



**SHERWIN  
WILLIAMS.**

# Product Finishes

# CC-M25

## MIL-DTL-53039E, Type IX

### 1K Aliphatic Polyurethane 3.5 VOC, VO-HAPS FREE Polymeric Flattened Chemical Agent Resistant Coating

Aircraft Black, 37038 .....	F93B0S112
Tan 686A, 33446 .....	F93H0S118
Brown 383, 30051 .....	F93N111
Olive Drab, 34088 .....	F93G114
Aircraft White, 37875 .....	F93W101
Black, 37030 .....	F93B112

Black, 37030 .....	F93B0S112
Aircraft Gray, 36231 .....	F93A32
Sand, 33303 .....	F93H120
Earth Yellow, 33245 .....	F93H125
Tan 686A, 33446 .....	F93H118
Aircraft Black, 37038 .....	F93B112

Green 383, 34094 .....	F93G0S111
Aircraft Green, 34031 .....	F93G119
Dark Sandstone, 33510 .....	F93H122
Aircraft Yellow, 33538 .....	F93Y103
Green 383, 34094 .....	F93G111
Green 383, 34094 .....	F93G0L111

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>																																																										
<p><b>MIL-DTL-53039E, Type IX</b> coatings are single component moisture cure aliphatic polyurethane chemical agent resistant coating (CARC) for military equipment. They conform to MIL-DTL-53039E composition and performance specification. They can be effectively decontaminated after exposure to liquid chemical agents.</p> <p><b>Advantages:</b></p> <ul style="list-style-type: none"> <li>• Single component</li> <li>• 3.5 lb/gal VOC</li> <li>• VO-HAPS FREE</li> <li>• Fast solvent and water resistance</li> <li>• Very responsive to force curing</li> <li>• Reduces waste</li> <li>• Low viscosity</li> <li>• Smooth finish</li> <li>• Excellent exterior durability</li> </ul> <p>The following MIL-DTL-53039E Type IX colors are approved by the U.S. Army Research Lab, Aberdeen Proving Ground, Aberdeen, MD.</p> <table border="1"> <thead> <tr> <th>Sherwin-Williams#</th> <th>QPD#</th> </tr> </thead> <tbody> <tr><td>F93B112, 37030</td><td>Q1890</td></tr> <tr><td>F93B112, 37038</td><td>Q2164</td></tr> <tr><td>F93G111</td><td>Q1912</td></tr> <tr><td>F93G114</td><td>Q2035</td></tr> <tr><td>F93G119</td><td>Q2154</td></tr> <tr><td>F93H118</td><td>Q1922</td></tr> <tr><td>F93H120</td><td>Q2002</td></tr> <tr><td>F93H122</td><td>Q2015</td></tr> <tr><td>F93H125</td><td>Q2081</td></tr> <tr><td>F93N111</td><td>Q1972</td></tr> <tr><td>F93W101</td><td>Q2003</td></tr> <tr><td>F93Y103</td><td>Q2094</td></tr> <tr><td>F93A32</td><td>Q2004</td></tr> <tr><td>F93G0S111</td><td>Q2178</td></tr> <tr><td>F93H0S118</td><td>Q2175</td></tr> <tr><td>F93G0L111</td><td>Q1912</td></tr> <tr><td>F93B0S112, 37030</td><td>Q2202</td></tr> <tr><td>F93B0S112, 37038</td><td>Q2202</td></tr> </tbody> </table>	Sherwin-Williams#	QPD#	F93B112, 37030	Q1890	F93B112, 37038	Q2164	F93G111	Q1912	F93G114	Q2035	F93G119	Q2154	F93H118	Q1922	F93H120	Q2002	F93H122	Q2015	F93H125	Q2081	F93N111	Q1972	F93W101	Q2003	F93Y103	Q2094	F93A32	Q2004	F93G0S111	Q2178	F93H0S118	Q2175	F93G0L111	Q1912	F93B0S112, 37030	Q2202	F93B0S112, 37038	Q2202	<p><b>Gloss:</b></p> <table border="0"> <tr><td>60°</td><td>2 mils dry</td><td>3.0 units maximum</td></tr> <tr><td>85°</td><td></td><td>8.0 units maximum</td></tr> </table> <p>Refer to MIL-DTL-53039 for specific gloss requirements by color.</p> <p><b>Recommended film thickness:</b></p> <table border="0"> <tr><td>Mils Wet</td><td>4.0 – 6.0</td></tr> <tr><td>Mils Dry</td><td>2.0 - 3.0</td></tr> </table> <p><b>Air Dry</b> (2.0 mils DFT, 70°F, 50% RH):</p> <table border="0"> <tr><td>Dry To Touch:</td><td>15 minutes</td></tr> <tr><td>Dry To Handle:</td><td>3 hours maximum</td></tr> <tr><td>Dry Through:</td><td>4 hours maximum</td></tr> <tr><td>Full Cure:</td><td>7 days</td></tr> <tr><td>Force Dry:</td><td>20 min. @ 165°F, or 30 min. @ 145°F</td></tr> </table> <p>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.</p> <p><b>Flash Point:</b> 95-105°F Pensky Martens Closed Cup</p> <p><b>Pot Life:</b> Once opened, use within 8 hours unless protected by a nitrogen or argon blanket.</p> <p><b>Package Life:</b> 18 months, inside storage unopened</p> <p><b>Air Quality Data:</b> Photochemically reactive Volatile Organic Compounds (VOC) theoretical as packaged, maximum 3.5 lb/gal, 420 g/L</p> <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility or at <a href="http://www.paintdocs.com">www.paintdocs.com</a>.</p>	60°	2 mils dry	3.0 units maximum	85°		8.0 units maximum	Mils Wet	4.0 – 6.0	Mils Dry	2.0 - 3.0	Dry To Touch:	15 minutes	Dry To Handle:	3 hours maximum	Dry Through:	4 hours maximum	Full Cure:	7 days	Force Dry:	20 min. @ 165°F, or 30 min. @ 145°F	<p><b>CLEANING &amp; PRETREATMENTS</b> 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.</p> <p>For <b>ferrous substrates</b>, use: MIL-DTL-53022 Types II, III, IV or V; MIL-DTL-53030 Type II; MIL-PRF-32348 Type I or Type II; or MIL-DTL-53084 electrocoat.</p> <p>For <b>non-ferrous substrates</b>, 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</p> <p><b>Note:</b> See the current MIL-DTL-53072 for complete details regarding substrate preparation, coatings, and application.</p> <p><b>Testing:</b> 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.</p>
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## APPLICATION

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

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.

## SPECIFICATIONS

- Protect product from moisture.
- Material should be agitated during application to maintain its homogeneous state
- Product needs to be used over a suitable primer.

### **Performance Properties:**

Meets all the performance properties of MIL-DTL-53039E Type IX.

## 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-William facility or [www.paintdocs.com](http://www.paintdocs.com).

## CAUTIONS (CONT)

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

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