



MIL-P-23377F TYPE I CLASS 2
MIL-PRF-23377G TYPE I CLASS C
Mil-PRF-23377H TYPE I Class C
Mil-PRF-23377J TYPE I Class C2
Mil-PRF-23377K TYPE I Class C2

DESCRIPTION

This coating system is a two component, high solids epoxy primer designed for application to treated, or untreated metal surfaces. Meeting the requirements of the military specifications: Mil-P-23377F Type I Class 2, Mil-PRF-23377G Type I Class C, Mil-PRF-23377H Type I Class C, and Mil-PRF-23377J Type I Class C2, this corrosion inhibiting primer has excellent chemical and solvent resistance, and meets a V.O.C. of 340g/l(2.8 lbs./gal.).

ADVANTAGES

This primer provides the excellent protection that demanding military and industrial environments require. The typical areas of application for this system include: marine, transportation, aviation, and maintenance finishing. This material will accept virtually any industrial or military topcoat available.

PERFORMANCE CHARACTERISTICS

COLOR: Yellow

GLOSS: Matte

VISCOSITY: #4 Ford, Catalyzed, Unthinned
25 seconds

POT-LIFE: 4 Hours Minimum

COVERAGE: 1065 - 1598 sq. ft./ gal, no loss
@ 0.6 - 0.9 mils DFT

DRY TIMES: Class 2 @ 77°F
Tack Free: 5 Hours Maximum
Dry Hard: 8 Hours Maximum
To Handle: 8-10 Hours
Recoat 5 Hours

PIGMENT: Strontium Chromate, Titanuim
Dioxido, Siliceous Extenders

V.O.C. ≤ 340g/l (2.8 lbs./gal.)

CHEMICAL RESISTANCE:

- 24 Hours Immersion in MIL-L-23699
Lubricating Oil @ 250°F
- No Blistering, Softening, or Loss of Adhesion
- 24 Hours Immersion in MIL-H-83282
Hydraulic Fluid @ 150°F
-No Blistering, Softening, or Loss of Adhesion
- Methyl Ethyl Ketone 25 Double Rubs

5% SALT SPRAY: 2000 Hours
-No Blistering or Creepage

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	2 Part
Component B	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. If it is necessary to add thinner to this coating, use only Mil-T-81772B TY II Epoxy Thinner. In areas where air quality regulations restrict volatile emissions, do not add thinner to this primer if that addition will raise the VOC content to greater than 340g/L (2.8 lb/gal). The addition of too much thinner can cause pigment to flocculate and fall out of solution.
7. Mix for 1-2 minutes.
8. Mixture is now ready to spray!

Note: A paint shaker can be used in conjunction with a 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, airless 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-PRF-22750 High Solids Epoxy
- Mil-DTL-64159 Waterborne CARC Urethane
- Mil-DTL-53039 Aliphatic Urethane
- Mil-PRF-85285 Polyurethane

CURING

Production Applications:

- **Air Dry** (77°F, 50% R.H.)

Tack Free	5 Hours Max
Dry Hard	8 Hours Max
To Handle:	10 Hours Max
Recoat	5 Hours
- **Force Dry**

To Handle:	
Allow sprayed part to air dry for 1-2 hours @ ~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 5 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 14 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.