



PT20

TITAN[®]-B1

SEALER / PRIMER

TiTan-B1 is designed as a high performance sealer and coating for concrete. Supplied in a convenient one to one mix ratio. **Titan-B1** is capable of penetrating and filling the pore structure of the concrete to provide an effective subsurface barrier to prevent moisture migration and chemical penetration.

Type: Two-component polyamide cured, liquid epoxy solvent based primer.

Applications: Due to **Titan-B1's** highly penetrating properties on properly prepared concrete it provides pore filling and strengthening the top concrete layer to form a sufficiently strong base for subsequent top coats. An exceptional characteristic of **Titan-B1** is its high bond strength to a variety of substrates.

Applicable Standards: **Titan-B1** is recommended for use on class 1,2,3 & 4 concrete floors as classified in table 1.1 ACI Standard 302-69.

Colors	Clear
Mix Ratio	1 to 1 by volume
Volume Solids	50± 2%
Theoretical Coverage	800 mil sq. ft./gal.
Recommended Coverage	3-3.5 mils DFT
Pot Life @ 25°C	8-10 hrs.
Cure Time @ 25°C(recoat)	8 hrs.
Initial Cure @ 25°C	12 hrs.
Final Cure @ 25°C	7 days
Seward Hardness	70-75
Shelf Life	1 year min.
Thinner	Pilgrim 111

* consult Pilgrim representative for specific conditions

PILGRIM PERMOCOAT, INC.

Main office and factory: 402 S. 22nd Street, Tampa, Fl 33605 (813) 248-3328 FAX# (813) 248-1076
Distribution : USA, Canada & Caribbean

Surface Preparation:

In order that a coating system can wholly fulfill the job it is intended to do, i.e. to protect the substrate against damage, the substrate and the protective layer must adhere as tightly as possible.

Failures due to peeling, adhesive loss or disintegration usually are connected to lack of cleaning, interfering materials or failure to produce a mechanical "tooth" for the new application.

Metallic surfaces should be cleaned by suitable mechanical preparation. Steel surfaces are best freed from rust and mill scale by blasting with sand or shot. When blasting is impossible, derusting should at least be thoroughly done by hand.

Grease, oils and other troublesome matter must be removed in order to achieve satisfactory wetting of the paint carrier.

Concrete: Before coating is applied, inspect the top surface of the substrate and treat as necessary to remove laitance, loose material on the surface, grease, oil and other contaminant's which will affect bond of coating. Remove oil and grease with commercial grade alkaline cleaner; thoroughly rinse and dry. Prepare all concrete surfaces by sandblasting, bead blasting, acid etching with a 10-15% solution of muriatic acid or high pressure wash (min. 2500 psi). (Caution: Use adequate respiratory, eye and skin protection when using etching solutions, sand blasting, or bead blasting.)

After the preparation and cleaning of the substrate it is advisable to prime the surface as soon as possible. Its purpose is to plug the capillaries and pores in the concrete, to bind back the dust and to make sure the following coat is securely bonded.

MIXING:

Combine 1 part A with 1 part B by volume. Mix with a Jiffy Mixer at 300-600 rpm for 3 minutes. Allow mixed components to induce or sweat-in for a minimum of 30 minutes. Only perfectly uniform mixtures of the two components in the correct mixing ratio will yield satisfactory film properties.

Thinning:

Material is supplied at application viscosity and normally needs no thinning. If thinning is necessary thin with Pilgrim111 Thinner up to one pint/gallon.

Application:

Apply by brush, roller, or spray. Apply at 6-7.5 mils wet to achieve 3-3.5 mils DFT.

Equipment:

Brush: Good quality 4" wide brush with short hair bristle.

Roller: 1/8" mohair or foam roller.

Conventional Spray: DeVilbiss MBC-510 gun; E tip and 704 air cap; 3/8" ID material hose; double regulated pressure tank with oil and moisture separator.

Work Stoppages:

Do not allow material to remain in hoses. Release pressure from pressure tank and disconnect material hose. Thoroughly flush hose and spray gun with #5 Cleaner.

