

# TECHNICAL DATA SHEET

### **Product Description**

Sur-Prep<sup>™</sup> AP-1 is an adhesion promoter that can be used in place of scuff sanding between coats of polyurethane topcoats. It helps to re-activate the surface of the existing topcoat for subsequent topcoats application without the need for manual sanding. It can also be used for applying stencil markings to existing topcoat.

- Compatible with urethane topcoats
- Eliminates sanding
- Can be sprayed with HVLP, airless, air assisted airless and conventional spray gun
- Available in easy to mix packaging and aerosol spray

### **Components**



#### Mix ratio:

- Kit Ready to mix in base container
- Aerosol Ready to spray

Kits - available in gallon and pint Aerosol - available in 4 oz. & 11 oz.

### **Specifications**



AP-1 is qualified to:

• BMS 10-127

AP-1 is listed on:

- Boeing D6-1816 Process
  Document for Decorative
  Finishing of Airplane Exteriors
  - BAC5308
  - T.O. 1-1-8
  - T.O. 35-1-3

Note: PPG Aerospace recommends you check the most recent process standard for updated information.

#### **Product Compatibility:**

AP-1 is compatible with the following topcoat specifications:

- BAMS 565-009
- BMS 10-60 Type I & Type II
- BMS 10-72 Type VIII
- BMS 10-125 Type III
- DMS 2115

- MEP 10-069
- MIL-PRF-85285
- MM1276
- MMS-420



### Surface Preparation and Pretreatments



Sur-Prep<sup>™</sup> AP-1 adhesion promoter can be applied over clean, dry, intact polyurethane topcoats.

### Instructions for Use



#### Mixing Instructions:

For 2-part kit:

Pour Part A into Part B container. Reseal the Part B container and shake for 5 minutes on paint shaker.

Pour mixture into spray gun cup, pot or other container. Keep containers covered until ready for application. Allow to dry 30 minutes for large area, 15 minutes for stencil use. Apply next decorative paint coat within 24 hours. Pot life of mixed Sur-Prep<sup>™</sup> AP-1 is 10 hours if the containers are covered to prevent moisture ingression.

For aerosol can:

- 1) Shake aerosol can for 10-15 seconds.
- 2) Apply as thin film, wetting surface (gloss on paint surface will change)
- 3) Allow to dry 30 minutes for large area, 15 minutes for stencil use.
- 4) Apply next decorative paint coat within 24 hours.

Note: It is important to condition the paint for 24 hours prior to mixing by placing all materials in the shop or hangar, with ambient temperatures between 13° and 35°C (55° to 95°F). The minimum temperature of the paint components should be 13°C (55°F) prior to mixing. If any defects occur during application (runs or heavily wetted areas) dry the area with compressed air. Remove the dried powder using solvent such as MPK or 70/30 MPK/MEK mixture or using a tack rag. Reapply a thin wet film of Sur-Prep<sup>™</sup> AP-1. If second coat of paint is not applied over Sur-Prep<sup>™</sup> AP-1 within 24 hours, remove the dried powder using solvent such as MPK or 70/30 MPK/MEK mixture or using a tack rag. Reapply a thin wet film of sur-Prep<sup>™</sup> AP-1.



#### Induction Time:

Temperature	22 - 28°C (71 - 84°F)
Kit	20 minutes
Aerosol	Not Required



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Viscosity: (23°C/73°F) Not Applicable



#### Pot Life:

10 hours in moisture free covered container @ 21 - 25°C (70 - 77°F)

## **Application Guidelines**

#### **Recommended Application Conditions:**

Temperature Relative Humidity 18 - 32°C (65 - 90°F) 15 - 70%

#### **Application:**

Ground the aircraft and the application equipment before using. Mix and allow for induction time listed on the mixing section above. Sur-Prep<sup>TM</sup> AP-1 can be sprayed with HVLP, air assisted, airless and conventional paint gun or aerosol. Spray as a thin, wet film with recommended wet film thickness of 10 to 20 microns (0.4 to 0.8 mils) when applied, the promoter forms a fine, whitish-gray powder, with a flat gloss appearance. Allow to dry 30 minutes before applying the next decorative paint coat.

