AEROWASH

Aerowash

Information Pack

Biodegradability as per
Regulation (EC) 648/2004

Available from Frasers Aerospace

1 St James Rd, Brentwood, Essex, CM14 4LH

www.frasersaerospace.com

FRASERS AEROSPACE

Technical Datasheet

AEROWASH

Product Name: AeroWash

Pack:

5, 20 & 1000 Lt containers

Manufacturer: Frasers Aerospace

Approvals:

- AIMS 09-00-002
- BoeingD6-17487
- Bombardier

HS Commodity Code: 3402909000

Product Description.

AeroWash utilises an eco-friendly solvent, water softener, naturally derived surfactant and shine additive for the quick and complete removal of oil, dirt, carbon, brake dust, Skydrol deposits and greasy residues from the exterior of aircraft.

Frasers Aerospace, 1 St James Road, Brentwood, Essex, CM14 4LH
Tel: +4420 8597 8781 Email:contact@frasersaerospace.com Web:www.frasersaerospace.com

Core Benefits.

- Biodegradable.
- Concentrated formula, reducing the cost in use and single use plastic.
- Reduces CO2e by up to 85%.
- Advanced detergent/solvent combination removes oil, greases, dirt and grime from all aircraft exteriors in one straightforward application.
- Formulated with water softeners to ensure performance even in very hard water areas.
- Effectively enhances shine on both dulling and new paint.
- Reduced use of hazardous ingredients owing to the inclusion of a plant derived solvent in place of traditional solvents, with a high bio-renewable carbon index (BCI) and low VOC content.
- Moderate foaming formulation ensures quick and easy rinsing to give streak free finish.
- Safe on plexiglass and glass.

How does it work?

AeroWash contains a heavy duty, quick breaking, multi-surfactant system to provide effective wetting, penetrating, soil cutting and anti-redepositing action which allows the quick emulsification and easy lifting of soils, dirt and grease from hard surfaces.

Oily and greasy soils do not dissolve in water easily, so solvents are added to formulations to boost performance, creating a water-based solution that effectively penetrates and breaks down oily soils. Solvents play an important role in the cleaning process, breaking down soils, dissolving particles and preventing them from returning to the freshly cleaned surfaces. Solvents also help surfaces dry faster, prevent water spots and help maintain a streak-free shine on the aircraft exterior.

AeroWash contains a plant derived, near carbon neutral, low VOC eco-solvent which provides extra solvency power and rapid soil penetrating kinetics and replaces the need for more conventional and hazardous solvents.

Directions for use.

For heavy soiling, dilute product at a rate of 1:10 (500ml per 5 litre mop bucket),
for lighter soiling dilute at a rate of 1:20 (250ml per 5 litre mop bucket). Apply AeroWash to the surfaces of the aircraft exterior starting at the top and working downwards using a mop, soft brush or scrub pad. Allow a short contact time but do not allow product to dry out on the surface. Agitate surfaces where necessary. Rinse thoroughly with clean water or wipe off with a clean dry terry towel / microfiber cloth.

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Environmental.

- Local UK Production and supply chain reduces CO2e impact from transport.
- Technologies are renewable and sustainable, sourced from plant extracts, fermentation, microbes and manufacturing by-products reducing CO2e and environmental toxicity.
- Post-Consumer Recycled bottles provide a circular life cycle reducing CO2e and removing physical plastic pollution.
- Highly concentrated to reduce plastic, transport and storage costs and environmental impact.
- Readily biodegradable (99% over <28 days).
- 0% manufacturing waste.
- Not tested on animals.
- Excludes all 'watch list' raw materials.

Safety & storage.

Full guidance on the handling and disposal of this product is provided in a separate Safety Data Sheet (SDS). Only for professional users/specialists. Store in original closed containers away from extremes of temperature.

IRRITANT

Frasers Aerospace, 1 St James Road, Brentwood, Essex, CM14 4LH
Tel: +4420 8597 8781 Email:contact@frasersaerospace.com Web:www.frasersaerospace.com

BIODEGRADABILITY DECLARATION

Product: AEROWASH

We, Frasers Aerospace, hereby confirm we have not carried out biodegradability testing on the Aerowash formulation itself. However, based on the biodegradability data for the consituent ingredients provided below we are confident that the Aerowash formulation does indeed meet the criteria for being 'Readily Biobiodegradable'.

