



MIL-DTL-53039E, Type IV

1K Aliphatic Polyurethane 1.0 VOC, VO-HAPS FREE Polymeric Flattened Chemical Agent Resistant Coating

Black, 37030F93B0S114
 Aircraft Black, 37038F93B114
 Black, 37030F93B114
 Aircraft Red, 31136F93R101

Green 383, 34094.....F93G0S116
 Aircraft White, 37875..... F93W103
 Brown 383, 30051 F93N113
 Sand, 33303 F93H126

Tan 686A, 33446.....F93H0S124
 Interior Aircraft Gray, 36231.F93A34
 Green 383, 34094F93G116
 Tan 686A, 33446.....F93H124

<u>DESCRIPTION</u>	<u>CHARACTERISTICS</u>	<u>SPECIFICATIONS</u>																										
<p>MIL-DTL-53039E, Type IV coatings are single component moisture cure aliphatic polyurethane chemical agent resistant coatings (CARC). They conform to MIL-DTL-53039E composition and performance specifications. They can be effectively decontaminated after exposure to liquid chemical agents.</p> <p>Advantages:</p> <ul style="list-style-type: none"> • Single component • VOC as packaged <1.0 lb/gal, 120 g/L less exempt solvents* • No reportable VO-HAPS • Excellent exterior durability • Lower Emitted VOC's • Smooth Finish <p>The following MIL-DTL-53039E Type IV colors are approved by the U.S. Army Research Lab, Aberdeen Proving Ground, Aberdeen, MD.</p> <table border="1" data-bbox="154 1281 527 1648"> <thead> <tr> <th>Sherwin-Williams#</th> <th>QPD#</th> </tr> </thead> <tbody> <tr><td>F93A34</td><td>Q2174</td></tr> <tr><td>F93B114, 37030</td><td>Q2048</td></tr> <tr><td>F93B114, 37038</td><td>Q2163</td></tr> <tr><td>F93G116</td><td>Q2050</td></tr> <tr><td>F93H124</td><td>Q2051</td></tr> <tr><td>F93H126</td><td>Q2082</td></tr> <tr><td>F93N113</td><td>Q2049</td></tr> <tr><td>F93R101</td><td>Q2093</td></tr> <tr><td>F93W103</td><td>Q2124</td></tr> <tr><td>F93B0S114</td><td>Q2201</td></tr> <tr><td>F93G0S116</td><td>Q2177</td></tr> <tr><td>F93H0S124</td><td>Q2176</td></tr> </tbody> </table> <p>*VOC compliance limits vary from state to state; please consult local Air Quality rules and regulations.</p>	Sherwin-Williams#	QPD#	F93A34	Q2174	F93B114, 37030	Q2048	F93B114, 37038	Q2163	F93G116	Q2050	F93H124	Q2051	F93H126	Q2082	F93N113	Q2049	F93R101	Q2093	F93W103	Q2124	F93B0S114	Q2201	F93G0S116	Q2177	F93H0S124	Q2176	<p>Gloss:</p> <p>60° 3.0 units maximum 85° 8.0 units maximum</p> <p>Refer to MIL-DTL-53039 for specific gloss requirements by color.</p> <p>Recommended film thickness:</p> <p>Mils Wet 4.0 - 6.0 Mils Dry 2.0 - 3.0</p> <p>Air Drying (2 mils DFT, 70°F, 50% RH):</p> <p>Dry To Touch: 15 minutes Dry To Handle: 3 hours Dry Through: 4 hours maximum Full Cure: 7 days Force Dry: after flash off 20 min. @ 165°F, or 30 min. @ 145°F</p> <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>Flash Point: 95-105°F Pensky Martens Closed Cup</p> <p>Pot Life: Once opened, use within 8 hours unless protected by a nitrogen or argon blanket.</p> <p>Package Life: 18 months, inside storage unopened</p> <p>Air Quality Data:</p> <ul style="list-style-type: none"> • Photochemically reactive • Volatile Organic Compounds (VOC) theoretical as packaged, less exempt solvents <1.0 lb/gal, 120 g/L <p>An Environmental Data Sheet is available from your local Sherwin-Williams facility or at www.paintdocs.com</p>	<p>CLEANING & PRETREATMENTS</p> <p>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 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; or MIL-DTL-53084 electrocoat.</p> <p>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</p> <p>Note: See the current MIL-DTL-53072 for complete details regarding substrate preparation, coatings, and application.</p> <p>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.</p>
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F93A34	Q2174																											
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F93R101	Q2093																											
F93W103	Q2124																											
F93B0S114	Q2201																											
F93G0S116	Q2177																											
F93H0S124	Q2176																											

APPLICATION

Typical Setups

The paint must be shaken for a minimum of 15 minutes prior to use. This ensures that the product is homogeneous. 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.

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.

Performance Properties:

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

ADDITIONAL INFORMATION

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

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-Williams facility or www.paintdocs.com.

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

CAUTIONS (CONT)

Note: All purchases of products from Sherwin-Williams are exclusively subject to Sherwin-Williams' terms and conditions of sale which can be found at www.sherwin.com. 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.**

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