#### **Special Notes:**

Do not wipe or tack the surface after applying Sur-Prep<sup>™</sup> AP-1. If the surface is wiped or cleaned with tack rag, you must reapply the Sur-Prep<sup>™</sup> AP-1 to those sections.

These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.



#### **Theoretical Coverage:**

Coverage is typically 15 to 25 square meters per liter (600 to 1000 square feet per gallon)

Recommended wet film thickness; 10 to 20 microns (0.4 to 0.8 mils)



#### **Dry Film Weight:**

Fly away weight is less than 1 Kilogram per 1000 square meters (0.2 pounds per 1000 square feet)





#### Equipment:

Sur-Prep<sup>™</sup> AP-1 is compatible with the following spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
Air Assisted Spray	1.0 mm to 1.4 mm	10 to 40 psi	45 to 60 psi
Gun		(0.69 to 2.8 bar)	(3.1 to 4.1 bar)
Air Assisted	#611/#711 to	700 to 1200 psi	40 to 60 psi
Airless Spray Gun	#613/#713	(48 to 82 bar)	(2.8 to 4.1 bar)
High Volume	1.0 mm to 1.4 mm	10 to 20 psi	10 psi maximum
Low Pressure		(0.69 to 1.4 bar)	(0.69 bar)
Spray Gun (HVLP)			
Conventional Air	1.2 mm to 1.4 mm	10 to 20 psi	45 to 60 psi
Spray Gun		(0.69 to 1.4 bar)	(3.1 to 4.1 bar)

#### **Equipment Cleaning:**

Clean spray equipment as soon as possible after use. Flush spray equipment with DeSoto<sup>®</sup> CN20, DeSoto<sup>®</sup> CN44, or Desoclean<sup>™</sup> 45 high performance solvent cleaner.

### **Physical Properties (product)**

Color:



Light Whitish Powder



**Gloss:** Flat appearance



Dry to Overcoat Times at 22 - 28°C (71 - 84°F)				
For stencils	15 minutes minimum	24 hours maximum		
For large areas	30 minutes minimum	24 hours maximum		





### VOC:

Kit:	
Mixed VOC (EPA method 24)	861 grams/liter
Base Component	771 grams/liter
Activator Component	875 grams/liter
Aerosol Can:	
VOC (EPA method 24)	741 grams/liter
Flash point closed cup:	
Base Component	24°C (75°F)



Activator Component 32°C (90°F)

Aerosol Can

#### Shelf Life:

12 months from date of manufacture for the aerosol (18 months from date of manufacture for the gallon and pint kits) to most OEM material specifications. Consult the specification to verify shelf life requirements.

<21°C (70°F)

Note: Shelf life is provided for original, unopened containers.

Note: The application and performance property values above are typical for the material, but not intended for use in specifications or for acceptance inspection criteria because of variations in testing methods, conditions and configurations.

### **Storage Recommendations**



Inspect the condition of the container to ensure compliance. The material should be stored at temperatures between 4°C to 38°C (40°F to 100°F) to ensure shelf life.

Note: When procuring to a qualified material specification, follow those storage instructions.



#### **Health Precautions**

This product is safe to use and apply when recommended precautions are followed. Before using this product, read and understand the Safety Data Sheet (SDS), which provides information on health, physical and environmental hazards, handling precautions and first aid recommendations. An SDS is available on request. Avoid overexposure. Obtain medical care in case of extreme overexposure.

For industrial use only. Keep away from children. Additional information can be found at: www.ppgaerospace.com For sales and ordering information call the local PPG office at the numbers listed below:

## Asia Pacific

**ASC – Australia** Tel 61 (3) 9335 1557 Fax 61 (3) 9335 3490

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