



Desothane® HS CA8110/CA8120 Anti-Chafe Topcoats

TECHNICAL DATA SHEET

Product Description

Desothane® HS CA8110/CA8120 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 |
| • G Kit Yield | 1 ½ gallons |

Mix ratio (by volume) for semi-gloss colors:

- | | |
|---------------------------------|---------|
| • CA8120/XXXX (base component) | 2 parts |
| • CA8110D (activator component) | 1 part |

Specifications



CA8110 anti-chafe topcoats are qualified to:

- | | |
|-----------------------------|------------|
| • BMS 10-86 Type IV Grade D | • PS 13555 |
| • GC130RJ | • SS8869 |
| • MS-432 | • SS8870 |

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



Desothane® HS CA8110/CA8120 Anti-Chafe Topcoats

Product Compatibility:

CA8110/8120 anti-chafe topcoats are compatible with the following primer and topcoat specifications:

- BMS 10-11 Type I
- BMS 10-60 Type I & Type II
- BMS 10-72 Type VIII
- BMS 10-79 Type II & Type III
- DMS 1786
- DMS 2104
- DMS 2115
- DMS 2144
- MIL-PRF-23377
- MIL-PRF-85285
- MIL-PRF-85582
- MMS 415
- MMS420
- MMS 423
- MMS 425
- TT-P-2760

Surface Preparation and Pretreatments



Desothane® HS CA8110/CA8120 anti-chafe topcoats 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



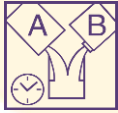
Viscosity: (23°C/73°F)

- | | |
|-------------------------|--------------------|
| • #2 Signature Zahn cup | 41 seconds maximum |
| • #4 Ford cup | 30 seconds maximum |
| • ISO 4mm cup | 68 seconds maximum |
| • BSB3 cup | 66 seconds maximum |
| • BSB4 cup | 35 seconds maximum |
| • AFNOR #4 cup | 34 seconds maximum |

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



Desothane® HS CA8110/CA8120 Anti-Chafe Topcoats



Pot Life:

2 hours at 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 top coating. Stir the topcoat slowly during the application. The suggested film thickness is 125 to 250 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.

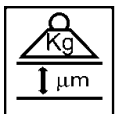
These application guidelines represent PPG's best advice in standard conditions. Some parameters will be influenced by environmental conditions, equipment settings, and other variables.



Theoretical Coverage:

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

Recommended dry film thickness; 125 to 250 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)

Desothane® HS CA8110/CA8120 Anti-Chafe Topcoats



Equipment:

CA8110/CA8120 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



Gloss: Flat colors, <5 G.U at 60°
Semi-gloss colors, 15 - 45 G.U at 60°



Dry Times	13 - 21°C (55 - 70°F)	22 - 28°C (71 - 84°F)	>29°C (>85°F)
Dry Hard	12 hours	10 hours	8 hours
Dry to Fly	56 hours	48 hours	36 hours
Full Cure	7 days	7 days	7 days

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)

Desothane® HS CA8110/CA8120 Anti-Chafe Topcoats

VOC**VOC (EPA method 24):**

Mixed, ready to use VOC for all gloss, semi-gloss, and flat colors is 420 grams/liter.

Flat Colors

Base Component 457 grams/liter

Flat Activator Component 327 grams/liter

Semi-Gloss Colors

Base Component 457 grams/liter

Activator Component 327 grams/liter

**Flash point closed cup:****Flat Colors**

Base Component 27°C (80°F)

Activator Component 27°C (80°F)

Semi-Gloss Colors

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.

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

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.



Desothane[®] HS CA8110/CA8120 Anti-Chafe Topcoats

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

Desoclean, Desoprime, 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.

PRC-DeSoto International, Inc.

12780 San Fernando Road
Sylmar, CA 91342

www.ppgaerospace.com

Issue Date: 9/16
Lit: 3074