

DeSoto® CA7088 Chrome-Free Integral Fuel Tank Coating

Product description

DeSoto® CA7088 Chromate-free, High Solids Integral Fuel Tank Coating is used to protect the interior of an aircraft's fuel tank against corrosion and fuel contaminants. CA7088 provides maximum protection against water, salt water, aircraft fuels, hydraulic fluids, engine oils, and dilute acid solutions.

- Chrome-free, corrosion inhibiting
- DiEGME Resistant
- Excellent adhesion to aluminum
- Compatible with fuel tank sealants
- Exceptional fluid resistance
- Compatible with all current non-electrostatic spray equipment
- Service temperature -54°C to 177°C (-65°F to 350°F)

Components



CA7088 Mix Ratio (by volume):

- CA7088A (base component) 4 parts
- CA7088B (activator component) 1 part
- CA7088C or CA7088CR (thinner component) 4 parts

Specifications



CA7088 with CA7088C thinner is qualified to the following material specifications:

- AMS-C-27725 Type 3 Grade 1 & 2

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

Product compatibility

CA7088 is compatible with the following sealant specifications:

- 207-6-466
- ACS-MRS-7006
- AMS 3265
- AMS 3276
- AMS 3277
- AMS 3281
- AMS-S 8802
- BMS 5-45
- HMS 16-1097
- FMS 1044
- FMS 3064
- DMS 2082
- GMS 4115
- MS-402
- MMS332

CA7088

DeSoto® CA7088 Chrome-Free Integral Fuel Tank Coating

Surface preparation and pretreatments



DeSoto® CA7088 Integral Fuel Tank coatings can be applied over clean, dry, intact aluminum surfaces which have been treated with materials conforming to BAC 5719, MIL-DTL-5541 or equivalent.

Instructions for use



Mixing Instructions:

Prior to mixing, thoroughly shake the base component. Add activator to base component and stir well. Add the thinner component and 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°C to 35°C (55°F to 95°F). The minimum temperature of the paint components should be 13°C (55°F) prior to mixing.



Induction time:

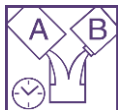
Not Required



Viscosity: (23°C/73°F)

- | | |
|-------------------------|--------------------|
| • #2 Signature Zahn cup | 17 to 20 seconds |
| • #4 Ford cup | 12 to 15 seconds |
| • ISO 4mm cup | 20 to 22 seconds |
| • BSB3 cup | 20 to 30 seconds |
| • BSB4 cup | 16 to 17 seconds |
| • AFNOR #2.5 cup | 50 to 56 seconds |
| • AFNOR #4 cup | 15.5 to 16 seconds |

Note: Viscosities quoted are 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	10-90%

DeSoto® CA7088 Chrome-Free Integral Fuel Tank Coating

Application:

Ground the aircraft and the application equipment before priming. Stir the primer slowly during the application. The suggested film thickness is 25 to 30 microns (1.0 to 1.2 mils). This can be accomplished by one or two medium coats with a 50% overlap. Note the first coat should be allowed to tack up before applying the second coat. If the second is applied before the first coat has tacked up, sagging can 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.

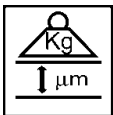


Theoretical coverage with CA7088C thinner

10.9 square meters/liter at 25 microns dry film (444 square feet/gallon at 1 mil dry film)
Recommended dry film thickness; 20 to 30 microns (0.8 to 1.2 mils)

Theoretical coverage with CA7088CR thinner

10.8 square meters/liter at 25 microns dry film (441 square feet/gallon at 1 mil dry film)
Recommended dry film thickness; 20 to 30 microns (0.8 to 1.2 mils)



Dry film density with CA7088C thinner:

1.67 grams/cubic centimeter (13.95 pounds/gallon)

Dry film weight with CA7088C thinner:

42.10 grams/square meter at 25 microns dry film (0.0086 pounds/square feet at 1 mil dry film)

Dry film density with CA7088CR thinner:

1.67 grams/cubic centimeter (13.95 pounds/gallon)

Dry film weight with CA7088CR thinner:

42.46 grams/square meter at 25 microns dry film (0.0087 pounds/square feet at 1 mil dry film)



Equipment:

CA7088 is compatible with all forms of non-electrostatic spray equipment.

Equipment Type	Tip Size	Pot Pressure	Atomization Pressure at the Cap
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)

DeSoto® CA7088 Chrome-Free Integral Fuel Tank Coating

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: Blue



Gloss: Not applicable



Dry times at 10-90% R.H.	13-21°C (55-70°F)	22-28°C (71-84°F)	>29°C (>85°F)
Tack free	4 hours	2 ½ hours	2 hours
Dry hard	8-10 hours	6-8 hours	5-6 hours
Full cure	21 days	21 days	21 days

Accelerated cure at 60°C (140°F) with 10 – 50% R.H.

Dry hard:

Flash off for 2 hours, then force cure for 3-4 hours

Full cure*:

Flash off for 2 hours, then force cure for 24-36 hours

**AMS-C-27725 Full Cure schedule is 24 hours flash off followed by 24 hours at 140°F and minimum 50% R.H.*



CA7088C VOC (EPA Method 24):

Mixed, ready to use VOC (EPA method 24)	419 grams/liter
Base Component	492 grams/liter
Activator Component	117 grams/liter
Thinner Component (CA7088C or CA7088CR)	0 grams/liter

DeSoto® CA7088 Chrome-Free Integral Fuel Tank Coating



Flash Point:

Base component	2.22°C (36°F)
Activator component	-5.56°C (22°F)
CA7088C thinner component	-9.44°C (15°F)
CA7088CR thinner component	3.89°C (39°F)

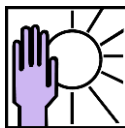
Shelf life:

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

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.

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

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

DeSoto® CA7088 Chrome-Free Integral Fuel Tank Coating

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

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

Americas

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

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: 9/19
Lit: 4583