Component	**Biodegradability**
Non-ionic surfactant	Readily Biodegradable
Cleaning Agent	Inorganic, not applicable
Blue Dye	≥ 80% bioelimination
Anti-redeposition agent	Readily Biodegradable
pH regulator 1	Inorganic, not applicable
pH regulator 2	Inorganic, not applicable
Solvent	Readily Biodegradable

Signed: Kevin Bishop

Position: Technical Manager

Date: 3rd February 2020

Material Safety Data Sheet

In compliance with Regulation (EC) No. 1907/2006 & 453/2010 (REACH)

Compilation Date: 27/02/15, issue 1

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1. IDENTIFICATION OF THE PRODUCT AND SUPPLIER

1.1 Product identifier — AERO*WASH* RTU Modified (1:20 dilution neat product)

1.2 Use of Preparation — Ready to use cleaning preparation for removing debris and grime from the exterior of aircraft.

1.3 Supplier details

Frasers Aerospace
1 St James Road
Brentwood
Essex
England
CM14 4LH
Phone: + 44 (0)20 8597 8781
E-mail: contact@frasersaerospace.com

1.4 Emergency telephone number — + 44 (0)7917693370 (8am-5pm)

2. HAZARDS IDENTIFICATION

2.1 Classification of the mixture
In compliance with directives 67/548/EEC, 1999/45/EC and their amendments

Not classified.

2.2 Label Elements
In compliance with directives 67/548/EEC, 1999/45/EC and their amendments

Risk Phrases	Not classified.	
Safety Phrases	S24/25	Avoid contact with eyes and skin.
	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

2.3 Other hazards — None known.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.2 Mixtures

Composition:

Ingredient	Cas No.	EC No.	Conc
Alkyl polyglucoside	68515-73-1	500-220-1	0.1-1%

Classification (EC 1272/2008)
Eye Dam. 1 - H318

Classification (67/548/EEC)
Xi R41

Ingredient	Cas No.	EC No.	Conc
Sodium metasilicate	10213-79-3	229-912-9	0.1-1%

Classification (EC 1272/2008)
Skin corr/irrit Cat 1B; H314
STOT SE 3: H335
Corr. to metals Cat 1; H290

Classification (67/548/EEC)
C; R34, 37

4. FIRST AID MEASURES

4.1 Description of first aid measures

In the event of exposure by inhalation:
Move to fresh air. Immediate medical attention not required.

In the event of splashes or contact with the eyes:
Immediately flush eyes with plenty of water for at least 15 minutes. If any persistent irritation is apparent obtain medical advice immediately.

In the event of splashes or contact with the skin:
Remove contaminated clothing. Wash off skin with plenty of water, using soap if available.

In the event of swallowing:
Drink plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

General information
The severity of the symptoms described will vary dependent of the concentration and the length of exposure.

Inhalation
No specific symptoms noted.

Ingestion
No specific symptoms noted.

Skin contact
Prolonged contact may cause minor irritation.

Eye contact
Direct contact may cause slight irritation and redness.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media:
This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials.

Suitable methods of extinction
Water, dry chemical or carbon dioxide.

Unsuitable methods of extinction
None known.

5.2 Special hazards arising from the mixture
When heated and in case of fire, harmful vapours/gases may be formed.

5.3 Advice for fire-fighters
Protective equipment for fire-fighters
Self contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and procedures
No special protective clothing (See Section 8).

6.2 Environmental precautions
Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.

6.3 Methods and materials for containment and cleaning up
Small quantities may be flushed to drains with plenty of water. Large Spillages: Soak up with inert material (e.g. sand, silica, acid binder, sawdust). Pick up and transfer to properly labeled containers. After cleaning flush away traces with water.

6.4 Reference to other sections
For personal protection, see Section 8.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Wear personal protective equipment.

7.2 Conditions for safe storage, including any incompatibilities
Store at moderate temperatures in dry, well ventilated area. Keep in original container. Store away from: oxidising materials and strong acids.