Cleanup:

Clean all equipment immediately after use with Pilgrim #5 Cleaner . Spray equipment requires flushing with either of these solvents. It is good working practice to periodically flush out spray equipment during the course of the working day. Frequency should depend upon amount sprayed, temperature, elapsed time including delay, etc.

Safety:

This product (and any recommended thinners) contains solvents and/or other chemical ingredients. Adequate health and safety precautions should be observed during all storage, handling, use and drying periods. For safe usage, user is specifically directed to consult the current "Material Safety Data Sheet" for this product. When using this product in a confined space or closed area, consult the current OSHA, or ANSI bulletins on safety requirements.

MATERIAL SAFETY DATA SHEET

PILGRIM PERMOCOAT, INC..
402 S. 22ND ST..
TAMPA, FL 33605

PILGRIM CODE-B1
ISSUE DATE-11/16/91
REVISED-10/21/94

A. TRADE NAME - B1 PRIMER, PART A
CAS# - MIXTURE

CHEMICAL NAME - SOLUTION EPOXY FORMULATION

DOT CLASS - FLAMMABLE LIQUID
HMIS: H-2, F-3, R-0
MOLECULAR WEIGHT - NA

FORMULA - NA

EMERGENCY CONTACT -ROBERT FORLONG

DAY PHONE - 813-248-3328
NIGHT PHONE- 813-685-5282

B. FIRST AID MEASURES

EYES - IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES HOLDING LIDS APART.
CALL A PHYSICIAN.

SKIN - WASH THOROUGHLY WITH SOAP AND WATER. IF IRRITATION DEVELOPS AND PERSISTS, SEE A PHYSICIAN.
WASH CLOTHES BEFORE REUSE.

INHALATION - REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH
TO MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN!

INGESTION - MAY CAUSE GASTROINTESTINAL DISTRESS, IRRITATION ULCERATION. DRINK LARGE QUANTITIES
OF WATER. CONSULT A PHYSICIAN.

C. HAZARDS INFORMATION**FIRE AND EXPLOSION**

FLASH POINT - 100°F AUTO IGNITION TEMPERATURE - 463°F
FLAMMABLE LIMITS: LOWER - 1.0 UPPER - 7.0

UNUSUAL FIRE AND EXPLOSION HAZARDS - VAPORS HEAVIER THAN AIR. MAY TRAVEL TO DISTANT SOURCE
OF IGNITION AND FLASH BACK.

HEALTH

INHALATION - VAPORS MAY IRRITATE NOSE AND UPPER RESPIRATORY TRACT.

INGESTION - MAY CAUSE GASTROINTESTINAL DISTRESS OR IRRITATION.

SKIN - PROLONGED AND REPEATED CONTACT MAY CAUSE IRRITATION AND RESULT IN SENSITIZATION AND
ALLERGIC REACTION.

EYES - VAPOR MAY CAUSE IRRITATION, REDNESS AND TEARING. LIQUID MAY CAUSE SEVERE IRRITATION WITH
POSSIBLE IRREVERSIBLE INJURY.

UNUSUAL CHRONIC TOXICITY - NONE KNOWN.

PERMISSIBLE CONCENTRATION (AIR) - TWA/TVL 100 PPM: STEL/TLV 150 PPM.

D. PRECAUTIONS/PROCEDURES

VENTILATION - SPARK PROOF MECHANICAL VENTILATION TO MAINTAIN RECOMMENDED TLV.

NORMAL HANDLING - DO NOT GET IN EYES, ON SKIN OR CLOTHING. DO NOT BREATHE VAPORS. KEEP
CONTAINERS CLOSED. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

STORAGE - STORE IN COOL, DRY AREA AWAY FROM HEAT, STRONG OXIDIZERS. PROTECT FROM DAMAGE

SPILL OR LEAK - ABSORB SPILL ON SAND, EARTH OR VERMICULITE.

