CC-M20

MIL-DTL-53022E, Type III
HAPS Free 2.8 VOC Epoxy Primer

Primer……..E90HC227
Primer (White)……..E90WC227
Catalyst.....V93VC200

DESCRIPTION

MIL-DTL-53022E, Type III is a two component 2.8 lb/gal VOC*, HAPS free compliant, lead and chromate free epoxy primer. It meets MIL-DTL-53022E Type III composition and performance specification. It may be used as the primer under polyurethane chemical agent resistant coatings (CARC) specified in MIL-DTL-53039, MIL-DTL-64159 or MIL-PRF-22750 epoxy topcoats, or MIL-PRF-85285 (non-aircraft) polyurethane topcoats.

Advantages:
- HAPS Free
- Less than 2.8 lb/gal Volatile Organic Compounds
- Excellent chemical, solvent and corrosion resistance on aluminum and steel
- Free of lead and chromate hazards

The following MIL-DTL-53022E, Type III products are approved by the U.S. Army Research Lab, Aberdeen Provong Grounds, Aberdeen, MD.

Sherwin-Williams	QPD
E90HC227	Q1949
E90WC227	Q1908

*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: 55.83%
Component B: 19.55%
Admixed: 40.48%

Viscosity (Typical):
Component A: 62-72 Krebs Units
Component B: 15-22 seconds #2 Zahn
Admixed: 24 seconds #2 Zahn

Recommended film thickness:
Mils Wet: 3.1 - 6.3
Mils Dry 1.5 - 2.5

Spreading Rate
649 sq ft/gal @ 1.0 mils DFT

Drying (70°F, 50% RH, @ 1 mils DFT):
Set to Touch: 60 minutes
Dry Hard: 5 hours
Dry Through: 8 hours
To Recoat: 30 - 60 minutes
Force Dry: 20-30 minutes @ 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: 65°F Pensky Martens Closed Cup

Mixing Instructions:
4 parts Component A E90HC227
1 part Component B V93VC200
Reduce as needed up to 20% with Acetone R6K9.
Shake Component A well before using.

Induction Time: 30 minutes

Pot Life: 4 - 6 hours at room temperature

Package Life: 24 months, unopened inside storage

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.paintdocs.com
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CHARACTERISTICS (CONT)

Air Quality Data:
Photochemically reactive
Volatile Organic Compounds (VOC) less exempt solvents
Component A as packaged, maximum 2.19 lb/gal, 263 g/L
Component B as packaged, maximum 4.74 lb/gal, 568 g/L
catalyzed as above, maximum 2.7 lb/gal, 324 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.

continued on back

APPLICATION

Typical Setups

Reduction: If required, use only HAPS-Free solvents as recommended by the manufacturer.

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.

SPECIFICATIONS

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 with a mist coat of primer before topcoating for good adhesion.

Performance Properties:

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

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.

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

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