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MIL-C-22750D TY I

EPOXY TOPCOAT

DESCRIPTION

This coating is a 2 component epoxy-polyamide topcoat for use on various metal and composite surfaces. Meeting the requirements of the military specification, Mil-C-22750D, this product is approved for use by all departments and agencies of the Department of Defense.
This coating is furnished in "kit" form and 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 non-photochemically reactive solvent blend for use under air pollution regulations. 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 8% max.

VISCOSITY: #2 Zahn, Ready for Spray:
16 - 18 seconds

POT LIFE: 8 to 12 Hours

COVERAGE: 350 - 450 sq ft per gallon
@ 1mil DFT, No Loss

DRY TIMES: @ 77°F, 50% RH

Tack Free	1 Hour
Dry Hard	7 Hours
To Handle:	4-6 Hours
Recoat:	2-4 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 1/8" Mandrel Bend

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

-Plain Steel	100%
-Plain Aluminum	100%
-Treated Aluminum	100%
-Primed Aluminum	100%

SHELF LIFE: 50-80ºF, ~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. 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 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.

PRIMERS: This coating should only be used directly over: MIL-P-23377F Ty I Cl 1 Epoxy Primer (Spectrum # 1006)

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. Consult Mil-C-22751D, "Coating System, Epoxy Polyamide, Chemical and Solvent Resistant, Process for Application of".

APPLICATION

This material may be applied by any conventional spray method including HVLP and electrostatic systems. Approved Spray Method: Apply a mist first coat and allow to air dry for 5 minutes. Apply a second coat to a total dry film thickness of 1.2 to 1.6 mils.

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** (77ºF, 50% R.H.)

Tack Free	1 Hour
Dry Hard	7 Hours
To Handle:	4-6 Hours
Recoat:	2-4 Hours

- **Force Dry**

To Handle:
Allow sprayed part to air dry for 1 hour @ ~77ºF before force drying @:

150º F	2 Hours or
200º F	1 Hour

For packaging, allow parts to dry overnight for both air and force drying.

Quality Control—Test Curing:

- **Air Dry** (77ºF, 50% R.H.)
  Allow 7-10 Days Before Testing
- **Force Dry**
  Air Dry for 4 Days then
  Force Dry 24 Hrs @ 225ºF then
  Allow to Air Dry for 24 Hrs Before Testing

SAFETY & HANDLING INFORMATION

FIRE & EXPLOSION DATA: In case of fire use foam, CO2, or dry chemical firefighting apparatus. The use of self-contained breathing apparatus is recommended for firefighters. Water may be unsuitable as an extinguishing media, but helpful in keeping adjacent containers cool. Avoid spreading burning liquid with water used for cooling purposes.

HEALTH & FIRST AID:

EYES: Safety glasses, chemical goggles, and/or face shields are recommended to safeguard against potential eye contact. If this product comes in contact with the eyes, flush with large quantities of water for at least 15 minutes. Seek medical attention.

SKIN: The use of impermeable gloves is advised to prevent skin irritation on sensitive individuals. If this product comes in contact with the skin, wash with a mild soap and large quantities of water. Seek medical attention if irritation persists.

INHALATION: The use of respiratory protection depends on vapor concentrations above the time-weighted TLV; use a NIOSH approved cartridge respirator or gas mask. If breathing difficulties, dizziness, or lightheadedness occur when working in areas with high vapor concentrations, seek fresh air. If difficult breathing continues, administer oxygen until medical assistance can be rendered. If breathing stops, begin artificial respiration and seek medical attention.

HANDLING: General mechanical ventilation may be sufficient to keep vapor concentrations within specified TLV ranges. If general ventilation proves inadequate, supplemental local exhaust may be required. Keep product containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation, and sufficiently ground containers when transferring this material. Dispose of this product in accordance with applicable local, county, state, and federal regulations.

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 (50-75ºF).

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.