



General Industrial Coatings

CC-M7

MIL-PRF-23377K, Class C2 2K Epoxy, 2.8 Lbs./Gal. VOC High-Solids Epoxy Primer

Type I (Standard Pigments) E90G203
 Type II (Low Infrared Reflective Pigments) E90G205
 Catalyst..... V93V230

DESCRIPTION

MIL-PRF-23377K, Class C2 coatings are two component, 2.8 lbs./gal. *VOC, high-solids epoxy primers. They are used as a primer under the following topcoats:

- MIL-PRF-85285 polyurethane
- MIL-PRF-22750 high solids epoxy
- MIL-DTL-53039 polyurethane CARC
- MIL-DTL-64159 polyurethane CARC

Advantages:

- Meets all the composition and performance requirements of the MIL-PRF-23377K specification as it relates to Class C2
- Passes 1,000 hours filiform corrosion testing per Section 4.5.8.2 of MIL-PRF-23377K and 2,000 hours ASTM B117 salt spray
- Complies with 2.8 *VOC solvent emissions
- Free of lead hazards

The following MIL-PRF-23377K, Class C2 product combinations are approved by the Naval Air Systems Command (NAVAIR), Lakehurst, NJ:

Type	Product
I	E90G203/V93V230
II	E90G205/V93V230

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

An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.PaintDocs.Com.

CHARACTERISTICS

60° Gloss: 30.0 units max.

Volume Solids:
 (3) E90G203 (1) V93V230 45.2 ± 2 %
 (3) E90G205 (1) V93V230 44.7 ± 2 %

Viscosity (at 77° F):
 Admixed 40 secs. max., #4 Ford Cup
 18-25 secs., #2 Zahn Cup

Recommended Film Thickness:
 Mils Wet 1.5-2.0
 Mils Dry 0.6-0.9

Spreading Rate: (no application loss):
 900 ft.²/gal. at 0.8 mil DFT

Cure:
 Air Dry
 Force Dry 60 mins. at 140° F

Substrate Disclaimer: Curing of coating at temperatures higher than the heat distortion parameters of the substrate may cause substrate issues.

Drying: 0.8 mils DFT at 77° F, 50% RH
 Tack-Free 5 hours
 Dry Hard 8 hours
 To Recoat w/ Itself 2 hours
 To Coat w/ Topcoat 2 hours
 Total (Full Properties) 14 days

Mixing Ratio: By Volume

Shake products well before using.

3-parts E90G203 or E90G205
 Measure and add 1-part V93V230
 Thoroughly stir the admixed primer

Induction Time: 30 minutes

Potlife (at 77° F): *4 hours

Potlife Disclaimer: Potlife listed applies to containers which have been opened & exposed to air.

Flash Point: -1° F
 (Pensky Martens Closed Cup)

Air Quality Data:

Photochemically Reactive
 Volatile Organic Compounds
 (VOC, less exempt solvents, maximum):

Admixed 2.80 lbs./gal., 340 g/L

Recommended Storage: Inside, sealed container, 40-120° F, no freeze hazard. Protect from moisture.

Package Life: 18 months, unopened
 Inside storage

SPECIFICATIONS

CLEANING & PRETREATMENTS

Follow the most current revisions of MIL-DTL-53072 and/or MIL-PRF-23377 for required cleaning and pretreatment application before coating.

Note: See the current MIL-DTL-53072 for complete details regarding substrate preparation, coatings, and application.

General: All substrates should be free of mold release, oil, grease, dirt, fingerprints, drawing compounds, surface passivation treatments and any other contaminants to ensure optimum adhesion and coating performance. For non-military uses, consult Metal Preparation brochure CC-T1 for additional details.

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.

APPLICATION

Typical Setups

Reduction: If needed, MIL-DTL-81772 Type II (R91K210) and Type IV (R91K25) can be used as reducers. However, they will raise VOC above 2.8 lbs/gal. To maintain 2.8 lb/gal VOC, no reducer other than acetone or Oxsol 100 may be added.

For all application and usage guidelines, please consult and review the MIL-DTL-53072 & MIL-PRF-23377 specifications as well as your local Sherwin-Williams representative.

Cleanup: Clean tools & equipment immediately after use with R6K10 (MEK), R6K16 (MIBK), R6K30 (MAK), R91K25 (MIL-DTL-81772 Type IV), R91K210 (MIL-DTL-81772 Type II), or any other epoxy thinner.

Follow manufacturer's safety recommendations when using any solvent.

PRECAUTION STATEMENTS

1. **This product must be properly catalyzed before using. DO NOT VARY CATALYST RATIO.** The catalyst ratio has been established for optimum properties.
2. Surface preparation is important for coating performance.
3. If parts have been primed for longer than 3 days, they must be sanded and recoated with a mist coat of E90G203 or E90G205 before topcoating for good adhesion.
4. 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.
5. Both E90G203 and E90G205 are strontium chromate-based epoxy primers.

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CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION ONLY

Thoroughly review the 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.

Note:

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