CAREFULLY COLLECT INTO CLOSED CONTAINERS FOR DISPOSAL ACCORDING TO FEDERAL, STATE OR
LOCAL REGULATIONS.

FIRE EXTINGUISHING PRECAUTIONS - WEAR FULL PROTECTIVE GEAR AND NIOSH/MSHA APPROVED SELF-
CONTAINED BREATHING APPARATUS.

FIRE EXTINGUISHING AGENTS TO AVOID - SOLID STREAM OF WATER OR FOAM MAY CAUSE FROTHING,
SPLATTERING AND SPREAD HAZARD.

SPECIAL PRECAUTIONS/PROCEDURES - COOL CONTAINERS EXPOSED TO FLAME WITH WATER SPRAY.

E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY EQUIPMENT - IF TLV EXCEEDED, A NIOSH/MSHA APPROVED RESPIRATOR SHOULD BE USED.

EYES - CHEMICAL SPLASH - PROOF GOGGLES.

HANDS, ARMS AND BODY - RUBBER OR POLYETHYLENE GLOVES AND FULL BODY COVERING CLOTHING.
OTHER CLOTHING AND EQUIPMENT - EYE WASH FOUNTAIN AND SAFETY SHOWER.

F. PHYSICAL DATA

DESCRIPTION - SOLUTION EPOXY COATING

% VOLATILES (BY VOLUME) - 46%

BOILING POINT - 137°C

SPECIFIC GRAVITY - 0.94

VAPOR DENSITY - 3.7 (XYLENE)

VAPOR PRESSURE - 0.2 PSIG @ 100

SOLUBILITY IN WATER - NON

PH - NA

EVAPORATION RATE - >1

G. REACTIVITY DATA

STABILITY - STABLE

INCOMPATIBLE MATERIALS - STRONG OXIDIZERS, ACIDS AND EPOXY CURING AGENTS.

HAZARDOUS DECOMPOSITION PRODUCTS - CO, CO2, NOT AS A RESULT OF THERMAL DECOMPOSITION.

HAZARDOUS POLYMERIZATION - WILL NOT OCCUR.

H. HAZARDOUS INGREDIENTS (MIXTURES)

<u>INGREDIENTS</u>	<u>PERCENTAGE</u>	<u>CAS#</u>	<u>TLV</u>
XYLENE <=22%	1130-20-7	100 PPM	
METHYL ISOBUTYL KETONE	>=24%	108-10-1	50 PPM
EPOXY RESIN	>=54%	25068-38-6	NE

I. ENVIRONMENTAL

BIODEGRADABILITY - NOT KNOWN

WASTE DISPOSAL METHODS - DISPOSE OF AS HAZARDOUS WASTE IN APPROVED WASTE DISPOSAL FACILITIES IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

J. REFERENCES

PERMISSIBLE CONCENTRATION REFERENCES - ACGIHTWA, TLV, AND STEL

REGULATORY STANDARDS - TITLE 49 CFR SECTION 173.118, 172.101

GENERAL - NIOSH GUIDE TO CHEMICALS - XYLENE

NFPA - FIRE HAZARD PROPERTIES OF FLAMMABLE LIQUID - 325M

DANGEROUS PROPERTIES OF INDUSTRIAL CHEMICALS, SAX, 6TH ED.

K. ADDITIONAL INFORMATION

EMPTY CONTAINER HANDLING!

WARNING! EMPTIED CONTAINER RETAINS PRODUCT RESIDUE AND VAPORS.

OBSERVE ALL LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED.

DO NOT CUT, DRILL, GRIND, OR WELD ON OR NEAR CONTAINER.

L. DOT SHIPPING INFORMATION

PAINT, 3, UN 1263, III

FLAMMABLE LIQUID

INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. HOWEVER, IT IS PROVIDED SOLELY FOR THE CUSTOMERS CONSIDERATION, INVESTIGATION AND VERIFICATION. PILGRIM PERMOCOAT INC. HEREBY SPECIFICALLY DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE ACCURACY AND COMPLETENESS OF SUCH INFORMATION, AND MAKES NO REPRESENTATIONS WITH RESPECT THERETO.