7.3 Specific end use(s)
The identified uses for this product are detailed in Section 1.2.
Usage Description
See Product Information Sheet & Label for detailed use of this product.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Hazardous ingredients:

Component	Std	TWA - 8 hrs	STEL - 15 min
Propan-2-ol	WEL	400 ppm 999 mg/m^3	500 ppm 1250 mg/m^3

8.2 Exposure controls
Engineering measures
Not relevant.

Personal protection measures, such as personal protective equipment
Eye/face protection
Not required under normal conditions of use.

Hand protection
Not required under normal conditions of use.

Body protection
Not required under normal conditions of use.

Respiratory protection
Respiratory protection not required.

Other protection
Avoid contact with eyes and skin. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
General information:
Physical state
Appearance Liquid

Colour	Clear to pale blue liquid
Odour	Characteristic
Solubility	Soluble
pH	11-12

9.2 Other information
None.

10. STABILITY AND REACTIVITY

10.1 Reactivity
No specific reactivity hazards associated with this product.

10.2 Chemical stability
Product is stable under normal conditions of use.

10.3 Possibility of hazardous reactions
See sections 10.1, 10.4 & 10.5

10.4 Conditions to avoid
Extreme temperatures.

10.5 Incompatible materials
Avoid oxidizing agents and strong acids.

10.6 Hazardous decomposition products
Thermal decomposition can lead to release of irritating gases and vapours.

11. TOXICOLOGICAL

11.1 Information on toxicological effects
Skin corrosion/skin irritation:
Not anticipated under normal conditions of use.

Serious damage to eyes/eye irritation:
Not anticipated under normal conditions of use.

Respiratory or skin sensitization:
Not anticipated under normal conditions of use.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

We have not carried out any Aquatic testing, therefore we have no Aquatic Toxicity Data specifically for this product. The Aquatic Toxicity Data, where provided by the raw material manufacturer for ingredients with aquatic toxicity, can be made available on request.

12.2 Persistence and degradability
The preparation is readily biodegradable. The surfactants in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

12.3 Bio-accumulative potential
No appreciable bioaccumulation potential is to be expected.

12.4 Mobility in soil
Completely soluble.

12.5 Results of PBT and vPvB assessment
This product does not contain any PBT or vPvB substances.

12.6 Other adverse effects
Not known.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product Waste:
Small amounts (less than 5 Litres) of unwanted product may be flushed with water to sewer. Larger volumes should be sent for disposal by an approved waste contractor.
Soiled packaging:
Rinse container and consign empty container to normal waste.

14. TRANSPORT INFORMATION

General	Not classified for as hazardous for Transport.
14.1 UN Number	Not applicable/Non-hazardous
14.2 UN proper shipping name	Not applicable/Non-hazardous
14.3 Transport Hazard class(es)	Not applicable/Non-hazardous
Land	
Inland Waterway Transport	
Sea	
Air	
14.4 Packing group	Not applicable/Non-hazardous

14.5 Environmental hazards	Not classified as environmentally hazardous
14.6 Special Precautions for user	None

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Safety Data Sheet prepared in accordance with REACH Commission Regulation (EU) No 453/2010, which amends Regulation (EC) No 1907/2006.

The product is as classified under CHIP Directive 1999/45/EEC Classification, Packaging & Labelling of Dangerous Preparations.

Ingredients are listed with classification under both CHIP - Directive 67/548/EEC - classification, packaging & labelling of dangerous substances & GHS/CLP Regulation (EC) No 1272/2008 classification, labelling & packaging of substances & mixtures.

15.2 Chemical safety assessment
Not applicable - this product is a mixture.

16. OTHER INFORMATION

Information Sources
Material Safety Data Sheets from raw material manufacturers.
CLP Classification - List of harmonised classification and labelling of hazardous substances.
CHIP Classification - List of harmonised classification and labelling of hazardous substances from Annex I to Directive 67/548/EEC.

Comments
This Material Safety Data Sheet has been prepared in accordance with REACH Commission Regulation (EU) No 453/2010, which amends Regulation (EC) No 1907/2006. Raw material (ingredient) hazard classifications are listed in both CHIP & CLP format.
Compilation Date 27/02/15

The Risk Phrases/Hazard Statements listed below relate to the raw materials (ingredients) in the product (as listed in Section 3) and NOT the product itself. For the Risk Phrases / Hazard Statements relating to this product refer to Section 2.

