



**SHERWIN  
WILLIAMS.**

# Chemical Coatings

## CC-M14A

# MIL-PRF-85285E, Type I, Class H Full Gloss Ordnance Polyurethane Topcoat

Full Gloss White, 17925 ..... F91W26\*  
Catalyst (Component B) ..... V93V28  
Activator (Component C) ..... V93V2

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>						
<p><b>MIL-PRF-85285E Type I, Class H</b> coatings are multi-component (3K), low VOC, high solids polyurethane topcoats designed as a finish coat for military aircraft and equipment. They meet MIL-PRF-85285E Type I, Class H composition and performance specification.</p> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• Low viscosity at 3.5 VOC</li> <li>• Very low HAPS content &lt;3% by weight</li> <li>• Excellent flow characteristics</li> <li>• Free of lead and chromate hazards</li> </ul> <p>These MIL-PRF-85285E products have been approved by the U.S. Naval Air Warfare Center (NAWC), Patuxent River, MD. Copies of approval letter are available upon request.</p> <p>*All gloss colors in the Federal Standard 595B are available. It should be noted that colors other than F91W26 are covered by a separate data page (CC-M14B) due to their use of a different catalyst and activator.</p>	<p><b>Gloss (60°):</b> 90+ units @ 1.8-2.3 dft</p> <p><b>Volume Solids:</b> Component A: 57% Admixed: 53%</p> <p><b>Viscosity:</b> varies by color Component A: 60-65 Krebs Units Admixed: 16-20 seconds #2 Zahn</p> <p><b>Recommended film thickness:</b> Mils Wet 3.5-4.5 Mils Dry 1.8-2.3</p> <p><b>Spreading Rate</b> (no application loss) 370-472 sq ft/gal @ 1.8-2.3 mils DFT</p> <p><b>Drying (77°F, 50% RH):</b> Set to Touch: 2 hours Dry to Tape: 8 hours</p> <p><b>Flash Point:</b> 97°F Pensky-Martens Closed Cup</p> <p><b>Mixing Ratio:</b> by volume The mix ratio and the Component B and Component C used vary according to Part A. ALL COMPONENTS MUST BE USED. <i>For all other colors, refer to Product Data Sheet CC-M14B)</i></p> <table border="0"> <tr><td>1 part</td><td>Component A</td></tr> <tr><td>1 part</td><td>Component B (V93V28)</td></tr> <tr><td>1/8 part</td><td>Component C (V93V2)</td></tr> </table> <p><b>Pot Life:</b> 4 hours <b>Package Life:</b> 1 year, inside storage <b>Storage:</b> Protect from moisture</p> <p><b>Air Quality Data:</b> Non-photochemically reactive Volatile Organic Compounds (VOC) catalyzed and reduced, maximum 3.5 lb/gal, 419 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	1 part	Component A	1 part	Component B (V93V28)	1/8 part	Component C (V93V2)	<p><b>Steel:</b> Surface must be clean and free of grease, dirt, oil, rust, fingerprints, and other contaminants to insure optimum adhesion and performance properties. Chemical pretreatment, (zinc phosphate) or DOD-P-15328D wash primer, e.g. E90G4, gives best adhesion and performance results. Where blasting is appropriate, blast in accordance with SSPC-SP6. For optimum adhesion pretreat blasted surface immediately. Prime with wash primer E90G4 within two hours after blasting.</p> <p><b>Aluminum:</b> Clean with acidic cleaner or other appropriate cleaner depending on contamination. Pretreat with chromate conversion coating MIL-DTL-5541F, wash primer DOD-P-15328D, E90G4, or anodize per MIL-A-8625F.</p> <p><b>Galvanized and other metals:</b> Clean and remove oxidation contamination on surface, followed by treatment with DOD-P-15328D wash primer, E90G4, or chemical pretreat with zinc phosphate. Due to the variability in these surface, testing adhesion on each situation is recommended.</p> <p><b>Primers must be applied under the MIL-PRF-85285E topcoats.</b> For ferrous substrates, use MIL-DTL-53022C, Type II primer, E90H226. MIL-DTL-53030B may also be used. For non-ferrous substrates, use MIL-P-23377J, Type I, Class C2, E90G203.</p> <p><b>Testing:</b> Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.</p>
1 part	Component A							
1 part	Component B (V93V28)							
1/8 part	Component C (V93V2)							

## APPLICATION

### Typical Setups

Best application results are obtained by applying 2 medium wet passes and allowing a "tack-off" time between coats. Typical "tack-off" time is 5-30 minutes.

### May be applied by:

Conventional  
Airless  
Air Assisted Airless  
HVLP Electrostatic

Please consult with your Sherwin-Williams sales representative for proper settings for your spray equipment.

### Cleanup:

Clean tools/equipment immediately after use with MIL-T-81772, Type I Reducer, R91K20, Methyl Propyl Ketone, or other polyurethane reducer. Do not use lacquer thinner or epoxy thinner. Follow manufacturer's safety recommendations when using any solvent.

## SPECIFICATIONS

### Product Limitations:

- The catalyst (Component B) and activator (Component C) vary according to Component A. The proper catalyst and activator MUST be used.
- **All colors other than F91W26 are covered by a separate data page (CC-M14B) due to their use of a different catalyst and activator.**

### Performance Properties:

Meets all the performance properties of MIL-PRF-85285E Type I Class H.

## CAUTIONS

### FOR INDUSTRIAL SHOP APPLICATION

Thoroughly review product label for safety and cautions prior to using this product.

A Material Safety Data Sheet is available from your local Sherwin-Williams facility. Please direct any questions or comments to your local Sherwin-Williams facility.

**Note:** 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.