SHERWIN-WILLIAMS

AEROSPACE COATINGS

PRODUCT DATA

High Solids Epoxy Sanding Surfacer

CM0480920

ADVANTAGES

- Product forms tough films with excellent recoat / intercoat adhesion properties
- Excellent sanding process characteristics
- Handles a variety of temperature conditions
- Less than 2.9 lbs./gallon (350 g/L) of VOC without use of exempt solvents
- Reduces process time for basecoat preparation

DESCRIPTION

CM0480920 is a high solid epoxy surfacer intended for use on aircraft and other aerospace applications over Sherwin-Williams corrosion protective primers. It is used to fill and cover surface imperfections to create a smooth surface for topcoat application.

COATING PROPERTIES

	Base Component
Solids:	
By weight	71.6 ± 1.0%
By volume	49.5 ± 1.3%
Wt./Gal.	11.9 ± 0.2 lbs.
Sp. Gravity	1.43 ± 0.02
Color	White
Viscosity–Sprayable	
Gardner Signature #2 Zahn Cup	19-24 seconds
ISO 2431 3mm	45 -65 seconds
Admixed V.O.C. (Mixed 4:1: 1)	
U.S. Exempt Solvent: CM0110944	<2.9 lbs./gal. (350 g/L)
Non-Exempt Solvent :	<4.6 lbs./gal. (552 g/L)
Useable Pot Life (after induction)	
at 77°F / 25°C	2 Hours
at 95°F / 35°C	1 Hour
Theoretical Coverage	
Per dry mil	612 ft.2 / gal.
Per 25 microns	15 m^2 / L
Dry Film Weight	
Per dry mil	0.017 lbs. / $ft.^2$
Per 25 microns	83.0 g/ 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

CM0480920:	2 years
CM0120911:	2 years
CM0110093	7 years
CM0110944	7 years

SURFACE PREPARATION

Surface should be dry and free of oil, dust, or overspray. For maximum adhesion and corrosion resistance, apply over a chromate or chrome free corrosion resistant primer such as CM0483928, CM0483505 CM0481968, CM0483787 or CM0483790.

The CM0480920 should be applied over the selected corrosion preventative primer within 16 hours of the primer application at 77ºF (25ºC).

NOTE: Do not use this product as a filler Surfacer to cover marginally prepared composite/fiberglass or polyester filler bondtite area. Address these appearance items by reviewing the cured corrosion protective primer and assuring satisfactory smoothness before applying CM0480920.

MIXING INSTRUCTIONS

Shake primer component for 10-15 minutes before admixing.

Admix by Volume:

4 Parts	Epoxy Primer Component **CM0480920**
1 Part	Epoxy Surfacer Adduct **CM0120911**

Add the Adduct into the Primer Component.

Add the required volume (up to a maximum of 1 part) of CM0110093 or CM0110944 Reducer to reach desired viscosity.

Ready to spray product should be allowed a 15-minute induction time for optimum application performance.

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

Note: Temperature should be no lower than 59ºF/ 15ºC before, during, and after application.

Select the Reducer based on the following criteria:

Select CM0110093 for:

- Use for large surfaces at any temperature above 59ºF/ 15ºC.
- Any hot conditions up to100ºF/ 38ºC
- When conventional equipment is used. (Due to high air velocity)

Note: When applying in conditions above 77 ºF / 25 ºC, it is advised to mix fresh material for the third coat if required.

Additional reduction of CM0110093 may change the application VOC to greater than 2.9 lbs./gal. (350 g/L) depending on the legislation in your area.

Select CM0110944 for:

- Small Aircraft (Temperatures between 59ºF/ 15ºC to 77ºF/ 25ºC.)
- Parts or components

APPLICATION

This product, using either solvent, can be applied using conventional air spray equipment, HVLP, Graco Pro 4500 air electrostatic, or Graco Pro 4500 air assisted airless electrostatic. Please consult your Sherwin-Williams representative for specific equipment settings

1. Make sure pots, guns, and lines are purged and cleaned.
2. Mix thoroughly and filter strain before spray applying.
3. Equipment Settings (i.e. Conventional settings):
   Spray 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

Always air-blow and tack-wipe the surfaces to be painted. Electrostatic users: Ensure that the aircraft is properly grounded for potential static buildup.

Best spray application results are obtained by applying two or three smooth medium-wet coats 1hr between coats.

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 59ºF / 15ºC before, during, and after application.

DRYING SCHEDULE

Dry times are based on the dry film thickness of up to 5 mils (125 microns).

Note: Solvent selection does not effect dry times below.

Air Dry Times (75°f / 25°C and 50% RH)	Min
To DA (orbital) Sand	12 Hours

Force Dry (120°F / 50°C)	
Note: Allow a 2 hour flash prior to bake	
To DA (Orbital) Sand	4 Hours

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

SANDING RECOMMENDATIONS

Mechanical DA (orbital) sanding or hand sanding of this product works well with 240 or 320 grit sandpaper. Proper sanding is the key to good intercoat adhesion and a smooth appearing surface.

Note: Once sanded topcoat within 72 hours.

If the cured epoxy primer is inadvertently sanded through, a light coat of corrosion primer as a spot repair 0.5 mil (12 microns) will be required prior to spraying topcoat. Allow primer to dry a minimum of 1 hour before overcoating.

GUIDECOAT COLORANT TO ASSIST IN SANDING (OPTIONAL)

To create color contrast when sanding, add up to 0.5 fl. oz. of D59BC1 Phoenix Black Colorant per gallon of CM0480920 Primer base. Add the colorant to the base prior to admixing. Post adding the colorant to existing mixed material is also acceptable.

EQUIPMENT CLEANUP

Flush and clean fluid material hose and paint guns as soon as possible after spraying is complete. Use clean Ketone–type solvents such as CM0110308 MEK. Do not allow material to cure inside equipment.

PRODUCT INFORMATION

Confirm compliance with national, state, and local air quality rules before use.

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.*