

DeSoto[®] 521X315 Epoxy Topcoat Untinted White

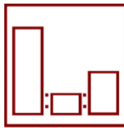
TECHNICAL DATA SHEET

Product Description

DeSoto[®] 521X315 epoxy topcoat untinted white is a chemically cured hydraulic fluid resistant coating. 521X315 was designed for use over Super Koropon[®] epoxy primed substrates.

- Compatible with epoxy primers
- Excellent fluid resistance
- Service temperature -54 °C to 177 °C (-65 °F to 350 °F)

Components



Mix ratio (by volume):

- 521X315 (base component) 4 parts
- 910-037 (activator component) 1 part
- 020-004 (thinner component) 2 parts

Specifications



521X315 topcoat is qualified to:

- 207-9-472
- GAMPS 3205
- GMS 5002

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

Product Compatibility:

521X315 topcoat is compatible with the following primer specifications:

- 207-9-470
- GM 5001

Surface Preparation and Pretreatments



DeSoto[®] 521X315 epoxy topcoat can be applied over clean, dry, intact primed aluminum and composite surfaces.

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Instructions for Use



Mixing Instructions:

Prior to mixing, thoroughly shake the base component. Add the activator component to the base component and stir well, and add the thinner component while stirring. Maintain constant agitation for 10 minutes to ensure proper mixing. Induction time is required.

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:

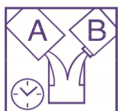
Temperature	13 - 21 °C (55 - 70 °F)	22 - 28 °C (71 - 84 °F)	>29 °C (>85 °F)
Induction Time Required	70 minutes	60 minutes	50 minutes



Viscosity: (23 °C/73 °F)

- #2 Signature Zahn cup 16 to 20 seconds
- #4 Ford cup 12 to 15 seconds
- ISO 3mm cup 37 to 50 seconds
- ISO 4mm cup 18 to 22 seconds
- BSB3 cup 26 to 30 seconds
- BSB4 cup 15 to 17 seconds
- AFNOR #2.5 cup 45 to 56 seconds
- AFNOR #4 cup 14 to 16 seconds

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



Pot Life:

8 hours @ 21 - 25 °C (70 - 77 °F)

Application Guidelines

Recommended Application conditions:

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

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Application:

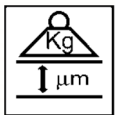
Ground the aircraft and the application equipment before topcoating. Stir the topcoat slowly during the application. The suggested film thickness is 50 to 75 microns (2 to 3 mils). This can be accomplished by two or three medium coats with a 50% overlap. Note the previous coats should be allowed to tack up before applying the next coat. If the subsequent coat is applied before the previous coat has tacked up, sagging may occur.

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:

11 square meters/liter at 25 microns dry film (462 square feet/gallon at 1 mil dry film)
 Recommended dry film thickness; 50 to 75 microns (2 to 3 mils)



Dry Film Density:

1.72 grams/cubic centimeter (14.33 pounds/gallon)

Dry Film Weight:

43 grams/square meter at 25 microns dry film (0.00864 pounds/square feet at 1 mil dry film)



Equipment:

521X315 topcoat is compatible with all current forms of spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
Electrostatic Air Spray Gun	1.2 mm or 1.5 mm	10 to 20 psi (0.69 to 1.4 bar)	45 to 60 psi (3.1 to 4.1 bar)
Electrostatic Air Assisted Airless Spray Gun	#611 or #613 (Graco Nomenclature)	700 to 1200 psi (48 to 82 bar)	40 to 60 psi (2.8 to 4.1 bar)
High Volume Low Pressure Spray Gun (HVLP)	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)

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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: FED STD 17925 White



Gloss: 90+ G.U at 60°



Dry Times	13 - 21 °C (55 - 70 °F)	22 - 28 °C (71 - 84 °F)	>29 °C (>85 °F)
Dry Between Coats	30 minutes	20 minutes	15 minutes
Dry to Tape	7 hours	6 hours	5 hours
Full Cure	7 days	7 days	7 days

Accelerated cure to dry hard:

Allow 60 minutes flash off at 24 °C ± 3 °C (75 °F ± 10 °F)
followed by 2 hours at 43.3 °C (110 °F)



VOC (EPA method 24):

Mixed, ready for use VOC	600 grams/liter
Base Component	457 grams/liter
Activator Component	693 grams/liter
Thinner Component	851 grams/liter



Flash point closed cup:

Base Component	13 °C (55 °F)
Activator Component	17 °C (63 °F)
Thinner Component	20 °C (68 °F)



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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

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

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