



# General Industrial Coatings

CC-M25

## MIL-DTL-53039F, Type IX 1K Aliphatic Polyurethane, 3.5 VOC, VO-HAPS Free Polymeric Flattened Chemical Agent Resistant Coating

Aircraft Gray, 36231.....F93A32	Aircraft Yellow, 33538.....F93Y103	Earth Yellow, 33245.....F93H125
Aircraft Green, 34031.....F93G119	Brown 383, 30051.....F93N111	Olive Drab, 34088.....F93G114
Aircraft White, 37875.....F93W101	Dark Sandstone, 33510.....F93H122	Sand, 33303.....F93H120

### DESCRIPTION

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

#### Advantages:

- Single component system
- Smooth finish
- Excellent exterior durability
- Fast solvent and water resistance
- Very responsive to force curing
- Low viscosity
- Reduces waste
- \*Formulated to meet 3.5 lb/gal VOC
- \*Formulated to be VO-HAPS Free

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

Sherwin-Williams #	QPD #
F93A32	Q2004
F93G114	Q2035
F93G119	Q2154
F93H120	Q2002
F93H122	Q2015
F93H125	Q2081
F93N111	Q1972
F93W101	Q2003
F93Y103	Q2094

\* 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](http://www.PaintDocs.Com).

### CHARACTERISTICS

**60° Gloss\*:** 3.0 max  
**80° Gloss\*:** 8.0 max  
 \*2 mils dry film thickness  
 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)  
 3.5 lb/gal, 420 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 Type 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 Type 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.

## **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 IX.

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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](http://www.PaintDocs.Com).

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

### **Note:**

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