Risk Phrases in Full
R34 Causes burns.
R37 Irritating to respiratory system.
R41 Risk of serious damage to eyes.

Hazard Statements in Full
H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.

Legal disclaimer:
The information provided is to the best of our knowledge correct and accurate. However, all data instructions and suggestions should be used only for guidance purposes. This company shall not be held liable for any damage resulting from handling or contact with the above product.

SMI, Inc.

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Attn: Kevin Bishop
Frasers Aerospace
185-187 High Road
Chadwell Heath, Romford
Essex RM6 6NR UK

Date: 20-Apr-2015

SMI REF: 1502-562

Product: **AEROWASH (Lot 150038)** *(received 25-Mar-2015-2014)*

Dilution: As received

BOEING D6-17487 REVISION T

Exterior and General Cleaners and Liquid Waxes, Polishes and Polishing Compounds

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Sandwich Corrosion Test	Conforms
Acrylic Crazing Test	Conforms
Paint Softening Test	Conforms
Hydrogen Embrittlement Test	Conforms

Respectfully submitted,

Patricia D. Viani, SMI, Inc.

Sandwich Corrosion Test : Specimen preparation, testing, and interpretation shall be in accordance with ASTM F1110 using the following materials and with the following exceptions:

a. Reagents and materials exception:
   (1). Clad 7075-T6 aluminum alloy in accordance with QQ-A-250/13 (AMS 4049 or AMS-QQ-A-250/13 optional) (2024-T3 Alclad specimens are neither required nor optional.)
   (2) Bare 7075-T6 aluminum alloy in accordance with QQ-A-250/12 (AMS 4045 or AMS-Q-A-250/12 optional) anodized in accordance with BAC 5019 or MIL-A-8625, Type I.
   (3) Anodize shall be sealed. (2024-T3 nonclad specimens are neither required nor optional).
   (4) Distilled or deionized water may be used in place of ASTM F1193, Type IV reagent grade water for control specimens.
   (5) The filter paper may be Whatman No. 5 or equivalent in place of Whatman GFA glass fiber paper.

b. Procedure exceptions:
   (1) The filter paper strips shall be 1 by 3 inches and shall be placed in the center of the sandwiched specimens.
   (2) Each sandwich specimen shall be held together with waterproof tape, with no more than 1 piece of tape (maximum width 0.75 inch) on each of two opposite edges.

c. Interpretation of result exceptions:
   (1) Leaching or lightening of the chromate sealed anodize coating shall not be cause for rejection.
   (2) Deposits or residues from the material being tested that are not products of corrosion of the test panel surface shall not be cause for rejection.
   (3) Special procedure for evaluation of fire extinguishing foams and liquids.

   Panels with very light darkening or staining, which have no obvious metal attack or pitting, may be swabbed (cotton-tipped swabs or cotton gauze) with a 0.26 mole/liter sulfuric acid solution and re-examined. If the coloration is substantially removed and there is no evidence of metal attack or pitting, the condition shall not be cause for rejection. (The 0.26 mole/liter sulfuric acid solution can be prepared by adding 1.5 cc of concentrated sulfuric acid (SG = 1.84) to 100 cc of distilled or deionized water.

   (4) Panels shall have a rating of 1 (no more than 5 percent of the surface area shall be corroded) or better in accordance with ASTM F 1110. The preferred method of determining the corroded area is by using image analysis. Other means approved by the purchaser may be substituted.
   (5) Any corrosion in excess of that shown by the control group shall be cause for rejection.

Sandwich Corrosion Test :continued

	Bare 7075-T6 (AMS 4045) Anodized per BAC 5019 (Type 3 chromate seal)	Clad 7075-T6 Aluminum (AMS 4049)
PRODUCT	**1**	**1**
Control	1	1

Result Conforms

Acrylic Crazing Test:

The material being tested shall not craze, crack, or etch acrylic test specimens when tested in accordance with ASTM F 484 using Type C (stretched acrylic plastic in accordance with MIL-P-25690) stressed to an outer fiber stress of 4500 psi.