PT20

MATERIAL SAFETY DATA SHEET

PILGRIM PERMOCOAT, INC.
402 S. 22ND. ST.
TAMPA, FL. 33605

PILGRIM CODE - B1
ISSUE DATE - 11/16/87
REVISED-1/1/94

A. TRADE NAME - B1 Primer, PART B
CHEMICAL NAME - POLYAMIDE RESIN SOLUTION
FORMULA - COMPLEX POLYMER IN SOLUTION
EMERGENCY CONTACT - ROBERT FORLONG

CAS# - MIXTURE
DOT CLASS - FLAMMABLE LIQUID
HMIS: H-2, F-3, R-O
MOLECULAR WEIGHT - NA
DAY PHONE - 813-248-3328

B. FIRST AID MEASURES

EYES - IMMEDIATELY FLUSH EYES WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES HOLDING LIDS APART. CALL A PHYSICIAN.
SKIN - WASH THOROUGHLY WITH SOAP AND WATER. IF IRRITATION DEVELOPS AND PERSISTS, SEE A PHYSICIAN. WASH CLOTHES BEFORE REUSE.
INHALATION - REMOVE TO FRESH AIR. IF NOT BREATHING GIVE ARTIFICIAL RESPIRATION, PREFERABLY MOUTH TO MOUTH. IF BREATHING IS DIFFICULT, GIVE OXYGEN. CALL A PHYSICIAN!
INGESTION - MAY CAUSE GASTROINTESTINAL DISTRESS, IRRITATION ULCERATION. DRINK LARGE QUANTITIES OF WATER. CONSULT A PHYSICIAN.

C. HAZARDS INFORMATION

FIRE AND EXPLOSION

FLASH POINT - 82°F AUTO IGNITION TEMPERATURE - 463°F
FLAMMABLE LIMITS: LOWER - 1.0 UPPER - 7.0
UNUSUAL FIRE AND EXPLOSION HAZARDS - VAPORS HEAVIER THAN AIR. MAY TRAVEL TO DISTANT SOURCE OF IGNITION AND FLASH BACK.

HEALTH

INHALATION - VAPORS MAY IRRITATE NOSE AND UPPER RESPIRATORY TRACT. HIGH CONCENTRATIONS OF VAPOR MAY CAUSE DIZZINESS, LOSS OF APPETITE, NAUSEA, AND MAY CAUSE REVERSIBLE DAMAGE TO KIDNEYS AND LIVER.
INGESTION - MAY CAUSE GASTROINTESTINAL DISTRESS OR IRRITATION.
SKIN - REPEATED OR PROLONGED CONTACT MAY CAUSE SKIN RASH.
EYES - VAPOR MAY CAUSE IRRITATION, REDNESS AND TEARING. REPEATED OR PROLONGED EXPOSURE TO FUMES MAY CAUSE PERMANENT DAMAGE.
UNUSUAL CHRONIC TOXICITY - NONE KNOWN.
PERMISSIBLE CONCENTRATION (AIR) - TWA/TVL 100 PPM: STEL/TLV 150 PPM.

D. PRECAUTIONS/PROCEDURES

VENTILATION - MECHANICAL VENTILATION TO MAINTAIN RECOMMENDED TLV.
NORMAL HANDLING - DO NOT GET IN EYES, ON SKIN OR CLOTHING. DO NOT BREATHE VAPORS. KEEP CONTAINERS CLOSED. USE WITH ADEQUATE VENTILATION. WASH THOROUGHLY AFTER HANDLING.

STORAGE - STORE IN COOL, DRY AREA AWAY FROM HEAT, STRONG OXIDIZERS. PROTECT FROM DAMAGE
SPILL OR LEAK - ABSORB SPILL ON SAND, EARTH OR VERMICULITE.

CAREFULLY COLLECT INTO CLOSED CONTAINERS FOR DISPOSAL ACCORDING TO FEDERAL, STATE
 OR LOCAL REGULATIONS.

