



# Product Finishes

CC-M5

## MIL-DTL-53022E, Type II 3.5 VOC Lead & Chromate Free Epoxy Primer

Buff (Component A)..... E90H226  
Buff (Component A)..... E90H0H226  
Catalyst (Component B)..... V93V227

### DESCRIPTION

This is a two component 3.5 lb/gal VOC compliant, lead and chromate free epoxy primer. It meets MIL-DTL-53022, Type II, composition and performance specification. It may be used as a primer under polyurethane chemical agent resistant coatings (CARC) specified in MIL-DTL-53039 or waterborne polyurethane (CARC) specified in MIL-DTL-64159, MIL-PRF-22750 epoxy topcoat, or MIL-PRF-85285 (non-aircraft) polyurethane topcoats. The E90H0H226 formula is enhanced for application.

#### Advantages:

- 3.5 lb/gal VOC\*
- Fast drying - can be topcoated in 30 minutes
- Excellent chemical, solvent and corrosion resistance on aluminum and steel
- Free of lead and chromate hazards
- Air or Force Dry cure

The following MIL-DTL-53022 Type II colors are approved by U.S. Army Research Lab, Aberdeen Proving Ground, Aberdeen, MD.

Sherwin-Williams	QPD
E90H226	Q1563
E90H0H226	Q2125

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at [www.paintdocs.com](http://www.paintdocs.com)

\*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations

### CHARACTERISTICS

**Gloss:** 10-30 units @ 60°  
**Volume Solids:** (Typical)  
Component A: 58.2 ± 1%  
Component B: 19.5 ± 1%  
Admixed: 50.5 ± 1%  
**Viscosity:** (Typical)  
Component A: 65-75 Krebs Units  
Component B: 18-25 seconds #2 Zahn  
Admixed: 34-45 seconds #2 Zahn

#### Recommended film thickness:

Mils Wet 3.0-5.0  
Mils Dry 1.5-2.5

#### Spreading Rate per Admixed Gallon (no application loss):

407 sq. ft./gal @ 2.0 mil DFT

#### Drying (1 mils DFT, 70°F, 50% RH):

Set to Touch: 30 minutes  
Dry Hard: 4 hours  
Dry Through: 6 hours  
To Recoat: 30 - 60 minutes  
Force Dry: to obtain dry hard  
20-30 minutes at 140° F

The force dry schedules above are provided as a guide. Wet film thickness, humidity, flash off time, part size and oven characteristics will all have an effect on drying and cure. Test for your specific application and line conditions.

**Flash Point:** 44°F Pensky-Martens Closed Cup  
**Mixing Ratio:** by volume  
4 parts Component A:  
1 part Component B:  
E90H226/E90H0H226  
V93V227

Shake Component A well before mixing.

**Induction Time:** 30 minutes

**Pot Life:** 4 - 6 hours at room temperature - higher temperatures will shorten pot life.

**Package Life:** 24 months unopened, inside storage

### CHARACTERISTICS (CONT)

#### Air Quality Data:

Photochemically reactive  
Volatile Organic Compounds (VOC)  
E90H226/E90H0H226 as packaged,  
maximum 2.87 lb/gal, 344 g/L  
V93V227 as packaged, maximum  
5.78 lb/gal, 694 g/L  
catalyzed as above, maximum  
3.34 lb/gal, 401 g/L

### SPECIFICATIONS

#### CLEANING & PRETREATMENTS

Follow the most current revisions of MIL-DTL-53072 and/or TT-C-490 for required cleaning and pretreatment application before coating.

**Note:** See the current MIL-DTL-53072 for complete details regarding substrate preparation, coatings, and application.

**Testing:** The information, data, and recommendations set forth in this Product Data Sheet are based upon test results believed to be reliable. However, due to the wide variety of substrates, substrate properties, surface preparation methods, equipment and tools, application methods, and environments, the customer should test the complete system for adhesion, compatibility and performance prior to full scale application.

## APPLICATION

**Reduction:** If required, use epoxy thinner per manufacturers recommendation up to 20%/volume.

For all application and usage guidelines, please consult and review the MIL-DTL-53072 & TT-C-490 specifications as well as your local Sherwin-Williams representative.

**Clean-Up:** Clean tools / equipment immediately after use with Acetone (R6K9), MEK (R6K10), MIBK (R6K16), MAK (R6K30), or other epoxy thinners such as MIL-T-81772 Type II (R91K210).

Follow manufacturer's safety recommendations when using any solvent.

## APPLICATION

### Typical Setups

#### **Product Limitations:**

- This product must be properly mixed (catalyzed) before using. ( See mixing instruction for details.)
- Surface preparation is important for performance.
- If parts have been primed for longer than seven (7) days, they must be sanded or recoated before topcoating for good adhesion

#### **Performance Properties:**

Meets all the performance properties of MIL-DTL-53022E, Type II.

## CAUTIONS

### FOR INDUSTRIAL SHOP APPLICATION ONLY

**Thoroughly review product label and Safety Data Sheet (SDS) for safety information and cautions prior to using this product.**

To obtain the most current version of the Environmental Data Sheet (EDS), Product Data Sheet (PDS), or Safety Data Sheet (SDS) please visit your local Sherwin-Williams facility or [www.paintdocs.com](http://www.paintdocs.com).

Please direct any questions or comments to your local Sherwin-Williams facility.

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