



# Spectrum

COATINGS, INC.

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## MIL-PRF-22750F HIGH SOLIDS EPOXY TOPCOAT

### DESCRIPTION

This coating is a high solids, 2 component, high performance epoxy-polyamide topcoat for use on various metal and composite surfaces. Meeting the requirements of the military specification, Mil-C-22750E Type I / MIL-PRF 22750F & G, and having a VOC of 2.8 lbs./gal (340 g/l) or less, this coating is available in all Federal Standard 595b colors.

### ADVANTAGES

This coating provides the excellent protection that demanding military and industrial environments require. This coating system contains a unique solvent blend that allows for both electrostatic and HVLP application while still maintaining a VOC of 2.8 lbs./gal. or less.

The typical areas of application for these coatings include marine, transportation, aviation, and maintenance finishing.

**COLOR:** All FS-595B Colors

**HARDNESS:** 3H

**GLOSS:** 60 degree geometry  
-Gloss 90% min.  
-Semi Gloss 15 - 30%  
-Lusterless 5% max.

**VISCOSITY:** #4 Ford, @ 25°C, Catalyzed:  
-Initial 50 secs max  
-4 Hours 70 secs max

**POT LIFE:** 4 Hours

**COVERAGE:** 800 — 950 sq ft per gallon  
@ 1 mil DFT, No Loss

**DRY TIMES:** @ 77°F, 50% RH  
To Touch 5 Hours Max  
Dry Hard 8 Hours  
To Handle: 8 Hours  
Recoat: 6 Hours

### **CHEMICAL RESISTANCE:**

- 24 Hours Immersion in MIL-L-23699 Lube Oil @ 250°F  
- No Blistering, Softening, or Loss of Adhesion
- 24 Hours Immersion in MIL-H-83282 Hydraulic Oil @ 150°F  
-No Blistering, Softening, or Loss of Adhesion

**FLEXIBILITY:** Pass 1" Mandrel Bend

**ADHESION:** 24 Hour Water Immersion,  
Cross Hatch Tape Pull:  
-Plain Steel 100%  
-Treated Aluminum 100%  
-Primed Aluminum 100%

**SHELF LIFE:** 50-80°F, ~50% R.H.  
1 Year from Date of Manufacture, Unopened

## APPLICATION INFORMATION

### MIX RATIO: (by volume)

	<u>Gloss</u>	<u>SemiGloss &amp; Flats</u>
Component A	1 Part	2 Parts
Component B	1 Part	1 Part

This material may be thinned 3-5% by volume with Mil-T-81772B Ty II Epoxy Thinner without bringing the VOC higher than the specified 2.8 lbs./gal..

### MIXING INSTRUCTIONS:

1. Using a dispersion blade, stir contents of Part A until completely blended.
2. Pour Part A into mixing container.
3. While stirring Part A, create a whirlpool effect and **slowly** pour the appropriate quantity of Part B in. **Never pour Part B into Part A while not stirring!**
4. Thoroughly mix until all of Part B is incorporated into Part A.
5. Induction time: Let mixed material stand for 30-45 minutes.
6. If thinning, pour in appropriate quantity of Mil-T-81772B TY II Epoxy Thinner, but only after Part A and Part B have been properly mixed together. Never pour thinner directly into Part A or B, or unmixed A & B.
7. Mix for 1-2 minutes whether you add thinner or not.
8. Mixture is now ready to spray!

### Notes:

- A paint shaker can be used in conjunction with the dispersion blade mixer, but the use of a shaker alone **does not** properly mix Part A, or Parts A & B together.
- A coating from one manufacturer, or individual component, shall never be mixed with that of another manufacturer, even of the same color. Components from different kits are **not** interchangeable.

**SURFACE PREP:** All surfaces to be coated must be free of dirt, oils, greases, polishing compounds, fingerprints, and any other foreign matter including oxidation products.

**PRIMERS:** This coating has been approved for use directly over the following:

- MIL-PRF-23377J Ty I CI C2 High Solids Epoxy Primer (Spectrum Part # 1007)
- MIL-PRF-85582D Waterborne Epoxy Primer

## APPLICATION

This material may be applied by any conventional spray method including HVLP and electrostatic systems. Dry films should be in the range of 1.5 to 2.0 mils thick. The gloss levels of semi gloss and flat colors can vary if DFT is above recommended range.

**Conventional Spray** Air Pressure 30-45 psi

**HVLP** Air Pressure 65 psi / Fluid Pressure 8-15 psi

Tip size can vary depending upon desired spray pattern, size of gun and desired flow rate.

## CURING

### Production Applications:

- **Air Dry** (77°F, 50% R.H.)

To Touch	5 Hours Max
Dry Hard	8 Hours Max
To Handle:	8 Hours
Recoat:	6 Hours
- **Force Dry**

To Handle:	
Allow sprayed part to air dry for 2 hours @	
~77°F before force drying @:	
150° F	2 Hours or
200° F	1 Hour

Please note, force drying can cause variations in gloss. **For packaging, allow parts to dry overnight for both air and force drying.**

### Quality Control—Test Curing:

- **Air Dry** (77°F, 50% R.H.)

Allow 7-10 Days Before Testing
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- **Force Dry**

Air Dry for 4 Days then
Force Dry 24 Hrs @ 225°F then
Allow to Air Dry for 24 Hrs Before Testing

## SAFETY & HANDLING INFORMATION

*Please consult current MSDS for Hazardous Ingredient Information, Hazards Identification, Emergency First Air Measures, Fire Fighting Measures, Accidental Release Measures, Handling & Storage Conditions, Exposure Controls & Personal Protection, Physical & Chemical Properties, Reactivity Data, Toxicological Information, Ecological Information, Waste Disposal Considerations, Transportation Information, and other Regulatory Information.*

## PRODUCT LIMITATIONS

Do not vary catalyst ratio, this material has been formulated to achieve its optimum performance properties at listed ratios. Do not heat while applying, mixing, or storing. Heat shortens the pot life and shelf life of the materials. Protect all Spectrum Epoxy products from moisture, extreme temperatures and store inside in ambient conditions. Temperature and humidity will effect drying times, cure rate, and color. **NON-WARRANTY.** The information presented in this publication is based upon the research and experience Spectrum Coatings and its suppliers. No representation or warranty is made concerning the accuracy or completeness of the information presented in this publication. Spectrum Coatings makes no warranty or representation of any kind, express or implied, including without limitation any warranty of merchantability or fitness for any particular purpose, and no warranty or representation shall be implied by law or otherwise. Any products sold by Spectrum Coatings are not warranted as suitable for any particular purpose to the buyer. The suitability of any products for any purpose particular to the buyer is for the buyer to determine. Spectrum Coatings shall in no event be liable for any special, incidental, or consequential damages.

**STORAGE:** Product should be stored in accordance with federal, state and local regulations. Recommended storage conditions: Containers should be tightly sealed, kept indoors in dry conditions at ambient temperatures (50-75°F).

**IMPORTANT NOTE:** The above information is supplied as a guideline to our customers. The user must be aware of the cleaning, primer, pretreatment, application and testing requirements for their specific job.