CC-M18

MIL-PRF-85582D, Class C2
Waterborne Epoxy Primer

Type I Yellow E90Y500
Catalyst (Component B) V93V501

Type II Low IR Green E90G500
Catalyst (Component B) V93V501

DESCRIPTION

MIL-PRF-85582D is a two component, 2.8 VOC compliant*, waterborne, chromated, high performance epoxy primer for aircraft. It meets MIL-PRF-85582C Class C2 (350 g/L or less VOC) primer for exterior urethane enamel.

Advantages:

- 2.07 lb/gal less water VOC at application
- Volatile Organic Emissions under 2.1 lb/gal
- Good salt spray and humidity resistance
- Excellent chemical and stain resistance
- Excellent hardness, mar and abrasion resistance
- Reduced with water and clean-up with water means cost savings for solvent and insurance, lower odor and improved working conditions
- Superior direct to metal adhesion
- Non-isocyanate
- No formaldehyde
- No induction time needed
- Air or force dry cure
- Compatible with most polyurethane or epoxy topcoats including MIL-PRF-85285D, Type I or Type II, MIL-C-53039, MIL-C-46168D, MIL-DTL-64159 and MIL-PRF-22750F

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

CHARACTERISTICS

Gloss: 10 units maximum

Volume Solids:
E90Y500/ E90G500: 40-45%
V93V501: 51-55%
Admixed: 34-38%

Viscosity:
Admixed: 17-20 seconds #4 Ford

Recommended film thickness:
Mils Wet 1.7-2.5
Mils Dry 0.6-0.9

Spreading Rate (no application loss)
606-1016 sq ft/gal @ 0.6-0.9 mils DFT

Drying (0.6 mils dft, 77°F, 50% RH):
To Dust Free: 15 minutes
To Handle: 2-3 hours
Tack Free: 90 minutes
To Recoat: 30-60 minutes
Force Dry: 30 minutes at 140°F

Good air movement and humidity control are necessary for proper drying of water reducible coatings.

Flash Point: 84°F Penskt-Martens Closed Cup

Mixing Ratio:
2 part E90Y500 or E90G500
1 part Catalyst V93V501
1 part Water

Pot Life: 8 hours at room temperature. Higher temperature will shorten working potlife. Do not add additional water to extend pot life.

Package Life: 1 year, unopened

Storage: Protect from freezing

Air Quality Data:
Non-photochemically reactive
Volatile Organic Compounds (VOC) catalyzed and reduced as above, less water, maximum
2.07 lb/gal, 248 g/L
Volatile Organic Emissions catalyzed and reduced as above, maximum
2.1 lb/gal, 252 g/L

An Environmental Data Sheet is available from your local Sherwin-Williams facility.

SPECIFICATIONS

Steel: 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-15328 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.

Aluminum: Clean with acidic cleaner or other appropriate cleaner depending on contamination. Pretreat with chromate conversion coating (MIL-C-5541), wash primer DOD-P-15328, E90G4, or anodize per MIL-A-8625.

Galvanized and other metals: Clean and remove oxidation contamination on surface, followed by treatment with DOD-P-15328 wash primer, E90G4, or zinc phosphate pretreatment. Due to the variability in these surface, testing adhesion on each situation is recommended.

Testing: 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.

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APPLICATION

Typical Setups

Reduction: Reduce with water as needed up to 35%.

May be applied by:

Conventional Spray
Airless Spray
Air Assisted Airless
Electrostatic Spray
HVLP

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

Cleanup:

Clean tools/equipment immediately after use with water. If dried, use a 1:1 blend of Butyl Cellosolve and water. Do not use alcohols, esters, ketones, or hydrocarbons because of incompatibility. Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- Must be admixed 2:1 with V93V501.
- Must be applied to properly prepared substrates.
- Maximum 8 hour potlife.
- Must be topcoated for exterior applications.

Performance Properties:

Meets all the performance properties of MIL-PRF-85582D, Class C2.

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.

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 FLAMMABLE. Vapors may cause flash fires. Keep away from heat, sparks, and open flame. 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. Adequate ventilation required when sanding or abrading the dried film. If adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). 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.

Abrading or sanding of the dry film may release crystalline silica which has been shown to cause lung damage and cancer under long term exposure. 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.21475-100102.