SHERWIN WILLIAMS.

MIL-DTL-53022C, Type II

3.5 VOC Lead & Chromate Free Epoxy Primer

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

DESCRIPTION

E90H226/V93V227 is a two component 3.5 lb/gal VOC compliant, lead and chromate free epoxy primer. It meets MIL-DTL-53022C, Type II, composition and performance specification. It may be used as a primer under MIL-PRF-85285D (non-aircraft) polyurethane topcoats, polyurethane chemical agent resistant coatings (CARC) specified in MIL-DTL-53039B or waterborne polyurethane (CARC) specified in MIL-DTL-64159 Type I and II, or MIL-PRF-22750F epoxy topcoat.

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

Sherwin-Williams	QPL
E90H226	Q1563
V93V227	Q1563

CHARACTERISTICS

Gloss: 10-30 units @ 60°
Volume Solids: (Typical)
Component A: 58.2%
Component B: 19.5%
Admixed: 50.5%
Viscosity: (Typical)
Component A: 65-75 Krebs Units
Component B: 10-22 seconds #4 Ford
Admixed: 30-40 seconds #4 Ford
Recommended film thickness:
Mils Wet 2.0-4.0
Mils Dry 1.0-2.0
Spreading Rate per Admixed Gallon (no application loss):
405-810 sq. ft./gal @ 1.0-2.0 mil DFT
Drying (1 mils DFT, 77°F, 50% RH):
Set to Touch: 15 minutes
Dry Hard: 4 hours
To Recoat: 30 minutes to 3 days
Force Dry: to obtain dry hard
20-30 minutes at 140°F
Flash Point: 44°F Pensky-Martens Closed Cup
Mixing Ratio: by volume
4 parts Component A: E90H226
1 part Component B: V93V227
Shake Component A well before mixing.
Induction Time: 30 minutes
Pot Life: 4 hours at room temperature - higher temperature will shorten pot life.
Package Life: 1 year unopened, inside storage

Air Quality Data:
Photochemically reactive
Volatile Organic Compounds (VOC)
E90H226 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

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- 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.
Aluminum: 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.
Galvanized and other metals: 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.

Note: See MIL-DTL-53072C for details.

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: If required, use epoxy thinner, R91K210, up to ½ pint thinner per one gallon of admixed paint to meet 3.5 lb/gal VOC. May also use MIL-T-81772, Type I Reducer, R91K20 or MAK.

May be applied by:

Conventional Spray
Airless Spray
Air Assisted Airless
HVLP

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

Cleanup:

Clean tools/equipment immediately after use with Acetone, MEK, MIBK, MAK or any or other epoxy thinners, such as MIL-T-81772, Type II Thinner, R91K210. Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

- This product must be properly mixed (catalyzed) before using. (See mixing instruction for details.)
- Surface preparation is important for performance.
- This product may be topcoated as short as 15 minutes after application. However, the user should check adhesion first before running a full scale production.
- Primer must be applied within 24 hours after the surface has be prepared for priming.
- If parts have been primed for longer than seven (7) days, they must be sanded or recoated with E90H226/V93V227 before topcoating for good adhesion

Performance Properties:

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

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.21349-051905.