

# DeSoto<sup>®</sup> 513X393 Epoxy Sanding Surfacer

## TECHNICAL DATA SHEET

### Product Description

DeSoto<sup>®</sup> 513X393 epoxy sanding surfacer is chromate-free, chemical and solvent resistant epoxy polyamide sanding primer. It is heavily pigmented and designed to fill in the irregularities and surface defects commonly experienced on aluminum and composite surfaces.

- Compatible with Desoprime™ HS primers
- Needs a urethane compatible primer before topcoating with Desothane<sup>®</sup> HS topcoat
- High build
- Easy to sand
- Excellent adhesion to composites
- Requires a corrosion resistant primer over aluminum
- Service temperature -54°C to 177°C (-65°F to 350°F)

### Components



#### Mix ratio (by volume):

- 513X393 (base component) 4 parts
- 910X669 (activator component) 1 part

### Specifications



513X393 epoxy sanding surfacer is qualified to:

- 299-947-127B
- STMB-M513 Type 2

*Note: PPG Aerospace recommends you check the most recent specification QPLs for updated information.*

#### Product Compatibility:

513X393 epoxy sanding surface when over coated with a urethane compatible primer is compatible with the following topcoat specifications:

- BMS 10-60 Type I & Type II
- BMS 10-72 Type VIII
- DMS 2143
- DMS 2433
- DPM 6338
- EMS 53181
- MIL-PRF-85285 Type I & Type II

### Surface Preparation and Pretreatments



DeSoto<sup>®</sup> epoxy sanding surface 513X393 can be applied over clean, dry, intact primed, aluminum and unprimed composite surfaces.

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## Instructions for Use



### Mixing Instructions:

Prior to mixing, thoroughly shake the 513X393 base component. Add the activator to the base component and stir well, maintain constant agitation for 10 minutes to ensure proper mixing.

*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.*



### Induction Time:

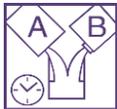
Not Required



### Viscosity: (23°C/73°F)

- |                         |                  |
|-------------------------|------------------|
| • #2 Signature Zahn cup | 35 to 46 seconds |
| • #4 Ford cup           | 25 to 35 seconds |
| • ISO 4mm cup           | 58 to 82 seconds |
| • BSB3 cup              | 58 to 78 seconds |
| • BSB4 cup              | 30 to 40 seconds |
| • AFNOR #4 cup          | 30 to 37 seconds |

*Note: Viscosities quoted are the typical ranges obtained when using specified mix ratio.*



### Pot Life:

4 hours @ 21 - 25°C (70 - 77°F)

## Application Guidelines

### Recommended Application conditions:

Temperature	15 - 30°C (59 - 86°F)
Relative Humidity	20 - 90%

### Application:

Ground the aircraft and the application equipment before priming. Stir the primer slowly during the application. The suggested film thickness unsanded is 75 to 100 microns (3 to 4 mils), when sanded is 25 microns (1.0 mil). This can be accomplished by two or three medium coats with a 50% overlap. Note the previous coat should be allowed to tack up before applying the next coat. If the next is applied before the previous coat has tacked up, sagging may occur.

# DeSoto® 513X393 Epoxy Sanding Surfacers

*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:

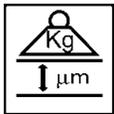
15 square meters/liter at 25 microns dry film (624 square feet/gallon at 1 mil dry film)

Unsanded

Recommended dry film thickness; 75 to 100 microns (3 to 4 mils)

Sanded

Recommended dry film thickness; 25 microns (1.0 mil)



### Dry Film Density:

2.05 grams/cubic centimeter (17 pounds/gallon)

### Dry Film Weight:

51 grams/square meter at 25 microns dry film (0.0104 pounds/square feet at 1 mil dry film)



### Equipment:

DeSoto® epoxy sanding surfacer 513X393 is compatible with all current forms of non-electrostatic spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
High Volume Low Pressure Spray Gun (HVLVP)	1.0 mm to 1.4 mm	10 to 20 psi (0.69 to 1.4 bar)	10 psi maximum (0.69 bar)
Conventional Air Spray Gun	1.2 mm to 1.8 mm	10 to 20 psi (0.69 to 1.4 bar)	45 to 60 psi (3.1 to 4.1 bar)

### Equipment Cleaning:

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

## Physical Properties (product)



**Color:** Yellow



**Gloss:** Not Applicable



# DeSoto® 513X393 Epoxy Sanding Surfacer



Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Dust Free	15 minutes	10 minutes	8 minutes
Dry to Sand	2 ½ hours	2 hours	1 ½ hours
Dry to Overcoat	2 ½ hours	2 hours	1 ½ hours
Full Cure	7 days	7 days	7 days

### Accelerated cure:

Allow 15 minutes flash off at 24°C ± 3°C (75°F ± 10°F)  
followed by 30 minutes at 66°C (150°F)



### VOC:

Mixed, ready for use VOC (EPA method 24)	528 grams/liter
Base Component	481 grams/liter
Activator Component	717 grams/liter



### Flash point closed cup:

Base Component	19°C (66°F)
Activator Component	5°C (41°F)

### Shelf Life:

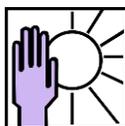
12 months from date of manufacture to most OEM material specifications. Consult the specification to verify shelf life requirements.

24 months from date of manufacture for PRC-DeSoto Standard.

*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 5°C to 35°C (41°F to 95°F) to ensure shelf life.

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

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## 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](http://www.ppgaerospace.com)**

**For sales and ordering information call the local PPG office at the numbers listed below:**

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