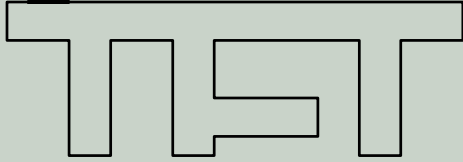


# BIO-SEAL 197

PENETRATING AND  
REINFORCING EPOXY  
SEALER



Thin Film Technology, Inc.

## PRODUCT DATA SHEET

**BIO-SEAL 197** is based on pure **liquid** epoxy polymers and proprietary polyamine curing agents.

**BIO-SEAL 197** is formulated with *no* volatile solvents and is so completely tolerant of water that it may be applied to damp or wet surfaces yet still function well as a reinforcing seal coating. Applications may be made using brush or roller with no especial ventilation requirements -odor during application is almost completely absent. Airless spraying using standard single component equipment is easily accomplished at a fluid temperature of 80°F.

The standard "00000" version may be shipped "Non-Regulated" by air or surface -this material is ideal for most applications however it will yellow on exposure to UV light. A UV resistant version is available which uses the same epoxy base and curing agent BS 196-11111B, this material ships UN1760, "Corrosive Liquid N.O.S." PG III.

**BIO-SEAL 197** has been successfully tested against ASTM E-84, 24' tunnel test, and generated zero flame or smoke.

## RECOMMENDED USES

**PENETRATING SEALER** - used to seal and protect concrete, brick and similar surfaces against chemical attack, and penetration by water leading to freeze-thaw damage.

**REINFORCING PENETRANT** - when applied to bare sheetrock surfaces will penetrate the entire fiber surface into the gypsum and will cure to a hard, tough and damage resistant layer. Especially suitable for applications where frequent contact with gurneys, trolleys and similar equipment is anticipated.

## TECHNICAL INFORMATION

<b>COMPOSITION:</b>	Vehicle Type Pigmentation Solids by Volume Flash Point VOC	Epoxy/Polyamines None 100% Over 212°F Essentially Zero
<b>APPEARANCE:</b>	Gloss Color	Matte when fully absorbed, unabsorbed is full gloss Clear, slightly amber
<b>APPLICATION:</b>	Methods Rec. Dry Film Thickness Rec. Wet Film Thickness Coverage, (theor.) Induction Time Pot Life Dry Time – Dust Free Dry Time – Service	Brush, roller or spray 5 mils, (127 microns) 5 mils, (127 microns) 320 sq.ft./gallon @ 5 mils thickness Not Required - may be used immediately after mixing Approx. 45' @ 77°F, (25°C) 8 hours @ 77°F, (25°C) 24 hours handling, 36 hours light service @77°F, (25°C)
<b>STORAGE:</b>	Shelf Life	24 months under normal storage conditions
<b>TRANSPORTATION:</b>		USDOT, IATA & IMO "Non-Regulated"-(00000version) UN1760, HAZ CLASS 8, PG II -(11111version)

## APPLICATION NOTES

### *SURFACE PREPARATION:*

**Bare Concrete:** surfaces should be allowed to cure for a minimum of 20 days before coating. Excessive weak surface laitance must be removed by either acid etching or, preferably, abrasive sweeping before coating. Aged, uncoated concrete surfaces are best prepared by abrasive sweeping. Unless carried out properly acid etching can give unpredictable results due to inadequate etching or inadequate rinsing, for this reason abrasive blasting is the preferred method of preparation. Contamination by oil or grease should be removed with an industrial degreaser before either abrasive blasting or acid etching.

**MIXING PROCEDURE:** BIO-SEAL 197 is supplied in 2 gallon kits of comprising epoxy base in a part filled 2 gallon plastic pail with curing agent packed in a part filled one gallon steel can. A "Jiffy" type mixer with a high torque motor is recommended for proper blending. Pour the curing agent into the base and mix for about 2 minutes taking care to stir in all base material from the edges and base of the plastic pail, *unmixed material will never harden*. No induction or "sweat-in" time is required and the mixed material may be used immediately.

Pot life and reaction time is heavily dependent on temperature, as a general guide figure that each 18°F, (10°C), variation in temperature above or below 77°F, (25°C), will respectively halve or double the pot life and cure times.

**APPLICATION:** Brush or roller application is straightforward and requires no special technique. Application on a floor is assisted by using a squeegee to distribute the BIO-SEAL 197 then back rolling to achieve an even coating. The material will thicken in cold weather and will be noticeably heavier at temperatures of 50°F and below. If permissible to use solvent it will be found that 5 -10% of lacquer thinner or MEK will greatly reduce viscosity in cold weather allowing much easier application.

When used as a sealer, take care not to over apply the product, which will result in areas of unabsorbed, glossy surface, which will be slippery when wet. Note: should this occur it is possible to apply a thin coat of BIO-SEAL 197 followed by a light broadcast of 24 -36 mesh abrasive such as aluminum oxide or sand back rolled into the wet coating, this will yield an attractive, slip resistant surface.

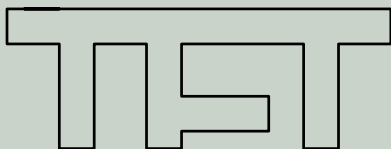
BIO-SEAL 197 applied over bare sheetrock for sealing and reinforcement may be over coated with latex paint as soon as absorption is complete as indicated by a complete loss of gloss over the sealed area.

When a glossy surface is desired over an absorbent substrate such as concrete or brick it will be necessary to apply at least two coats of BIO-SEAL 197. The first coat will penetrate and seal. After this seal coat has cured for about three hours minimum a "glaze coat" of BIO-SEAL 197 may be applied at about 5 mils thickness, (320 sq.ft. per gallon), to yield a tough, high gloss finish. A light broadcast of abrasive such as Aluminum Oxide or silica sand back rolled into this coat will provide enhanced slip resistance.

**CURING BEFORE SERVICE:** BIO-SEAL 197 will cure to a hard film within 24 hours and is suitable for traffic after this time. Allow at least three (3) days at 77°F before subjecting to aggressive chemical service from industrial solvents and similar materials.

BS197/02MAR99

WE URGE YOU TO READ THE MATERIAL SAFETY DATA SHEET (MSDS) BEFORE USING AND TO CALL THIN FILM TECHNOLOGY, INC., AS NECESSARY FOR ADVICE OR INFORMATION BEFORE ANY ACTUAL OR CONTEMPLATED APPLICATION.



Thin Film Technology, Inc. • P.O. Box 580669 • Houston, TX 77258-0669  
(713) 910-6200 • Fax: (713) 910-6210 • Mobile: (281) 82-0723  
Email: [info@thinfilmttech.net](mailto:info@thinfilmttech.net) • Website: [www.thinfilmttech.net](http://www.thinfilmttech.net)

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