

MIL-PRF-85285D, Type I, Class H Semi-Gloss Polyurethane Topcoat

DESCRIPTION

MIL-PRF-85285D, 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 MIL-PRF-85285D, Type I, Class H composition and performance specification.

Advantages:

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

This MIL-PRF-85285D product has been approved by the U.S. Naval Air Warfare Center (NAWC), Patuxent River, MD. Copies of approval letter are available upon request. **CHARACTERISTICS**

CHEMICAL

COATINGS

Gloss (60°):	15-45 units @ 1.8- 2.3 dft
Volume Solids:	
Component A:	55-56%
Admixed:	50-51%
	50-51%
Weight Solids:	
Component A:	
Weight per Gallon:	
Component A:	10.0 ± .3
Application Viscosity:	
Admixed:	18-30 seconds Max
/ annxoa.	#4 Ford Cup
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Recommended film thickness:	
Mils Wet	3.5-4.5
Mils Dry	1.8-2.3
Spreading Rate (no application loss)
@ 1 mil dft:	802 sq ft/gal
Drying (77°F, 50% RH):	
Set to Touch:	2 hours
Dry to Tape:	8 hours
Flash Point:	109°F Pensky-
	Martens Closed Cup
Mixing Datia	
Mixing Ratio:	by volume
	ITS MUST BE USED.
3 parts	Component A
1 part	Component B
	(V93V26)
1 part	Component C
	(V93V3)
Pot Life:	4 hours
Package Life:	1 year, inside storage
Storage:	Protect from mois-
Storage.	
	ture
Air Quality Data: 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

Green, 24052 F92G26 Catalyst (Component B) V93V26 Activator (Component C) V93V3

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-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-C-5541), wash primer DOD-P-15328D, E90G4, or anodize per MIL-A-8625.

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-85285D topcoats. For ferrous substrates, use MIL-P-53022B, Type II primer, E90H226. MIL-P-53030 may also be used.

For **non-ferrous** substrates, use MIL-P-23377H, Type I, Class C, E90G203, or MIL-PRF-85582D, Class C.

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. Follow manufacturer's safety recommendations when using any solvent.

SPECIFICATIONS

Product Limitations:

 Do not vary catalyst mixing ratio. Mixing ratio varies by Component A.

Performance Properties:

Meets all the performance properties of MIL-PRF-85285D, Type I, Class H.

CAUTIONS

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.

LABEL CAUTIONS

Contents are FLAMMABLE. Vapors may cause flash fires. Keep away from heat, sparks, and open flame. During use and until all vapors are gone: Keep area ventilated - Do not smoke - Extinguish all flames, pilot lights, and heaters -Turn off stoves, electric tools and appliances, and any other sources of ignition. SEE CONTENTS STATEMENT ON LABEL.VAPOR HARMFUL. Use only with adequate ventilation. This product must be used with an appropriate catalyst. Follow the respirator requirement and instructions on the catalyst. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

FIRST AID: If INHALED: If affected, remove from exposure. Restore breathing, Keep warm and quiet. If on SKIN: Wash affected area thoroughly with soap and water. Remove contaminated clothing. Launder before re-use. If in EYES: Flush eyes with large amounts of water for 15 minutes. Get medical attention. If SWALLOWED: Get medical attention immediately.

SPILL AND WASTE: Remove all sources of ignition. Ventilate and remove with inert absorbent. Incinerate in approved facility. Do not incinerate closed container. Dispose of in accordance with Federal, State, and Local regulation regarding pollution.

DELAYED EFFECTS FROM LONG TERM OVEREX-POSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents be harmful or fatal. This product must be mixed with other components before use. Before opening the packages, READ AND FOLLOW WARNING LABELS ON ALL COMPONENTS.

DO NOT TAKE INTERNALLY. KEEP OUT OF THE REACH OF CHILDREN. FOR INDUSTRIAL USE ONLY. SEE MATERIAL SAFETY DATA SHEET. K01738 4/99

Catalyst CONTAINS ISOCYANATES. People who have chronic (long-term) lung or breathing problems or have had a reaction to isocyanates, must not be in the area where this product is being applied. Where overspray is present, a positive pressure air-supplied respirator should be worn. If unavailable, a properly fitted organic vapor/particulate respirator may be effective. Consult catalyst MSDS and product label for complete handling instructions.

Note: Product Data Sheets are periodically updated to reflect new information relating to the product. It is important that the customer obtain the most recent Product Data Sheet for the product being used. The information, rating, and opinions stated here pertain to the material currently offered and represent the results of tests believed to be reliable. However, due to variations in customer handling and methods of application which are not known or under our control, The Sherwin-Williams Company cannot make any warranties as to the end result.