



High Solids Corrosion Resistant Epoxy Primer

CM0483505

ADVANTAGES

- Two-component system.
- Simple 2:1 mix ratio with no further reduction required.
- Designed to create a very smooth surface especially with electrostatic application.
- Smooth appearance makes this product ideal for business jet application.
- Product maintains a wet-edge during application.
- Excellent corrosion and chemical resistance.
- Designed to meet the performance criteria set forth in MIL-P-23377, Type 1, Class C.
- Contains less than 2.9 lbs. of VOC per mixed gallon or 350 grams per liter.
- Designed to work with Sherwin-Williams sanding surfacers and topcoat systems.
- Excellent topcoat gloss hold out

DESCRIPTION

CM0483505 is a high performance, high solids, low VOC, two-component, green corrosion inhibitive epoxy primer. This high performance Epoxy primer is intended for use on all types of aircraft and its benefits include ease of application, smoothness, and economy of coverage.

COATING PROPERTIES

Solids:	Base Component
By weight	56.8 ± 1.0%
By volume	40.9 ± 0.8%
Wt./Gal.	13.0 ± 0.2 lbs.
Sp. Gravity	1.56 ± 0.02
Color	Green

Viscosity–Sprayable

Gardner signature #2 Zahn Cup	15-19 seconds
ISO 2431 3mm Cup –Sheen	45-65 seconds

Admixed V.O.C. (Mixed 4:1:20%)

<2.9 lbs./gal. (350 g/L)*

* If CM0110944 is used, it is a US exempt solvent. If used in other countries, it may increase the VOC beyond this level.

Useable Pot Life

at 77°F / 25°C	4 Hours
at 95°F / 35°C	2 Hours

Theoretical Coverage

Per dry mil	590 ft.2 / gal.
Per 25 microns	14.4 m ² / L

Dry Film Weight

Per dry mil	0.0098 lbs. / ft. ²
Per 25 microns	48 g/ m ²

SHELF LIFE

Shelf Life is applicable only for materials stored in unopened and undamaged original factory filled containers.

Minimum Storage Temp: 40°F / 4°C

Maximum Storage Temp: 100°F / 37°C

CM0483505: 2 years

CM0120506: 2 years

CM0110944 7 years

Aerosol Touch –up Kits: 1 year

Cool, Dry Storage Required.

SURFACE PREPARATION

To insure proper primer adhesion to the substrate, all contaminants must be removed. Depending on the type of substrate to be prepared, different methods should be used. There are a variety of processes to prepare these substrates for primer and painting.

Sherwin-Williams primers are designed to go over various treatments (i.e., alclad or anodized aluminum, composite, fiberglass, magnesium, and stainless steel). Please refer to recommendations for cleaning, application, and preparation before painting to the manufacturer of the treatment.

If a wash primer is needed, please refer to the Product Data Sheet for CM0484684 Wash Primer.

MIXING INSTRUCTIONS

Shake primer component for 15 minutes before admixing.

Admix by Volume:

2 Parts	Epoxy Primer CM0483505
1 Part	Curing Agent CM0120506

Add the Curing Agent into the Primer Component.

Admixed product should be allowed a 30-minute induction time for optimum application performance.

Further reduction is not generally necessary. However, if a lower viscosity is needed to meet shop conditions, an additional reduction, a maximum of 10%, with CM0110944 Reducer may be used. This additional reduction may change the application VOC to greater than 2.9 lbs./gal. (350 g/L) depending on the legislation in your area.

It is recommended to filter strain before placing material in containers for spraying.

APPLICATION

This product can be applied using conventional air spray HVLP, Graco electrostatic airspray, or air assisted airless. Please consult your Sherwin-Williams representative for specific equipment settings.

Electrostatic users: Ensure that the aircraft is properly grounded for potential static buildup.

Equipment settings:

Conventional air spray:

- Air cap atomizing pressure: 50-60 psi (3.45-4.15 bar)
- Pot pressure: 10-12 psi (0.69 – 0.83 bar) using a 60' fluid hose (3/8" diameter)
- Delivery Rate: 8-10 fluid oz (236-295 mL) per minute

Best spray application results are obtained by applying one light continuous closed film cross coat

Recommended dry film thickness is 0.6 – 0.9 mils (15-23 microns).

Surfacer primer can be applied after a MINIMUM two-hour cure to allow time for solvent flash-off. Thicker mil films or cooler conditions will extend the solvent flash time. Please refer to the Product Data Sheets CM0480920 Epoxy Surfacer or CM0481810 Urethane Surfacer for more details.

NOTE: Application of these product systems requires recommended temperature / humidity conditions and film thickness ranges. The material, hangar, and aircraft skin temperature should be no lower than 55°F / 13°C before, during, and after application.

DRYING SCHEDULE

Dry times are based on the dry film thickness of 0.6-0.9 mils (15-23 microns).

Air Dry Times (75°F / 25°C and 50% RH)	<u>Min.</u>	<u>Max.</u>
To apply topcoat	2 Hours	72 Hours
Tack free	5 Hours	
Dry Hard	8 Hours	

Force Dry: (140°F (60°C), 45% RH)	<u>Min.</u>
To apply topcoat	1 Hour

* If an intermediate primer or topcoat is not applied within 72 hours of primer application, light scuff sanding using P240, P320 paper &/or red abrasive pad will be required for good intercoat adhesion.

NOTE: Lower temperatures, heavy film thickness, improper activator range selection and poor air movement will extend the dry time.

EQUIPMENT CLEANUP




Use clean Ketone-type solvents such as CM0110308 MEK. Do not allow material to cure inside equipment.

PRODUCT INFORMATION

Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.

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- 1** Shake the CM0483505 for 15 minutes before admixing.
- 2** Add in order shown below. The Adduct should be mixed into the primer component. Stir as components are added.

Order of Addition	Volume	U.S.		Metric	
		Large	Small	Large	Small
 CM0483505 Primer 	2 Parts	2 Gal.	1 Qt.	7.6 L	.95 L
 CM0120506 Epoxy Adduct	1 Part	1 Gal.	1 Pt.	3.8 L	.48 L

- 3** Allow admix to induct 30 minutes.
- 4** Further reduction is not necessary. However, if a lower viscosity is needed to meet shop conditions, additional reduction, a maximum of 10%, with **CM0110944 US Exempt Reducer** may be used. This additional reduction may change the application VOC to greater than 2.9 lbs./gal. (350 g/L) depending on the legislation in your area.
- 5** Filter strain and apply.