



**SHERWIN  
WILLIAMS.**

# Chemical Coatings

CC-M17

## MIL-PRF-22750F High Solids Epoxy Topcoat

White #17925 ..... F91W226  
Seafoam Green #24533 ..... F92G227  
Catalyst ..... V93V228

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>
<p><b>MIL-PRF-22750F High Solids Epoxy Topcoat</b> is a 2.8 lb/gal VOC compliant high solids two component epoxy topcoat. This epoxy coating is intended for use as a topcoat for the interior of military ground equipment. This product is applied over specified epoxy primers.</p> <p>The MIL-PRF-22750 products listed above 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><b>Gloss:</b> F91W226: 90 units minimum (60°) F92G227: 15-30 (60°)</p> <p><b>Volume Solids:</b> Component A: 57 - 64% Component B: 69 - 70% Admixed: 61 - 66%</p> <p><b>Viscosity:</b> (Typical) F91W226: 20-30 seconds #4 Ford F92G227: 55-65 Krebs Units Component B: 17-23 seconds #4 Ford Admixed: 20-25 seconds #4 Ford</p> <p><b>Recommended film thickness:</b> Mils Wet 2.8-3.1 Mils Dry 1.8-2.0 Minimum 1.8 dft per MIL-C-22750F.</p> <p><b>Spreading Rate</b> (no application loss) 490-588 sq ft/gal @ 1.8-2.0 mils DFT</p> <p><b>Drying</b> (2.0 mils dft, 77°F, 50% RH): Set to Touch: 4 hours maximum Dry Hard: 8 hours maximum Complete Cure: 7 days Force Dry: to obtain dry hard 30 minutes at 145°F</p> <p>Force drying will lower the gloss of F92G227. The gloss of F92G227 will be lower than the specification minimum of 15 units if force dried. Thicker films or lower temperature will increase cure time.</p> <p><b>Flash Point:</b> 20°F Pensky-Martens Closed Cup by volume</p> <p><b>Mixing Ratio:</b> 4 parts Component A 1 part Component B V93V228</p> <p><b>Induction Time:</b> <b>30 minutes</b></p> <p><b>Pot Life:</b> 4 hours at room temperature - higher temperature will shorten pot life.</p> <p><b>Package Life:</b> 1 year, inside storage</p> <p><b>Air Quality Data:</b> Non-photochemically reactive Volatile Organic Compounds (VOC) catalyzed as above, maximum 2.8 lb/gal, 335 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility.</p>	<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, 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-15328, 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. Due to the variability in these surface, testing adhesion on each situation is recommended.</p> <p><b>Primers must be applied under the topcoat.</b> For <b>ferrous</b> substrates, use MIL-DTL-53022C primer, e.g. E90W201 (Type I), or E90H226 (Type II, faster recoat).</p> <p>For <b>non-ferrous</b> substrates, MIL-P-23377J, E90G203 (Type I, Class C2, 2.8 VOC); or MIL-P-53022B (see above).</p> <p>Check the data sheet of each primer for recoat time of topcoat.</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>

## APPLICATION

### Typical Setups

**Reduction:** Reduction is not recommended. Optimum sag resistance is obtained without reduction. If required, use MAK R6K30, MEK R6K10, or MIL-T-81772 Type II Reducer, R91K210.

**Note:** Maximum reduction of F91W226 is 6% to maintain 2.8 VOC. No reduction is permitted of F92G227 to maintain 2.8 VOC.

### **Conventional Spray:**

Air Pressure ..... 45-60 psi  
Tip ..... .070"

### **Air Assisted Airless:**

Air Assist Pressure ..... 30 psi  
Fluid Pressure ..... 1800-2200 psi  
Tip ..... .011"

### **HVLP:**

Atomizing Air ..... 65 psi  
Fluid Pressure ..... 5-10 psi  
Tip ..... .070"

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 II Thinner R90K210, MEK R6K10, or other epoxy reducer. A blend of MIBK and Xylene works well also.

Follow manufacturer's safety recommendations when using any solvent.

## SPECIFICATIONS

### **Product Limitations:**

- MIL-PRF-22750F coatings (Component A) must be catalyzed with Catalyst (Component B), V93V228, at 4:1 ratio by volume.
- Do not use other catalysts.
- Do not vary catalyst mixing ratio.
- Component A must be well agitated prior to use.
- Agitate entire mixture, Component A, Component B, and Reducer well before spray.
- Potlife will be shorter with warmer temperatures.
- Force drying will lower the gloss of this product. The gloss of F92G227 will be lower than the specification minimum of 15 units if force dried.
- This coating is recommended for interior application only.

### **Performance Properties:**

Meets all the performance properties of MIL-PRF-22750F.

## CAUTIONS

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.

### LABEL CAUTIONS

SEE CONTENTS STATEMENT ON LABEL.

Contents are **EXTREMELY FLAMMABLE**. Keep away from heat, sparks, and open flame. Vapors will accumulate readily and may ignite explosively. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights and heaters - Turn off stoves, electric tools and appliances, and any other sources of ignition. **VAPOR HARMFUL**. Use only with adequate ventilation. Wear an appropriate properly fitted vapor/particulate respirator (NIOSH approved) during and after application, unless air monitoring demonstrates vapor/mist levels are below applicable limits. Follow respirator manufacturer's directions for respirator use. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

**FIRST AID:** If **INHALED:** If affected, remove from exposure. Restore breathing. Keep warm and quiet. If on **SKIN:** Wash affected area thoroughly with soap and water. Remove contaminated clothing. Launder before re-use. If in **EYES:** Flush eyes with large amounts of water for 15 minutes. Get medical attention. If **SWALLOWED:** Call Poison Control Center, hospital emergency room, or physician immediately.

**SPILL AND WASTE:** Remove all sources of ignition. Ventilate and remove with inert absorbent. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

**DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE.**

Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal.

This product must be mixed with other components before use. Before opening the packages, **READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.**

**WARNING:** This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

**DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN.**

**FOR INDUSTRIAL USE ONLY.**

SEE MATERIAL SAFETY DATA SHEET. 21902-051905.

**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.