Type C (MIL-P-25690): No crazing, cracking, or etching

Result Conforms

Paint Softening Test Procedure:

a. Testing shall be in accordance with ASTM F502 using the following coating systems.
   (1) BMS 10-79, Type II primer applied in accordance with BAC5882 plus BMS 10-60, Type II enamel in accordance with BAC5845.
   (2) BMS 10-79, Type III primer applied in accordance with BAC5882, plus BMS 10-100 coating in accordance with BAC5797.

b. Three specimens conforming to Section 12a.(1) and three specimens conforming to Section 12a(2) shall be used for each test condition.

c. The material being tested shall not produce a decrease in film hardness greater than two pencils, or any discoloration or staining.

   NOTE: Slight darkening of the BMS 10-100 surface is acceptable.

   As received:

   Paint system 1: 0 pencil hardness change after 24 hour post-exposure dry time. No discoloration or staining.

   Paint system 2: 0 pencil hardness change after 24 hour post-exposure dry time. Slight discoloration.

Result Conforms

Hydrogen Embrittlement Test:

Hydrogen Embrittlement testing shall be in accordance with ASTM F 519 using cadmium plated Type 1a.2, Type 1c, or Type 2a specimens. All requirements of ASTM F519 for specimens, preparation, testing, and reporting shall apply. Type 1a.2 specimens shall meet the requirements of D6-4307.

Specimens: Type 1c, cadmium plated per MIL-STD-870.
(45% load, 150 hours, notched immersed for the duration, room temp.)

As received:	***#1:***	***No failure occurred within 150 hours.***
	#2:	***No failure occurred within 150 hours.***
	#3:	***No failure occurred within 150 hours.***
	#4:	***No failure occurred within 150 hours.***

Result Conforms

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Essex RM6 6NR UK

Date: 20-Apr-2015

SMI/REF: 1502-562

Product: **AEROWASH (Lot 150038)** *(received 25-Mar-2015-2014)*

Dilution: As received

British Aerospace
AIRBUS AIMS09-00-002 (Issue3, July 2011)
EVALUATION OF MAINTENANCE MATERIALS
Exterior and General Cleaners

5.3.1	Sandwich Corrosion Test	Conforms
5.3.2	Total Immersion Test	Conforms
5.3.3	Hydrogen Embrittlement Test	Conforms
5.3.4	Paint Softening Test	Conforms
5.3.5	Acrylic Crazing Test	Conforms
5.3.6	Polycarbonate Crazing Test	Conforms

Respectfully submitted,

Patricia D. Viani, SMI Inc.

5.3.1 Sandwich Corrosion Test: Testing shall be in accordance with ASTM-F-1110 using:

- aluminium alloy 2024 T3 clad against
- anodised aluminium alloy 2024 T3 unclad and
- anodised aluminium alloy 7075 T6 unclad.

After the test the aluminium alloy specimens shall show a rating less than or equal to 1 or no worse than a control sample prepared with distilled water.

	Aluminium alloy 2024 T3 clad against Anodised alum. 2024 T3 unclad	Aluminium alloy 2024 T3 clad against Anodised alum. 7075 T6 unclad
AS RECEIVED	**2024 T3 clad: 1 2024 T3 unclad anodised: 1**	**2024 T3 clad: 1 7075 T6 unclad anodised: 1**
CONTROL	2024 T3 clad: 1 2024 T3 unclad anodised: 1	2024 T3 clad: 1 7075 T6 unclad anodised: 1

Result Conforms

5.3.2 Total Immersion Test: Testing shall be in accordance with ASTM-F-483 using:

- aluminium alloys as per 5.3.1. above
- low carbon steel, e.g. AMS 5045, XC18 or equivalent
- cadmium plated steel, e.g. AMS 5045, XC18 (or equivalent), plated in accordance with AMS QQ-P-416 Type I Class 1 (or equivalent)

The immersion time shall be (24 ± 0.5) h. The immersion temperature shall be (23 ± 2)°C.
No significant visual change shall be evident. The max. permitted weight changes are as follows:

Aluminum alloy = **0.02 mg/cm^2** maximum.
Low carbon steel = **0.8 mg/cm^2** maximum
Cadmium plated steel = **0.3 mg/cm^2** maximum

