049)	BARE 7075-T6 (AMS-QQ-A-250/12) ANODIZED PER MIL-A-8625 TYPE I (with dichromate seal)	
PRODUCT (AS RECEIVED)	1	1	
CONTROL (D.I WATER)	1	1	

Result	Conforms	

5.2 / 7.2 Immersion Corrosion Test

Requirement (BAC5150 / 11.3.2): The average weight change of each test specimen shall not exceed ± 10 mg in a 24 hour immersion period when tested in accordance with the procedures section for immersion corrosion in BSS7434.

	PRODUCT (AS RECEIVED) (Loss per 1" x 2" panel)
Clad 2024-T3 aluminum (AMS-QQ-A-250/5)	< 1.0 mg
Bare 2024-T3 aluminum (AMS-QQ-A-250/4) alodined per MIL-C-5541	< 1.0 mg
Bare 2024-T3 aluminum (AMS-QQ-A-250/4) anodized per MIL-A-8625 Type I	< 1.0 mg
Bare 7178-T6 aluminum (AMS-QQ-A-250/14) anodized per MIL-A-8625 Type I	< 1.0 mg

Result	Conforms

5.3 / 7.3 Rubber Test

Requirement (BAC5150 / 11.3.3): Changes in properties must not exceed the following, when tested in accordance with the procedures section for rubber test in BSS7434.

PROPERTY RUBBER: BMS1-72* *Note: BMS1-63 replaced with BMS1-72 according to Triangle Rubber Co.	MAX. CHANGE ALLOWED	PRODUCT (AS RECEIVED)	
Tensile Strength	25 % loss	< 5%	
Elongation	25 % loss	< 5%	
Volume	<u>+</u> 15% change	< 5%	

24 hour immersion at room temperature

Result	Conforms
Result	COMOTHS

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5.4 / 7.4 Sealant Test

Requirement (BAC5150 /11.3.4): The sealant must not lift at the edges or lose adhesion when tested in accordance with the procedures section for sealant test in BSS7434.

Sealant: BMS 5-95

Water control: No lifting or loss of adhesion when pried away from edge

PRODUCT (AS RECEIVED):

No lifting or loss of adhesion when pried away from edge

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5.5 / 7.5 Painted Surface Test

Requirement (BAC5150 / 11.3.5): When tested in accordance with the procedures section for painted surface test in BSS7434 and Section 7.c, the following is required:

Exposure: 2 minutes, then rinsed

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

Paint System: BMS10-83 enamel prepared in accordance with BAC5755

PRODUCT (AS RECEIVED):

Hardness change:

< 2 pencil hardness change

Color change (AATCC Gray Scale): Grade 5 / minimal to none

(No perceived difference in color or contrast between original material and tested specimen).

Result	Conforms

5.6 / 7.6 Tedlar Surface Test

Requirement (BAC5150 / 11.3.6): When tested in accordance with the procedures section for tedlar surface test in BSS7434 and Section 7c., the following is required:

Exposure: 2 minutes, then rinsed

- a. Greater than minimal color change or staining constitutes test failure.
- b. Examine for scratches

PRODUCT (AS RECEIVED):

Color change (AATCC Gray Scale): Grade 5 / minimal to none

(No perceived difference in color or contrast between original material and tested specimen).

No scratches

Result	Conforms

5.7 / 7.7 Vinyl Surface Test

Requirement (BAC5150 / 11.3.7): When tested in accordance with the procedures section for vinyl surface test in BSS7434 and Section 7c., the following is required:

Exposure: 2 minutes, then rinsed

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

PRODUCT (AS RECEIVED): No cracking or brittleness Color change (AATCC Gray Scale): Grade 5 / minimal to none (No perceived difference in color or contrast between original material and tested specimen).

Result	Conforms	

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5.8 / 7.8 Fabric and Carpet Test

Requirement (BAC5150 / 11.3.8): When tested in accordance with the procedures section for fabric and carpet test in BSS7434 and Section 7c., the following is required:

Upholstery:

a. Greater than minimal color change or staining constitutes test failure. PRODUCT (AS RECEIVED):

Color change (AATCC Gray Scale): Grade 5 / minimal to none (No perceived difference in color or contrast between original material and tested specimen).

> Conforms Result

Flammability: maximum values:

PROPERTY	MAXIMUM VALUE	FABRIC (cut perpendicular "fill")	FABRIC (cut parallel "warp")
Extinguishing Time	15 seconds	Less than 3 seconds	Less than 3 seconds
Burn Length	8 inches	4 inches	4 inches
Drip Extinguish Time	5 seconds	Less than 3 seconds	Less than 3 seconds

Result	Conforms

Carpet:

a. Greater than minimal color change or staining constitutes test failure. PRODUCT (AS RECEIVED):

Color change (AATCC Gray Scale): Grade 5 / minimal to none (No perceived difference in color or contrast between original material and tested specimen).

Conforms Result Flammability: maximum values:

PROPERTY	MAXIMUM VALUE	CARPET (cut perpendicular "fill")	CARPET (cut parallel "warp")
Extinguishing Time	15 seconds	Less than 3 seconds	Less than 3 seconds
Burn Length	8 inches	6 inches	6 inches
Drip Extinguish Time	5 seconds	Less than 3 seconds	Less than 3 seconds

Result	Conforms	
Mesuit	COMOTING	

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Requirement (BAC5150 / 11.3.9): When tested in accordance with the procedures section for leather and naugahyde in BSS7434 and Section 7c., the following is required:

Leather:

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

PRODUCT (AS RECEIVED): No cracking or brittleness Color change (AATCC Gray Scale): Grade 5 / minimal to none (No perceived difference in color or contrast between original material and tested specimen).

Result	Conforms	
DESUIL	COHIOHIS	

Naugahyde:

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

PRODUCT (AS RECEIVED): No cracking or brittleness Color change (AATCC Gray Scale): Grade 5 / minimal to none (No perceived difference in color or contrast between original material and tested specimen).

Result	Conforms
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5.10 / 7.10 Flash Point Test

Requirement (BAC5150 / 11.3.10): All cleaning candidates having a flash point must be approved by Fire Protection Engineering before they can be evaluated for use. Method used ASTM D93.

PRODUCT (AS RECEIVED): No Flash point observed to IBP: 212 °F (IBP = Initial Boiling Point)

Result	Informational

5.11 / 7.11 Polycarbonate Crazing Test

Requirement (BAC5150 / 11.3.11): Any cracking or crazing of the polycarbonate sheet constitutes failure, when tested in accordance with the procedures section for polycarbonate crazing test in BSS7434.

(Strain = 0.008; 10 minute exposure)

PRODUCT (AS RECEIVED):

LEXAN 9600: BMS8-400 BAC 70913: No cracking or crazing No cracking or crazing

Result	Conforms