SHERWIN-WILLIAMS

AEROSPACE COATINGS

PRODUCT DATA

Chrome Hazard Free Epoxy Flexible Primer

CM0483790

ADVANTAGES

- Provides corrosion protection without the use of chromate, making it safer for the environment and applicator
- Excellent flexibility
- Skydrol resistance without the use of topcoat
- Qualified to SAE AMS 3095 as part of a complete chrome free system with 3M's AC-131 Surface Pretreatment and Jet Glo Express™
- Ideal for commercial aircraft, business jet and general aviation applications
- Flows out to a nice, smooth surface with minimal profile
- Can be applied in a wet on wet multicoat primer/surfacer application for business jet and general aviation
- Product can be roller applied
- Designed to work with all Sherwin-Williams topcoat systems
- High square coverage per gallon.
- Contains less than 2.9 lbs. of VOC per mixed gallon or 350 grams per liter
- Excellent topcoat gloss hold out

DESCRIPTION

CM0483790 is a high performance, two-component, corrosion inhibitive Epoxy Primer which contains no chromate. It is highly flexible and provides Skydrol resistance. This Chrome Hazard Free Primer provides excellent adhesion to treated substrates and meets the U.S. VOC regulations that require a 2.9 lb/gal (350 g/L) VOC primer. This primer has been formulated to air dry slightly slower than a traditional epoxy primer allowing for an excellent wet edge, even on large aircraft in variable environmental conditions. These benefits produce smooth non-sand surface with minimal to zero sanding prior to top coating.

COATING PROPERTIES

	Base Component
Solids:	
By weight	63.0 +/- 1.0%
By volume	46.5% +/- 1.0%
Wt. /Gal.	10.5 +/- 0.5 lbs./gallon
Specific Gravity	1.26 +/- 0.06
Color	Light Tan
Viscosity–Sprayable	
Gardner Signature #2 Zahn Cup	15-20 seconds
Admixed V.O.C. (Mixed 3:1:1)	
U.S. Exempt Solvent	<2.9 lbs./gal (350 g/L)
Pot Life	
at 77°F / 25°C	3 Hours
Theoretical Coverage	
Per dry mil	745 ft.2 / gal
Per 25 microns	18.3 m^2 / L
Dry Film Weight	
Per dry mil	0.01 lb/ft^2
Per 25 microns	44.4 gm/m^2

SHELF LIFE

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

Minimum Storage Temp: 40ºF / 4ºC
Maximum Storage Temp: 100ºF / 37ºC

CM0483790: 2 years
CM0120790: 2 years
CM0110787: 7 years
CM0110944: 7 years

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SURFACE PREPARATION

To insure proper primer adhesion to the substrate, all contaminates 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 epoxy primers are designed to go over various treatments (i.e., alclad or anodized aluminum, composite, fiberglass, magnesium, and stainless steel) as well as properly prepared metal and composite substrates.

MIXING INSTRUCTIONS

Shake primer component for 15 minutes before admixing.

Admix by Volume:

3 Parts	Chrome Hazard Free Epoxy Primer **CM0483790**
1 Part	Chrome Hazard Free Epoxy Primer Adduct **CM0120790**
1 Part	Reducer **CM0110787 or CM0110944**

Add the Adduct and Reducer into the Primer Component. Stir in slowly and allow a 15-minute induction time

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

APPLICATION EQUIPMENT

This product can be applied using conventional air spray HVLP, Electrostatic air spray or air assisted airless.

COMMERCIAL APPLICATION AND DRYING SCHEDULE

Apply as a one singular continuous closed film or one cross coat at a dry film thickness of 0.6 to 1.2 mils. (15 to 30 microns)

Commercial Application - Recoat times are based on the dry film thickness of 0.6-1.0 mils (15-30 microns).

NOTE: Full opacity is not required to achieve corrosion protection.

To light sand or apply topcoat, @ 75f 50%RH. @ film thickness	4 Hours	72 Hours*
Force Dry: @120ºF (48ºC) To light sand or apply topcoat	Min. 30-60 Minutes once at temperature	

* If an intermediate primer or topcoat is not applied within 72 hours of air dry 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, Improper activator range selection and poor air movement will extend the dry time.

BUSINESS JET AND GENERAL AVIATION PRIMER / SURFACER APPLICATION AND DRYING SCHEDULE

When a thicker primer / surfacer is required to conceal surface profile, rivets, and/or to obtain a smoother topcoat film, a three coat system may be applied wet on wet. Typically this is applied one to two hours apart. For a smaller business jet application, it is acceptable to apply the coats in as soon as 30 minutes apart.

A typical three cross coat dry film thickness application yields 3 to 4 mils (75 to 100 microns)

Business Jet and General Aviation Primer / Surfacer Application - Recoat times are based on the dry film thickness of 3.0 – 4.0 mils (75-100 microns).

To machine sand. @ 75f 50%RH	12 Hours	72 Hours*
Force Dry: @ 120ºF (48ºC) To machine sand	Typically 3 hrs. Once at temperature	

P240 or P320 abrasive papers are recommended.

* If an intermediate primer or topcoat is not applied within 72 hours of air dry 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, Improper activator range selection and poor air movement will extend the dry time.

PRE PAINT WIPING PRIOR TO TOP COATING

Once all sanding dust debris has been cleaned off the surface with compressed air, wipe down the surface using the established wipe on wipe off technique using the recommended Sherwin Williams solution such as CM0110158 or CM0110120.

Note: Replace the wiping cloths regularly once soiled.

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.