



# EPOXOTHERM

## Technical Data Sheet (04/13/09)

### DESCRIPTION

EPOXOTHERM is a two-part epoxy coating, which produces a hard, yet flexible coating film. When totally cured, the coating will have an equivalent insulation value up to four inches of batt insulation when applied at 80 mils dry. This epoxy coating was formulated with several ceramic compounds, and designed to slow conduction from radiant heat sources.

EPOXOTHERM was designed for use under water or in areas where constant splashing or condensation is a problem. It is resistant to chemicals and solvents, and can be applied to metal, concrete, masonry and wood.

### TYPICAL USES

- Use to stop condensation on chiller pipes & domes
- Use to stop thermal shock on concrete dams or canal locks
- As a sealant to repair and insulate basement walls
- Very good acid and good alkali resistance.
- As insulation on any interior, underwater substrate or where constant water splashing or pooling is a problem.

### APPLICATION METHODS

EPOXOTHERM can be applied to metal, concrete, masonry, wood and other porous surfaces. The application can be by brush, roller, or airless sprayer. For specific instructions on surface preparation, mixing and application, please refer to the SPI's application instructions for EPOXOTHERM.

**NOTE:** Unless otherwise noted in the job specifications, EPOXOTHERM should be applied over RUST GRIP® OR MOIST METAL GRIP (primer). It is to have ENAMO GRIP applied as a top-coat for applications exposed to sunlight for UV protection to prevent chalking.

### FIELD TESTING RESULTS

1. The coating can reduce or stop condensation on pipes
2. The coating can withstand temperatures up to 400F (250C)

### MINIMUM SPREAD RATES (mil thickness)

**All Surfaces** – Apply 1 application of RUST GRIP® or MOIST METAL GRIP @ 200 sq ft/gallon (18 sq mtr/gallon). Then apply 5 applications of EPOXOTHERM @ 64 sq ft/gallon (6 sq mtr/gallon); 25 mils wet/16 mils dry (625 microns wet/400 dry) each coat, as a minimum thickness to stop condensation. This will leave a total thickness of 80 dry mils.

**NOTE:** Surface and ambient temperatures will determine cure time. Introduction of heat beneath or over surface will enhance the cure time.

Induction Period: 30 minutes at 70°F (21°C).

No induction time is necessary over 90°F (32°C).

### PHYSICAL DATA

- ◆ Reacted Solids: By weight: 71% / By volume 63.8%
- ◆ 30-60 minutes to tack free at 70°F (21°C)
- ◆ Overcoat window is three hours or less at 70°F (21°C)
- ◆ Lead and Chromate Free
- ◆ Cures by chemical reaction
- ◆ Reacted Weight: 9.5 lbs/gallon
- ◆ Amine-epoxy
- ◆ Shelf Life: Up to 3 years unopened under appropriate storage conditions (See MSDS)
- ◆ Reactive VOC - White: 2.49 lbs/gal; 298 grams per liter
- ◆ High molecular weight resin
- ◆ The coating is designed to be applied to substrates that will be submerged or for applications not needing UV protection
- ◆ Mix Ratio: 8 parts base to 1 part curing agent by volume
- ◆ Pot-Life: 4 hours @ 70°F (21°C); 1 hour @ 90°F (32°C)
- ◆ Maximum Surface Temperature when applying: 150° F (65°C)
- ◆ Minimum Surface Temperature when applying: 50°F (10°C)
- ◆ Maximum Surface Temperature after curing: 325°F (163°C)
- ◆ Failure will occur at a constant temperature equal to or greater than 325°F (163°C); consult SPI for intermittent temperatures greater than 325°F (163°C)

### SAFETY PRECAUTIONS

Do not use this product without first taking all appropriate safety measures to prevent property damage and injuries. These measures may include, without limitation: proper ventilation, use of proper lamps, wearing of protective clothing and masks, tenting, and proper separation of application areas. This coating is flammable. Keep away from flame, fire, or other sources of ignition. For more specific safety procedures, please refer to the EPOXOTHERM Material Safety Data Sheet. **KEEP OUT OF REACH OF CHILDREN.**

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