FIRE EXTINGUISHING PRECAUTIONS - WEAR FULL PROTECTIVE GEAR AND NIOSH/MSHA APPROVED SELF-
 CONTAINED BREATHING APPARATUS.

FIRE EXTINGUISHING AGENTS TO AVOID - SOLID STREAM OF WATER OR FOAM MAY CAUSE FROTHING,
 SPLATTERING AND SPREAD HAZARD.

SPECIAL PRECAUTIONS/PROCEDURES - COOL CONTAINERS EXPOSED TO FLAME WITH WATER SPRAY.

E. PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY EQUIPMENT - IF TLV EXCEEDED, A NIOSH/MSHA APPROVED RESPIRATOR SHOULD BE USED.

EYES - CHEMICAL SPLASH - PROOF GOGGLES.

HANDS, ARMS AND BODY - RUBBER OR POLYETHYLENE GLOVES AND FULL BODY COVERING CLOTHING.

OTHER CLOTHING AND EQUIPMENT - EYE WASH FOUNTAIN AND SAFETY SHOWER.

F. PHYSICAL DATA

DESCRIPTION - MATERIAL IS AMBER COLORED VISCOUS LIQUID

BOILING POINT - 137°C

SPECIFIC GRAVITY - 0.94

VAPOR DENSITY - 3.7 (XYLENE)

VAPOR PRESSURE - 0.2 PSIG @ 100

SOLUBILITY IN WATER - NONE

PH - NA

EVAPORATION RATE - <1

% VOLATILES (BY VOLUME) - 30%

G. REACTIVITY DATA

STABILITY - STABLE

INCOMPATIBLE MATERIALS - STRONG OXIDIZERS, ACIDS AND BASES.

HAZARDOUS DECOMPOSITION PRODUCTS - CO, CO₂, NOT AS A RESULT OF THERMAL DECOMPOSITION.

HAZARDOUS POLYMERIZATION - WILL NOT OCCUR.

H. HAZARDOUS INGREDIENTS (MIXTURES)

INGREDIENTS	PERCENTAGE	CAS#	TLV
XYLENE	<=30%	1130-20-7	100 PPM
TRIEthylenetetramine	<2%	112-24-3	NOT EST.

I. ENVIRONMENTAL

BIODEGRADABILITY - NOT KNOWN

WASTE DISPOSAL METHODS - DISPOSE OF AS HAZARDOUS WASTE IN APPROVED WASTE DISPOSAL
 FACILITIES IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.

J. REFERENCES

PERMISSIBLE CONCENTRATION REFERENCES - ACGIHTWA, TLV, AND STEL

REGULATORY STANDARDS - TITLE 49 CFR SECTION 173.118, 172.101

GENERAL - NIOSH GUIDE TO CHEMICALS - XYLENE

NFPA - FIRE HAZARD PROPERTIES OF FLAMMABLE LIQUID - 325M

DANGEROUS PROPERTIES OF INDUSTRIAL CHEMICALS, SAX, 6TH ED.

K. ADDITIONAL INFORMATION

EMPTY CONTAINER HANDLING

WARNING! EMPTIED CONTAINER RETAINS PRODUCT RESIDUE AND VAPORS.

OBSERVE ALL LABEL PRECAUTIONS EVEN AFTER CONTAINER IS EMPTIED.

DO NOT CUT, DRILL, GRIND, OR WELD ON OR NEAR CONTAINER.

L. DOT SHIPPING INFORMATION

PAINT, 3, UN 11263, III

FLAMMABLE LIQUID

INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. HOWEVER, IT IS PROVIDED SOLELY FOR THE CUSTOMERS CONSIDERATION, INVESTIGATION AND VERIFICATION. PILGRIM PERMOCOAT INC. HEREBY SPECIFICALLY DISCLAIMS ANY AND ALL WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE ACCURACY AND COMPLETENESS OF SUCH INFORMATION, AND MAKES NO REPRESENTATIONS WITH RESPECT THERETO.
