



Chrome Free Epoxy Primer / Surfacer

CM0481968

ADVANTAGES

- Provides corrosion protection without the use of chromate.
- Convenience – This product can be used as both a Primer and Surfacer. One product for both types of application.
- Qualified to SAE AMS3095.
- Flows out to a nice, smooth surface.
- Eliminates the need for a sanding guide coat as the product changes gloss and color as it is sanded.
- Designed to work with Sherwin-Williams topcoat systems.
- Designed to meet the performance criteria set forth in MIL-P-23377, Type 1, Class N and Boeing BMS 10-79.
- High square coverage per gallon.
- Great sanding characteristics.
- Contains less than 2.9 lbs. of VOC per mixed gallon or 350 grams per liter.
- Excellent topcoat gloss hold out

DESCRIPTION

CM0481968 is a high performance, low VOC, two-component, corrosion inhibitive epoxy Primer and Surfacer that contains no chromate. This high performance epoxy primer is intended for use on all types of aircraft and has excellent recoat/intercoat adhesion with Sherwin-Williams topcoat systems.

COATING PROPERTIES

Solids:	Base Component
By weight	71.2 ± 1.0%
By volume	49.7 ± 0.8%
Wt./Gal.	11.9 ± 0.2 lbs.
Sp. Gravity	1.43 ± 0.02
Color	Gray

Viscosity–Sprayable

Gardner Signature #2 Zahn Cup	16-22 seconds
ISO 2431 3mm Cup –Sheen	47-50 seconds

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

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

CM0110944 is a US exempt solvent. If used in other countries, it may increase the VOC level. If CM0110099 Reducer is used, it may increase the VOC above 2.9 lbs./gal. (350 g/L)

Useable Pot Life

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

Theoretical Coverage

Per dry mil	749 ft.2 / gal.
Per 25 microns	18.4 m2 / L

Dry Film Weight

Per dry mil	0.01 lbs. / ft. ²
Per 25 microns	48.8 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

CM0481968:	1 year
CM0120828:	2 years
CM0110944:	7 years
CM0110099:	7 years
CM0140968:	1 year

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:

4 Parts Epoxy Primer
CM0481968

1 Part Epoxy Adduct
CM0120828

Add the Adduct into the Primer Component, stir thoroughly.

THINNING INSTRUCTIONS:

Corrosion Primer Application (Non-Sand System)

The product can be reduced using up to 1 part of CM0110944 or CM0110099. (Ideal for a non-sand system.)

Surfacer Application (High Build System)

The product can also be reduced by 10% > with:

- CM0110944 US Exempt Reducer
- CM0110099 Slow Reducer

Ready to Spray product should be allowed a 30-minute induction time for optimum application performance.

GUIDECOAT COLORANT TO ASSIST IN SANDING (OPTIONAL)

To create color contrast when sanding, add up to 0.5 fl. oz. of CM0140968 Surfacer Colorant per gallon of CM0481968 Primer base. Add the colorant to the base prior to admixing. Post adding the colorant to existing mixed material is also acceptable.

EQUIPMENT

This product can be applied using conventional air spray HVLP, Graco electrostatic air-spray 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.

APPLICATION

Corrosion Primer Application (Non-Sand System)

Best spray application results are obtained by applying one light continuous closed film cross coat. The recommended dry film thickness is 0.6 – 1.2 mils (-15-30 microns).

Surfacer Application (High Build Colorant System)

Apply up to 3 wet single pass coats allowing one hour between coats. Total recommended dry film thickness up to 5.0 mils dry (125 microns). It is preferred to allow overnight cure at 77°F / 25°C for maximum cure properties. Constant airflow is recommended. Apply the 2nd and 3rd coat that contains CM0140968 Surfacer Colorant.

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 0.6-1.2 mils (15-30 microns).

<u>Air Dry Times</u> (75°F / 25°C and 50% RH)	<u>Min.</u>	<u>Max.</u>
To apply topcoat (thickness dependent)	2 to 4 Hrs	16Hrs*
To Lightly Sand (thickness dependent)	6 Hours	
Dry Hard	8 Hours	
<u>Force Dry:</u> (140°F (60°C), 45% RH)	<u>Min.</u>	
To light sand or apply topcoat	1 Hour	

* If an intermediate primer or topcoat is not applied within 16 hours of primer application, light scuff sanding using P240, P320 paper &/or red abrasive pads will be required for good intercoat adhesion.

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

EQUIPMENT CLEANUP


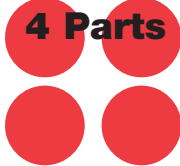


Use clean Ketone-type solvents such as CM0110308 MEK. Do not allow material to cure inside equipment.

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.

Chrome Free Epoxy Primer / Surfacer CM0481968

- 1** Shake the CM0481968 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
 CM0481968 Primer	 4 Parts	4 Gal.	1 Gal.	15.2 L	3.8 L
 CM0120828 Epoxy Adduct	 1 Part	1 Gal.	1 Qt.	3.8 L	.95 L


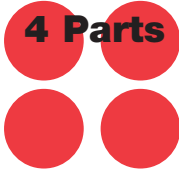




- 3** Allow admix to induct 30 minutes.
- 4** The product can be reduced using up to 1 part of **CM0110944 Reducer** for low film DFT application. (Ideal for non-sand system.)
- 5** The product can also be reduced by 10% with **CM0110944** or **CM0110099 Reducer**. (Ideal for high DFT Surfacer system.)
- 6** Filter strain and apply.

CM0481968

Rolling Procedure

If the product needs to be applied in an area with a roller, please use the following process.

- 1** Shake the Base component for 10-15 minutes before admixing.
- 2** Add in order shown below. Stir as components are added.

Order of Addition	Volume	U.S.		Metric	
		Large	Small	Large	Small
 CM0481968 Chrome-Free Primer	 4 Parts	4 Gal.	1 Gal.	15.2 L	3.8 L
 CM0120828 Epoxy Adduct	 1 Part	1 Gal.	1 Qt.	3.8 L	.95 L
 CM0110944 US Exempt Reducer	 1 Part	1 Gal.	1 Qt.	3.8 L	.95 L

- 3** Allow admix to induct 15 minutes. (Viscosity check not required.)
- 4** Filter strain and apply one single cross roller coat to achieve full opacity, flow and finish.

Note: CM0481968 must be applied over suitably prepared surfaces i.e., sanded Urethane, pretreated Aluminum, sanded composites / plastics.
- 5** 0.6 to 1.2 mils DFT required.
- 6** Recommended roller type: 4-inch high-density disposable foam roller.