Desothane® HS CA8110 Series Flat Anti-Chafe Topcoats

Product description

Desothane CA8110 flat anti-chafe topcoats are high solids, Teflon filled polyurethane coatings. They are used on surfaces where low friction, abrasion resistance, impact resistance, and chemical resistance are required to reduce chafing and wear.

- Mainly used on slats, exit door areas, flap tracks, and horizontal fuselage intersections
- Compatible with Desoprime™ HS primers
- Excellent color retention
- Excellent fluid resistance
- Service temperature -54°C to 177°C (-65°F to 350°F)

Components

Mix ratio (by volume):

• CA8110/XXXX (base component)	2 parts
• CA8110D (activator component)	1 part

Gallon kit yields 1.5 gallons

Specifications

CA8110 topcoats are qualified to:

- BMS 10-86 Type IV Grade D (Limited Colors)
- GC130RJ
- MS-432
- PS 13555
- SS8869
- SS8870

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

Product compatibility:

CA8110 anti-chafe topcoats are compatible with the following primer and topcoat specifications:

- BMS 10-11 Type I
- BMS 10-72 Type VIII
- BMS 10-79 Type III
- BMS 10-60 Type I & Type II
- DMS 1786
- DMS 2115
- DMS 2144
- MIL-PRF-23377
- MIL-PRF-85285
- MMS-420

Desothane® HS CA8110 Series Flat Anti-Chafe Topcoats

Surface preparation and pretreatments

Desothane HS flat anti-chafe topcoat CA8110 can be applied over clean, dry, intact primed surfaces.

Instructions for use

Mixing instructions:

Prior to mixing, thoroughly shake the 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)

- #3 Zahn cup 15 - 30 seconds

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

Pot life:

2 hours at 21 - 25°C (70 - 77°F)

Application guidelines

Optimum recommended application conditions:

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

Application:

Ground the aircraft and the application equipment before top coating. Stir the topcoat slowly during the application. The suggested film thickness is 250 to 500 microns (5 to 10 mils). 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.

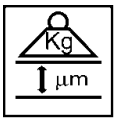
Desothane® HS CA8110 Series Flat Anti-Chafe Topcoats

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:

22 square meters/liter at 25 microns dry film (850 square feet/gallon at 1 mil dry film)

Recommended dry film thickness; 250 to 500 microns (5 to 10 mils)



Dry film density:

1.56 grams/cubic centimeter (13 pounds/gallon)

Dry film weight:

39 grams/square meter at 25 microns dry film (0.008 pounds/square feet at 1 mil dry film)

Equipment:

CA8110 flat anti-chafe topcoats are 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)

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: Available in commercial and military color standards

Desothane® HS CA8110 Series Flat Anti-Chafe Topcoats

Gloss: 5 G.U. maximum at 60°

Dry times	Dry hard	Dry-to-fly	Full cure
13 - 21°C (55 - 70°F)			
CA8110	12 hours	56 hours	7 days
CA8111	7 - 10 hours	48 hours	7 days
CA8112	4 - 7 hours	40 hours	7 days
CA8113	2 - 4 hours	32 hours	7 days
22 - 28°C (71 - 84°F)			
CA8110	10 hours	48 hours	7 days
CA8111	5 - 7 hours	40 hours	7 days
CA8112	3 - 4 hours	32 hours	7 days
CA8113	2 – 4 hours	24 hours	7 days
>29°C (>85°F)			
CA8110	8 hours	36 hours	7 days
CA8111	3 – 4 hours	28 hours	7 days
CA8112	Not recommended	Not recommended	Not recommended
CA8113	Not recommended	Not recommended	Not recommended

Accelerated cure for dry hard:

Allow 30 minutes flash off at 24°C ± 3°C (75°F ± 10°F)
followed by 60 minutes at 49°C (120°F)

VOC (EPA method 24):

Mixed, ready for use VOC	420 grams/liter
Base component	457 grams/liter
Activator component	327 grams/liter

Flash point closed cup:

Base component	27°C (80°F)
Activator component	27°C (80°F)

Shelf life:

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

Note: The coating 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.

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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