

## **Product Finishes**

## CC-M22

# MIL-DTL-11195, Type II

## Enamel, Lusterless, Fast Dry 3.5 VOC, VO-HAPS Free Ammunition Coating

Gray, 36231	F93AC350	Gray, 36375	F93AC351
•	F93GC350	Olive Drab, 34088	
Green, 34540	F93GC358	Tan, 33446	F93HC350
Brown, 30117	F93NC350	Red, 31158	F93RL350
Yellow, 33538	F93YC350	White, 37925	F93WL350

Viscosity:

Black, 37038......F93BL350 Forest Green, 34079 ......F93GC355 Blue, 35109 ......F93LC350 White, 37875 ......F93WC350

**MAK Free** 

Tan, 33446 ..... F93HC351

Forest Green, 34079 ......F93GC359

## DESCRIPTION

MIL-DTL-11195, Type II ammunition coatings are single component, HAPS Free, corrosion-inhibiting coatings for use as a topcoat on steel ammunition surfaces. This product may be used direct to pretreated steel, or may be used with an epoxy primer such as MIL-DTL-53022.

### Advantages:

- Single component
- Corrosion Resistant passes 336 hours salt spray - only 240 hours required by the specification.
- VO-HAPS Free
- · Lead and chromate hazard free
- Fast dry
- 3.5 lb/gal VOC\*

The following products have been approved by U.S. Army Research Lab, Aberdeen Proving Ground, Aberdeen, MD and given the approval codes listed be-

Product	QPD	Color
F93AC350	Q1670	36231
F93AC351	Q1677	36375
F93BL350	Q2059	37038
F93GC350	Q1669	34558
F93GC353	Q1665	34088
F93GC355	Q1667	34079
F93GC358	Q1783	34540
F93HC350	Q2078	33446
F93NC350	Q1725	30117
F93LC350	Q1668	35109
F93RL350	Q2060	31158
F93WC350	Q1666	37875
F93WL350	Q2153	37925
F93YC350	Q1722	33538

Products listed below are MAK Free:

<u>Product</u>	QPD	Color
F93GC359	Q2120	34079
F93HC351	Q2121	33446

## **CHARACTERISTICS**

Weight per Gal: 10.47-13.2 lb/gal varies by color

60-96 Krebs Units

34-40 sec Zahn #3

Volume Solids: 55-59 ± 1% varies by

Gloss @ 60°: 8.0 unit maximum

Recommended film thickness:

Mils Drv 1.0 - 1.5

Spreading Rate (no application loss):

578-962 sq ft/gal @ 1.0-1.5 mils DFT

**Drying** (1 mil dft, 77°F, 50% RH):

Dry Hard: 12 minutes

Flash Point: 45 - 102°F Pensky-

Martens Closed Cup

Package Life: 2 years

### Air Quality Data:

Non-photochemically reactive Volatile Organic Compounds (VOC) as packaged, maximum 3.1 lb/gal, 420 g/L

\*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

## **SPECIFICATIONS**

Steel: Surface must be clean and free of grease, dirt, oil, rust, fingerprints, and other contaminants to insure optimum adhesion and performance properties. Chemical pretreatment (zinc phosphate) or DOD-P-15328 wash primer, E90G4, gives best adhesion and performance results. Where blasting is appropriate, blast in accordance with SSPC-SP6. For optimum adhesion pretreat blasted surface immediately. Prime with wash primer E90G4 within two hours after blasting.

Aluminum: Clean with acidic cleaner or other appropriate cleaner depending on contamination. Pretreat with chromate conversion coating MIL-DTL-5541, wash primer DOD-P-15328, E90G4, or anodize per MIL-A-8625.

Galvanized and other metals: Clean and remove oxidation contamination on surface, followed by treatment with DOD-P-15328 wash primer, E90G4. Due to the variability in these surface, testing adhesion on each situation is recommended.

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

#### **Reduction with MAK**

	Max.		Max.
%	Visc.	Oz. of	VOC @
Reduction	Zahn #3	MAK/Gal	<u>Gun</u>
8	35 secs.	10.2	3.37
12.5	30 secs.	16.0	3.50

Maximum allowable reduction is 12.5% with MAK. Reduce 8:1.

### **Reduction for Pennsylvania:**

Maximum allowable VOC in PA is 3.37#/gallon based on a weight per gallon of the solvent of 6.76 pounds to meet Pennsylvania Rule 129.52 (3.37#/gal), the reduction has to be 8%.

#### Cleanup:

Clean tools/equipment immediately after use with MAK, Ketones or lacquer thinner.

Follow manufacturer's safety recommendations when using any solvent.

## **SPECIFICATIONS**

#### **Product Limitations:**

- Product must be applied over properly prepared substrates.
- Product should be applied at a dry film build of 1.0 1.5 mils.

#### **Performance Properties:**

Meets all the performance properties of MIL-DTL-11195, Type II. This product is a performance improvement and environmentally friendly replacement for the following specifications:

- TT-E-515
- TT-E-516
- MIL-E-11195
- MIL-P-11414
- MIL-E-52891
- MIL-L-10287

## **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.

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