



217 Chapman Street, Providence, RI 02905 (401) 781-4847 FAX (401) 781-1075

MIL-P-23377E TYPE I CLASS 1 MIL-P-23377F TYPE I CLASS 1 EPOXY PRIMER

DESCRIPTION

This Epoxy-Polyamide coating system is a two component, corrosion inhibiting primer designed for use on treated or untreated metal surfaces. Qualifying to the requirements of Military Specification, MIL-P-23377, this primer exhibits excellent chemical resistance, and contains a non-photochemically reactive solvent blend. This material will accept virtually any industrial or military topcoat available, and is packaged in "kit" form.

ADVANTAGES

This primer provides the excellent protection that demanding military and industrial environments require. The typical areas of application for these coatings include marine, transportation, aviation, and maintenance finishing.

PERFORMANCE CHARACTERISTICS

COLOR: Yellow

GLOSS: 60° geometry - 10% max.

PIGMENT: Strontium Chromate, Titanium Dioxide, Siliceous Extenders

VISCOSITY: #2 Zahn Catalyzed 1 Hour
20 - 25 seconds, Unthinned

POT LIFE: 8 Hours Minimum

COVERAGE: 444 - 666 sq. ft./ gal, no loss
@ 0.6 - 0.9 mils DFT

DRY TIMES: 77°F, 50% RH
Tack Free 1 Hour Max
Dry Hard 6 Hours Max
To Handle: 4-6 Hours
Recoat 2 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
- 24 Hours Immersion in MIL-H-5606 Hydraulic Fluid @ 150°F
-No Blistering, Softening, or Loss of Adhesion

ADHESION: 24 Hour Water Immersion, Cross Hatch Tape Pull:

Plain Steel	100%
Plain Aluminum	100%
Treated Aluminum	100%

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

APPLICATION INFORMATION

MIX RATIO: (by volume)

Component A	1 Part
Component B	1 Part
Mil-T-81772B TY II Epoxy Thinner	1 Part

MIXING INSTRUCTIONS:

1. Stir contents of Part A until completely blended.
2. Pour Part A into mixing container.
3. While stirring Part A, **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 1/2 hour.
6. 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.
8. Mixture is now ready to spray!

Note: 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.

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.

CLEANUP: Clean tools, equipment and mixing containers immediately after use with MEK, MIBK, MAK, Mil-T-81772B TY II Epoxy Thinner, # 522 Spectrum Epoxy Thinner or any other epoxy thinners.

APPLICATION

This material may be applied by any conventional spray method including HVLP and electrostatic systems. Apply a coat to a total dry film thickness of 0.6 to 0.9 mils.

Conventional Spray	Air Pressure 30-40 psi
HVLP	Air Pressure 65 psi
	Fluid Pressure 8-15 psi
Pressure Pot	Line Pressure 40-45 psi
	Pot Pressure 6-10 psi

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

Topcoat Compatibility

This primer is compatible with the following tocoats:

- Mil-C-22750D Epoxy
- Mil-DTL-64159 Waterborne CARC Urethane
- Mil-C-53039 Aliphatic Urethane
- Mil-PRF-85285 Polyurethane

CURING

Production Applications:

- **Air Dry** (77°F, 50% R.H.)
 - Tack Free 1 Hour Max
 - Dry Hard 6 Hours Max
 - To Handle: 4-6 Hours
 - Recoat 2 Hours
- **Force Dry**
 - To Handle:
 - Allow sprayed part to air dry for 3/4 hour @ ~77°F before force drying @:
 - 150° F 2 Hours or
 - 200° F 1 Hour

RECOAT: The primer will be ready for recoat/topcoating after a 2 hour air-dry, or after a 1/2 hour recovery time following a bake cycle.

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
- **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.

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).

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.

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.