Product Finishes

MIL-PRF-85285E, Type I, Class H

Full Gloss Ordnance Polyurethane Topcoat

F93AL0001 ..... #36173 Gray

DESCRIPTION

MIL-PRF-85285E Type I, Class H coatings are multi-component (3K), low VOC,high solids polyurethane topcoats designed as a finish coat for military aircraft and equipment. They meet MILPRF- 85285E Type I, Class H composition and performance specification.

Advantages:
- Low viscosity at 3.5 VOC
- Very low HAPS content <3% by weight
- Excellent flow characteristics
- Free of lead and chromate hazards

CHARACTERISTICS

Gloss: <5 units @ 60°
<9 units @ 85°

Volume Solids:
Component A: 50.3%

Viscosity:
Component A: 15-20 sec #2 Zahn
Admixed: 15-20 seconds #2 Zahn

Recommended film thickness:
Mils Wet 3.5-4.5
Mils Dry 1.8-2.3

Spreading Rate (no application loss)
807 sq ft/gal @ 1.0 mils DFT

Drying (77°F, 50% RH):
Set to Touch: 4 hours
Dry to Tape: 12 hours

Flash Point: 95°F Pensky-Martens Closed Cup

Mixing Ratio: by volume
The mix ratio and the Component B and Component C used vary according to Part A. ALL COMPONENTS MUST BE USED.
4 part Component A
1 part Component B (V66V55)
1/4 part Component C (V93V2)

Pot Life: 4 hours

CHARACTERISTICS (cont.)

Package Life: 2 year, inside storage

Storage: Protect from moisture

Air Quality Data:
Non-photochemically reactive Volatile Organic Compounds (VOC) catalyzed and reduced, maximum 3.5 lb/gal, 419 g/L

An Environmental Data Sheet is available from your local Sherwin-Williams facility.

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 DODP-15328D wash primer, e.g. 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-5541F, wash primer DOD-P-15328D, E90G4, or anodize per MIL-A-8625F.

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

Primers must be applied under the MIL-PRF-85285E topcoats.
For **ferrous** substrates, use MIL-DTL-53022C, Type II primer, E90H226. MIL-DTL-53030B may also be used.
For **non-ferrous** substrates**,** use MIL-P-23377J, Type I, Class C2, E90G203.

SPECIFICATIONS(cont.)

Testing: Due to the wide variety of substrates, surface preparation methods, application methods, and environments, the customer should test the complete system for adhesion and compatibility prior to full scale application.

APPLICATION

Typical Setups
Best application results are obtained by applying 2 medium wet passes and allowing a "tack-off" time between coats. Typical "tack-off" time is 5-30 minutes.

May be applied by:
Conventional
Airless
Air Assisted Airless
HVLP Electrostatic
Please consult with your Sherwin-Williams sales representative for proper settings for your spray equipment.

Cleanup:
Clean tools/equipment immediately after use with MIL-T-81772, Type I Reducer, R91K20, Methyl Propyl Ketone, or other polyurethane reducer. Do not use lacquer thinner or epoxy thinner. Follow manufacturer's safety recommendations when using any solvent.

Performance Properties:
Meets all the performance properties of MILPRF-85285E Type I Class H.

CAUTIONS

FOR INDUSTRIAL SHOP APPLICATION
Thoroughly review product label for safety and cautions prior to using this product. A Material Safety Data Sheet is available from your local Sherwin-Williams facility. Please direct any questions or comments to your local Sherwin-Williams facility.

AWSTC/Columbus
S. Cotsamire
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