



General Industrial Coatings

2K Waterborne, Polymeric Flattened Polyurethane Coating for Military Equipment

Tan, 33531 F93H508 Catalyst (Component B) V93V507

DESCRIPTION

F93H508/V93V507 is a two component, 1.8 lbs./gal. *VOC, VOHAP-free compliant, water dispersible, polymeric flattened aliphatic polyurethane coating for military equipment. This product is similar in performance to colors qualified to MIL-DTL-64159B, Type II.

Advantages:

- Reduces with water
- Low odor
- Excellent atomization
- Fast solvent and water resistance
- Excellent exterior durability
- Admixture complies with 1.8 *VOC solvent emissions.
- VOHAP-free
- V93V502 can be substituted in place of V93V507 if available
- Product has the ability to be applied with two component equipment
- Free of lead and chromate hazards

* 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: 1.6 units max.
85° Gloss: 4.0 units max.

Mixing Properties (by volume):
 F93H508 2 parts
 V93V507 1 part
 Deionized water (as needed up to) 1 part

Volume Solids#:
 Catalyzed and Reduced 37.1 ± 2 %

Viscosity# (catalyzed and reduced):
 Zahn #3 15-30 seconds

Recommended Film Thickness:
 Mills Dry 2.0-3.0

Spreading Rate# (no application loss):
 298 ft.²/gal. at 2.0 mil DFT

#Reduction: Recommended reduction of 0.8 part by volume deionized water. Increasing reduction will lower spreading rate, volume solids, and viscosity.

Cure:
 Air Dry
 Force Dry 60 mins. flash, 45 mins. at 140° F

The force dry schedule above is provided as a guide. Wet film thickness, flash off time, part size and oven characteristics will all influence drying and cure. Flash time is dependent upon air movement, humidity, and temperature. Flash conditions can be improved by utilizing an air dehydrator or fans to help remove the water. Test for your specific application and line conditions.

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

Drying: (2.0 mils DFT at 77° F, 50% RH)
 To Touch 60 minutes
 To Dry Hard 6 hours
 Through-Dry 8 hours
 To Recoat w/ Itself 2 hours
 Total (Full Properties) 7-10 days

Shake products well before mixing.

Potlife (at 77° F): 6 hours

Flash Point (Pensky Martens Closed Cup):
 F93H508 Not applicable
 V93V507 138° F

Air Quality Data:
 Photochemically Reactive
 Volatile Organic Compounds
 (VOC, less exempt solvents, maximum):
 Admixed 1.80 lbs./gal., 220 g/L

Recommended Storage: Inside, sealed container, 40-120° F. Protect from freezing.

Package Life (unopened package):
 F93H508 12 months
 V93V507 18 months

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.

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

F93H508 must be shaken for a minimum of 15 minutes prior to use. This ensures that the product is homogenous for mixing. Use a mechanical mixer to thoroughly mix 2 parts by volume of F93H508 with 1 part by volume of V93V507. Reduce with up to 1 part by volume of water (deionized or distilled).

For all application and usage guidelines, please consult your local Sherwin-Williams representative.

Cleanup: Clean tools & equipment immediately after use with water (deionized or distilled).

PRODUCT LIMITATIONS

1. This product must be properly catalyzed before using. **DO NOT VARY CATALYST RATIO.** Material agitation should be followed throughout application to maintain its homogenous state
2. Surface preparation is important for coating performance.
3. If parts have been primed for longer than 7 days, they must be sanded and recoated with a mist coat of E90W501 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. Mixture will generate carbon dioxide gas. Admixed material should not be discarded in sealed drums. Vented plugs should be used to allow gas to emit within the first 24 hours of being mixed. After 24 hours the gas is no longer emitted, and the drums can be sealed.

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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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