



General Industrial Coatings

CC-M32

MIL-DTL-53039F, Type IV 1K Aliphatic Polyurethane, 1.0 VOC, VO-HAPS Free Polymeric Flattened Chemical Agent Resistant Coating

Interior Aircraft Gray, 36231...F93A34 Black, 37030F93B0S114
Aircraft Red, 31136F93R101 Brown 383, 30051F93N113
Aircraft White, 37875F93W103 Sand, 33303F93H126

DESCRIPTION

MIL-DTL-53039F, Type IV coatings are single component moisture cure aliphatic polyurethane chemical agent resistant coatings (CARC). They conform to MIL-DTL-53039F composition and performance specifications. They can be effectively decontaminated after exposure to liquid chemical agents.

Advantages:

- Single component system
- Smooth finish
- Excellent exterior durability
- Lower emitted VOCs
- *Formulated to meet < 1.0 lb/gal, < 120 g/L VOC, less exempt solvents
- *Formulated to be VO-HAPS Free

The following MIL-DTL-53039F Type IV colors are approved by the U.S. Army Research Lab, Aberdeen Proving Ground, Aberdeen, MD.

Sherwin-Williams #	QPD #
F93A34	Q2174
F93B0S114	Q2201
F93H126	Q2082
F93N113	Q2049
F93R101	Q2093
F93W103	Q2124

*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: 3.0 max
80° Gloss: 8.0 max
Refer to MIL-DTL-53039 for specific gloss requirements by color.

Recommended Film Thickness:

Mils Wet 4.0-6.0
Mils Dry 2.0-3.0

Cure:

Air Dry or Force Dry 20 mins. at 165° F or 30 mins. at 145° F

Air Drying: 2.0 mils at 70° F, 50% RH
To Touch 15 minutes
To Handle 3 hours max
Through-Dry 4 hours max
Total (Full Properties) 7 days

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.

Potlife: Once opened, use within 8 hours, unless protected by a nitrogen or argon blanket.

Flash Point: 95-105° F
(Pensky Martens Closed Cup)

Package Life: 18 months
inside storage, unopened

Air Quality Data:

Photochemically Reactive
Volatile Organic Compounds (VOC)
< 1.0 lb/gal, < 120 g/L max
theoretical, as packaged

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

SPECIFICATIONS

CLEANING & PRETREATMENTS

Follow the most current revisions of MIL-DTL-53072 and/or TT-C-490 for required cleaning and pretreatment application before applying primers and/or topcoats.

For ferrous substrates, use:

- MIL-DTL-53022 Types II, III, IV or V
- MIL-DTL-53030 Type II
- MIL-PRF-32348 Type I or II
- MIL-DTL-53084 electrocoat.

For non-ferrous substrates, use:

- MIL-DTL-53022 Types II, III, IV or V
- MIL-DTL-53030 Type II
- MIL-PRF-32348 Type I or II
- MIL-DTL-53084 electrocoat.

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.

APPLICATION

Typical Setups

The paint must be shaken for a minimum of 15 minutes prior to use. This ensures that the product is homogenous. If it is not homogenous after 15 minutes, replace the lid solidly on the can and shake for an additional 10 minutes.

Clean-Up/Reduction: Clean tools & equipment immediately after use with R6K10 (MEK), R6K16 (MIBK), R6K30 (MAK), R6K9 (Acetone), R6K38 or R6K221 (Tertiary Butyl Acetate), R91K25 (CARC Reducer), or any Polane® reducer. A blend of MIBK/R2K4 (Xylene) or R91K20 (MIL-T-81772 Type I) may also be used.

Follow manufacturer's safety recommendations when using any solvent.

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.

Note: See MIL-DTL-53072 for details.

ADDITIONAL INFORMATION

1. Protect product from moisture.
2. Material should be agitated during application to maintain its homogenous state
3. Product needs to be used over a suit-able primer.

Performance Properties

Meets all the performance properties of MIL-DTL-53039F Type IV.

All trademarks are the property of their respective owners.

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:

All purchases of products from Sherwin-Williams are exclusively subject to Sherwin-Williams' [Standard Terms And Conditions Of Sale](#). Please review these terms and conditions prior to the purchase of the products.

Sherwin-Williams warrants the product to be free of manufacturing defect in accordance with Sherwin-Williams' quality control procedures. Except for the preceding sentence, due to factors that are outside of Sherwin-Williams' control, including substrate selection, and customer handling, preparation, and application, Sherwin-Williams cannot make any other warranties related to the product or the performance of the product. **SHERWIN-WILLIAMS DISCLAIMS ALL WARRANTIES OF ANY KIND, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTY OF MERCHANTABILITY, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.**

Liability for products proven to be defectively manufactured will be limited solely to replacement of the defective product or the refund of the purchase price paid for the defective product, as determined by Sherwin-Williams. Under no circumstances shall Sherwin-Williams be liable for indirect, special, incidental or consequential damages, lost profits or punitive damages arising from any cause whatsoever.