Technical Data Sheet Aerospace Coatings



PPG BOUNDLESS™ CA6510/B900 Polyurethane Flat Clear

Product description

PPG BOUNDLESS CA6510/B900 Polyurethane Flat Clearcoat is designed to provide excellent durability, performance, and appearance characteristics for the Light General Aviation market with minimal emissions of regulated Volatile Organic Compound (VOC) and Volatile Hazardous Air Pollutants (VoHAPS).

- Easy to apply, excellent flow and leveling properties
- VOC Content < 350 g/l
- HAP's Free and Heavy Metal Free Formulations
- Resistant to Hydraulic Fluids, Lubricating Oils, Diesel Fuel and Water
- Compatible with PPG BOUNDLESS CA6500 Polyurethane Buffable Topcoats
- Compatible with PPG BOUNDLESS CA6500 Special Effect Mica System

Components

Mix ratio (by volume):



CA6510/B900 Flat Clearcoat Base Component CA6500B Activator CA6500CT Series thinners 3 parts 1 part 0.50 parts

Thinner options:
CA6500CT1 (Standard)
CA6500CT2 (Fast)
CA6500CT3 (Faster)
CA6500CT4 (Fastest, cooler weather only)

Specifications



PPG BOUNDLESS CA6510/B900 Polyurethane Flat Topcoat is qualified to:

DeSoto Standard

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

Product compatibility:

PPG BOUNDLESS CA6510/B900 Polyurethane Flat Topcoat is compatible with the following PPG Aerospace coatings.

- PPG BOUNDLESS CA6500
 Polyurethane Buffable Topcoat
- Desothane[™] HS CA8800 Buffable Polyurethane Topcoats
- PPG BOUNDLESS CA6500 Special Effect Mica System
- Desothane™ CA8000 Polyurethane Topcoats

• Desothane™ HD CA9007 Polyurethane Basecoat

Desothane[™] HD 9008
 Polyurethane Basecoat

Surface preparation and pretreatments



PPG BOUNDLESS CA6510/B900 Polyurethane Flat Clearcoat can be applied over any clean, dry, and intact coatings system as described in the Product Compatability section above. Refer to the technical data sheets for the appropriate overcoat windows. The overcoat window for the CA6500 Series Topcoats is from dry-to-tape (DTT) to 72 hours.

Instructions for use



Mixing instructions:

Mechanically shake the base component (Part A) thoroughly before combining to ensure all solids are completely dispersed. Add one volume of activator component (Part B) to three volumes of base component (Part A), then add half volume of thinner component (Part C). Mix by hand stirring, paint shaker or mechanical mixing to ensure the mixture is homogeneous. Shake or mechanically mix for 5 minutes.

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 (fresh mix)

15 - 18 seconds

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



Pot life:	22 - 30°C (71 - 86°F)		
CA6500CT1	3 hours		
CA6500CT2	2 hours		
CA6500CT3	90 minutes		
CA6500CT4	60 minutes		

Application guidelines

Optimum recommended application conditions:

Temperature 15 - 30°C (59 - 86°F)

Relative humidity 20 - 75%

Application: Ground the aircraft and the application equipment before top coating. Stir the flat clearcoat during the application. The recommended dry film thickness is 37.5 to 50 microns (1.5 to 2.0 mils). This can be accomplished by one cross-coat.

Higher dry film thickness may cause a change in gloss.

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

Note:



Remove ALL filters from the spray gun and pumps before spraying CA6510/B900 Flat Clearcoat and during the application.

Brush or roll application is not recommended for CA6510/B900.



Theoretical coverage:

15.02 square meters/liter at 25 microns dry film (612 square feet/gallon at 1 mil dry film) Recommended dry film thickness; 37.5 to 50 microns (1.5 to 2.0 mils)



Dry film weight:

32.88 grams/square meter at 25 microns dry film (0.00674 pounds/square foot at 1 mil dry film)



Equipment:

PPG BOUNDLESS CA6510/B900 Polyurethane Flat Clearcoat 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 to 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)	1.2 mm to 1.5 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 1.5 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 IS-213 Polyurethane Reducer (MIL-DTL-81772 Type I) DeSoto® CN20, DeSoto® CN44, or Desoclean 45 high performance solvent cleaner. Once material is fully cured, use an approved chemical paint removal system to strip off coating.

Physical properties (product)



Color: Clear



Gloss 60°: 10 - 20 gloss units

Dry times at 22 – 30°C (71 - 86°F) 50% R.H.							
Thinner component	CA6500CT1	CA6500CT2	CA6500CT3	CA6500CT4*			
Dry to touch	12-16 hours	10-14 hours	8-12 hours	4-8 hours			
Dry to tape	20-24 hours	14-18 hours	10-14 hours	6-10 hours			
Full cure	14 days	14 days	14 days	14 days			

^{*}For use only in cooler weather. Gloss can rise while using CT4 at temperatures above 60°F (16°C)

Note: The times listed above are dependent upon film thickness, airflow, and spray technique. Lower film thickness, better airflow, spraying "dry" will decrease the dry-to-tape, and time between coats.



Mixed, ready to use VOC (EPA method 24) < 350 grams/liter



Flash point closed cup:

Base Component 20.6°C (69°F)
Activator Component 38.0°C (100.4°F)
Thinner Component (CT1) 23.9°C (75°F)

Shelf life:

24 months from date of manufacture to DeSoto Standard.

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

<u>Note:</u> 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.

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

ASC – Japan Tel 81 561 35 5200 Fax 81 561 35 5201

ASC – South East Asia Tel 65 6861 1119 Fax 65 6861 6162

ASC – Suzhou Tel (86-512) 6661 5858 Fax (86-512) 6661 6868

ASC - Tianjin Tel (86-022) 2482 8625 Fax (86-022) 2482 8600

Americas

1 (818) 362-6711 or 1-800-AEROMIX

Europe and Middle East

ASC – Central Europe Tel 49 (40) 742 193 10 Fax 49 (40) 742 139 69

ASC – Middle East & India Tel (971) 4 883 9666 Fax (971) 4 883 9665

ASC - North Europe Tel 44 (0) 1388 770222 Fax 44 (0) 1388 770288

ASC – South Europe Tel 33 (0) 235 53 43 71 Fax 33 (0) 235 53 54 44

Boundless, Desothane and DeSoto are trademarks of PRC-DeSoto International, Inc.

All recommendations, statements, and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for the intended use and assumes all risks and liability resulting from his use of the product. Seller's and manufacturer's sole responsibility shall be to replace that portion of the product of this manufacturer which proves to be defective. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss, or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer or seller.

This document has been reviewed by the PPG Aerospace Export Control Department and has been determined to contain only EAR99 controlled data

PRC-DeSoto International, Inc. 12780 San Fernando Road Sylmar, CA 91342 www.ppgaerospace.com

Issue Date: 7/22

Lit: 4805