ALLOY	**WEIGHT CHANGE**
	AS RECEIVED
Aluminum alloy 2024-T3 clad	0.02 mg/cm^2/24 hrs
Anodized aluminum alloy 2024-T3 unclad	0.01 mg/cm^2/24 hrs
Anodized aluminum alloy 7075-T6 unclad	+ 0.01 mg/cm^2/24 hrs
Low carbon steel AMS 5045	< 0.01 mg/cm^2/24 hrs
Cadmium plated steel AMS 5045 plated i.a.w. AMS-QQ-P-416 Type I Class 1	0.02 mg/cm^2/24 hrs

Result Conforms

5.3.3 Hydrogen Embrittlement Test: The product shall be non-embrittling as determined in accordance with ASTM F 519, using type 1a, 1c, or 2a specimens, cadmium plated in accordance with MIL-STD-870, Class 1, Type I. Type 1a and Type 1c specimens shall be loaded to 45% of the predetermined notch fracture strength and Type 2a specimens loaded to 80% of the yield strength. The entire 2a stressed specimen, or just the notched area of the 1a and 1c stressed specimen, shall be immersed continuously in the solution under test for 150 hours at a temperature between 20-30°C (68-86°F).
The maintenance material being tested shall not cause embrittlement of the test specimens.

Specimens: Type 1c, cadmium plated

As received: ***Specimen #1: No failures occurred within 150 hours.***
Specimen #2: No failures occurred within 150 hours.
Specimen #3: No failures occurred within 150 hours.
Specimen #4: No failures occurred within 150 hours.

Result Conforms

5.3.4 Paint Softening Test: Maintenance material compatibility shall be tested with Airbus approved paints and/or customer specific systems. Testing shall consist of three specimens for each of the following combinations. The substrate shall be clad aluminium alloy 2024 suitably pre-treated:

- Epoxy primer of polyurethane primer with or without polyurethane topcoat (interior paint scheme according to TN A.007.10050 OR epoxy primer to MIL-PRF-23377 Type I with or without polyurethane topcoat to MIL-PRF-85285 Type I or customer specific system).
- Basic primer plus relevant exterior paint scheme according to TN A.007.10050 OR epoxy primer to MIL-PRF-23377 Type I with polyurethane topcoat to MIL-PRF-85285 Type I OR external paint scheme conforming to AMS 3095 OR customer specific system.

The thickness and drying times of individual coats shall be in accordance with the manufacturer's instruction sheets. Testing shall be in accordance with ISO 1518 "Scratch Test" using the following test sequence: one hour immersion in the maintenance material at an ambient temperature (23 ± 2)°C, rinsing with water immediately after the immersion and drying for 1hour at room temperature. The material shall not soften the paint coat and the Scratch Test shall have 90% of the original value after the immersion.

The agent being tested shall not produce any blistering, discoloration or staining.

5.3.4 Paint Softening Test:continued

Paint System		Weight required to produce scratch	
		Before exposure	After exposure
AS RECEIVED	Epoxy Primer without topcoat: Primer: MIL-PRF-23377 Type I, Epoxy, High Solids	Pass*	Pass*
	Epoxy primer with polyurethane topcoat: Primer : MIL-PRF-23377 Type I, Epoxy, High Solids Topcoat: MIL-PRF-85285 Type I, Polyurethane, High solids	Pass*	Pass*

**** Using a 2,000 gram load (maximum load of the scratch apparatus)***

**Conformance ("Pass") if no scratch occurs using a load equal to or greater than 1,800 grams (90% of 2,000 = 1,800), and there is no evidence of blistering, discoloration or staining.*

Result_____* Conforms_____

55.3.5 Acrylic Crazing Test: Material confirming to MIL-P-25690 Type C shall be tested in accordance with ASTM-F-484. The maintenance materials shall not craze, crack, stain or discolor the test specimens.

As received: No evidence of craze, crack, stain or discolor.

Result_____Conforms_____

5.3.6 Polycarbonate Crazing Test: Material confirming to ASTM-D-3935 or AMS-P-83310 shall be tested in accordance with the method for the determination of stress crazing detailed in ASTM F 484.

Specimens shall be stressed for (30 ± 2) minutes to an outer stress of 21MPa (3000 psi) at a temperature of (23 ± 2)°C.

As received: No evidence of craze, crack, stain or discolor.

Result_____Conforms_____