

PRODUCT DATA SHEET

PT-201U & R THERMOSETTING EPOXY PTI EPOXY SERIES

DESCRIPTION

PT-201U is a thermosetting Epoxy modified with a urea-formaldehyde resin. The **PT-201R** is a thermosetting epoxy modified with a phenol-formaldehyde resin. This material offers the maximum in all around surface protection, toughness, flexibility and has excellent thermal resistance. **The PT-201** series is also exceptionally resistant to a wide range of acids, alkalis and solvents. The following applications are the most common for this coating.

- Industrial Piping
- Storage Tanks, Drums and Stacks
- Electrical & Electronic Parts
- Aircraft & Missile Parts
- Heat Exchanger Fins/Tubes
- Custom Jewelry
- Liquid Oxygen Systems
- Optical Coating
- Electronic Cabinets
- Instrument & Camera Parts
- Laboratory Furniture
- Brass and Copper Hardware

COLORS

This coating can be provided in any color from the 595C Federal Color Standard. Custom colors are also available.

COATING PROPERTIES & CHARACTERISTICS

REDUCER	PT-1002
PENCIL HARDNESS	3H
TABOR ABRASION	1500 CYCLES/MIL FOR CS-17 WHEEL, 1000HOURS
WEATHERING	1000 HOURS
EXTERIOR DURABILITY	12 MONTHS
SATURATED SALT SPRAY RESISTANCE	6 MONTHS
FLEXIBILITY	1/8" MANDREL – PASSES
DIELECTRIC STRENGTH	GREATER THAN 1000 VOLTS
BOILING WATER	6 MONTHS
IMPACT RESISTANCE, DIRECT & REVERSE	GREATER THAN 120 INCH-LBS
TEMPERATURE RANGE	-425°F TO 500°F (INTERMITTENT 700°F)

CHEMICAL PROPERTIES

Steel and aluminum samples coated with **PT-201** have remained immersed in the following chemicals for a period of six months with no deterioration.

- Ethyl Alcohol
- Sec. Butyl Alcohol
- Methyl Isobutyl Alcohol
- Carbon Chloride
- Isopropyl Alcohol
- N-Butyl Alcohol
- Hexylene Glycol
- Diethyl Ether

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- Sodium Hydroxide
- Ammonium Hydroxide (10%)
- Hydrochloric Acid (10%)
- Phosphoric Acid (85%)
- Sodium Chloride (25%)
- Calcium Hypochloride (15%)
- Sodium Methoxide (40% Methanol)
- Diacetone Alcohol
- Methyl Isobutyl ketone
- Nitric Acid (10%)
- Liquid Detergent (100%)
- Water
- Formaldehyde (30%)
- Xylene
- Linseed Fatty Acids
- Hydrofluoric Acid
- Solid Detergent (1%)
- Sodium Hypochloride (5%)
- Toluene
- Glycerine
- Sulfuric Acid (75%)
- Allyl Chloride
- Ferric Chloride (5%)

Tests indicate excellent resistance to:

- Skydrol 500 and 700 Hydraulic Fluid
- Anhydrous Ammonia Vapor
- Rocket Blast and Fuel Deposits
- Oronite 8515 Hydraulic Fluid
- Chlorine
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PT-201 performs well at elevated temperatures. Coated samples were unaffected by immersion in the following reagents for three weeks at 150°F. Except as noted:

For Three weeks at 150° F.

- Isopropyl Alcohol
- Sec. Butyl Alcohol
- Methyl Isobutyl Alcohol
- Diacetone Alcohol
- Methyl Isobutyl Ketone
- Allyl Chloride
- Hexylene Glycol

For two weeks at 280°F.

- Sodium Hydroxide (73%)

For six weeks at 170°F.

- Glycerin

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.

CLEANING

The surface to be coated must be chemically clean to insure proper bonding and optimum coating performance. The surface must be free of oxides, soils, greases and other contaminants. PT-209B should be applied as soon as possible following surface pretreatment.

MIXING INSTRUCTIONS

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

Reduce: Should thinning be required **PT-1002** 1:1 mix by volume solvent may be used in proportions determined by the applicator.

APPLICATION & CURING

This product can be applied using dipping, brush, roller, conventional air spray equipment, HVLP spray system and electrostatic spray systems. 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 paint and reducer 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 20-35psi
4. Always air-blow and tack wipe the surfaces to be painted. Aircraft should be grounded to prevent static.
5. If two coats are required spray the first coat and let dry for 30 minutes
6. Apply the second coat and let dry for 30 minutes
7. Bake at 150° F for 30 minutes
8. Then increase the temperature to 350° F and bake for 1 hour

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.

EQUIPMENT CLEANUP

Use clean Acetone, IPA or PT-1002. 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.