



PRODUCT DATA SHEET

PT-428D CONVENTIONAL EPOXY PTI DIELECTRIC EPOXY SERIES MIL-C-22750D

DESCRIPTION

PT-428D is a two component catalyst cure epoxy polyamide, which meets and exceeds **MIL-C-22750D**. This system cures to an extremely hard, impervious film which resists yellowing and chalking. **PT-428D** Tuf /Film provides the ultimate protection and appearance to metal, wood and most other materials capable of being coated. **This is a non-conductive, dielectric coating.**

- Aerospace/Aviation:** Aircraft - Helicopters - Radar - Ground Handling
- Industrial:** Material Handling - Pumps - Pipes - Valves - Fans where non-conductive properties are a must.
- Electronics:** Used extensively in the electronics industry where electric properties are critical.

COLORS

This coating can be provided in **General Dynamics Spec. 13223835 Black & Fed. Std. 595 #37038**. Custom colors are NOT available.

COATING PROPERTIES & CHARACTERISTICS

| | |
|---|---|
| Mix Ratio, by volume | 1 part Base to 1 part Catalyst |
| Recommended Primer(s) | PT-402 Wash Primer and/or PT-500 Epoxy Primer |
| Reducer | PT-1003 Type II |
| Toxicity | No known toxicity when used under normal conditions |
| Colors | Per General Dynamic Spec. 13223835 Black; Fed. Std. 595 #37038 |
| Gloss | (85 Geometry) – 1.5 Degrees Maximum |
| Flexibility – 1/8 th Mandrel 0.125al | No Cracking or Flaking |
| Pot Life | 8 hours |
| Taber Abrasion | 1000 cycles/1000gms, CS-17 wheel – 125mg loss maximum |
| Pencil Hardness – Castel B | Air Cure: 1H Heat Cure: 2H |
| Weathering (Accelerated) | 1000 Hours minimum |
| Saturated Salt Spray | 1000 Hours minimum |
| Temperature Range | 45°F to 400°F – Colors or glosses may change slightly at temperatures above 250°F |
| Mil Thickness | 0.75 – 1.00 Mil per coat |
| Specifications | MIL-C-22750D |

SHELF LIFE

Shelf life is only applicable for materials stored in unopened and undamaged original factory filled containers. 1 year when stored between 50°-85° Fahrenheit.

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CLEANING

All parts must be chemically or mechanically cleaned, film free, by an industry recognized cleaning specification or method

USE OF PRIMER

PTI recommends **PT-500 MIL-P-23377E**, high strontium chromate prime-all primer as a part of this system on metal surfaces. To assure unsurpassed corrosion protection and maximum adhesion, an acid etch pretreatment wash primer, **PT-402**, should also be used.

- PT-402: Wash Primer
- PT-500: Meets MIL-PRF-23377

MIXING INSTRUCTIONS

Shake component A in an industrial paint shaker for 5 – 10 minutes for optimal results.

Admix by volume:

- | | |
|---------------|------------------------|
| 1 Part | Component A (Base) |
| 1 Part | Component B (Catalyst) |

Add the Catalyst into the Base.

Admixed material should be allowed a 30-minute induction time for best application results.

Reduce: Use reducer **PT-1003 Type II** no more than 50% by volume. Use only the amount necessary to obtain proper spray viscosity.

APPLICATION

This product can be applied using brush, roller, conventional air spray equipment, HVLP Spray system. Please consult with a PTI representative for specific equipment recommendations and settings.

1. Make sure pots, guns, and lines are purged and cleaned.
2. Mix both base and catalyst thoroughly and filter/strain before spray application.
NOTE: It is not recommended to strain flat/matte coatings.
3. HVLP Spray Pressure: 7-10psi. Conventional Spray Equipment 15-30%
4. Always air-blow and tack wipe the surfaces to be painted. Parts should be grounded to prevent static.
5. Best application results: apply 3 coats: 1 fog/tack coat & 2 full coats from 0.75 – 1 mil thickness.
6. Allow 20-30 minutes to pass before applying additional coats.
7. Recommended Dry Film Thickness is 2.25-3 mils. Some colors may require thicker films to achieve hiding.

NOTE: Application of PTI products requires the use of all OSHA approved safety equipment, including proper ventilation. Additionally, PTI products require the recommended temperature/humidity conditions and film thickness ranges for optimal performance. The material, hangar, and aircraft skin temperatures should be no lower than 75° F / 25° C before, during and after application.

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DRYING & CURING SCHEDULE

Dry times are based on the dry film thickness between 2.25-3 mils.

Air Dry Times (75°F / 25°C and 50% Relative Humidity)

- 7 days to full cure
- 30 days to maximum resistance to environmental conditions

Force Cure

- 30 minutes at 250°F
- 1 hour at 180°F
- 2 hours at 150°F

EQUIPMENT CLEANUP

Use clean Acetone, IPA, or PT-1003 Type II. Do not allow material to dry or cure inside any equipment.

HEALTH, SAFETY, & STORAGE REQUIREMENTS

Refer to each individual material SDS (Safety Data Sheet) for specific requirements on the health, safety, storage and handling requirements. Follow all local, state, and national regulations during surface preparation, material application and cleanup.

PRODUCT INFORMATION & DISCLAIMER

Product Data Sheets are periodically updated to reflect new information. It is important to use the latest and most recent revision for the product being used. The foregoing information is accurate to the best of our knowledge. However, due to differences in customer handling, use and method of application which are not known and are beyond our control, Products Techniques, Inc. makes no warranties as to the end result.