Technical Data Sheet

PIP AM-PT-BW

Antimicrobial Concrete Pretreatment for Block & Walls

PROTECTIVE INDUSTRIAL POLYMERS
7875 Bliss Parkway North Ridgeville, OH 44039
440-327-0015 440-353-0549 - FAX

DESCRIPTION:

PIP AM-PT-BW is a clear, antimicrobial subsurface treatment developed to create a permanent, dense colloidal gel that extremely limits permeability when used vertical concrete or concrete block. **PIP AM-PT-BW** penetrates the concrete substrate and reacts with free alkali and/or alkaline hydrates internally producing a silica hydro-gel that fills the micro spaces and voids around aggregate or in block. This hydro-gel permanently seals the matrix limiting water and vapor movement.

PIP AM-PT-BW has been modified with an antimicrobial component that is integral to the manufactured product. The product is protected against bacterial and fungal growth. The antimicrobial properties will remain effective for the life of the product.

USES:

PIP AM-PT-BW is designed for use where the need exists to permanently hydrostatically seal the vertical concrete structure from within. It can also be installed where more concrete density needed, or additional bonding strength is required. **PIP AM-PT-BW** was designed for use on new or old concrete installations and reduces the potential for internal chemical reactions by converting alkali to a neutral compound structure. The use of **PIP AM-PT-BW** will also help protect concrete from damages caused by freeze-thaw cycles, especially where salt or calcium chloride has been or will be used.
PIP AM-PT-BW can help prevent peeling, cracking and loss of bond caused by capillary moisture and internal chemical reactions.

ADVANTAGES:

- Limits moisture and vapor transmission
- Penetrates walls 2" to 3"
- Permanently integrally seals concrete
- Preserves matrix integrity
- Increases surface abrasion resistance
- Adds density
- Improves thermal resistance
- Increases strength
- Improves past carbonation effects
- Zero VOC/VOS content
- Improves acid/chemical resistance
- Lowers internal chemical reaction potential
- Lowers creep potential
- Lowers electrostatic discharge potential
- Hardens surface
- Maintains pliability
- Resists fungus and mildew
- USDA Compliant for use in food processing areas

APPLICABLE STANDARDS:

PIP AM-PT-BW meets or exceeds the following standards:

- ASTM C-67 Section 7 - Water absorption
- ASTM-67 Section 9 - Suction
- ASTM C-67 Section 10 - Efflorescence
- ASTM C-666 - Freeze-thaw resistance
- ASTM C-23-69 - Artificial weathering
- ASTM C-666 - Salt attack resistance
- AASHTO T260 - Chloride ion content
- AASHTO T259-78 - Chloride ion penetrations
- VOC/VOS Compliant

PRODUCT COVERAGE:

Coverage rate, depending on porosity, is 50-100 sq. ft. per gallon or 1.17m2 - 2.3m2 per liter

PRECAUTIONS:

- Spills or spray droplets in contact with glass should be removed immediately by flushing with water. **DO NOT ALLOW TO DRY**, as etching can occur.
- Some discoloration of polished aluminum can occur.
- Do not apply **PIP AM-PT-BW** when air and/or substrate temperatures are less than 37°F/2.8°C and will not decrease to less than 37°F/2.8°C for 6 hours.
- For proper seal, concrete block should have 8% to 12% cementitious (Portland Cement) content.
- Do not use in very high moisture transmission situations without prior approval by Protective Industrial Polymers Technical Department.

JOB CONDITIONS:

- Do not apply **PIP AM-PT-BW** when air or substrate temperatures are less than 37°F/2.8°C or may reach this temperature within 24 hours of application
- Contact with glass, stainless steel or aluminum should be avoided and immediately flushed with water if contacted
- DO NOT ALLOW TO DRY on glass, as etching can occur
- Some discoloration of aluminum can occur if contacted
- Concrete block must have 8% to 12% Portland cement content.

APPLICATION PROCEDURE:

1. Cracks and joints should be sealed with **PIP AM-JF-Epoxy.**
2. It is highly recommended and best practice to clean and remove as much concrete dust as possible prior to application of the **PIP AM-PT-BW**. This is best done by sweeping and vacuuming.
3. To achieve deepest penetration and reaction into the slab, the concrete can be dampened with water by using the same sprayer set up and technique used to apply the **PIP AM-PT-BW** as seen below. Do not puddle water.
4. Apply **PIP AM-PT-BW** with a high pressure airless sprayer using a 0.17 - 0.19" degree fan tip within 15 minutes of dampening the concrete for best results. Position the spray tip approximately 8"-10" (200-300mm) from the concrete surface, using an overlapping spray pattern. Apply at a rate of 200 sq. ft per gallon (5 SM/L by applying in two passes applying the second pass immediately after the first has penetrated the surface (normally 5 to 20 minutes). DO NOT ALLOW TO DRY. Apply the second application at 90° to the first (cross shape).
5. Completely saturate the substrate but DO NOT PUDDLE.
6. Application on inclined or pitched surfaces should begin at the lowest elevation and proceed to highest.
8. Wait until purging has stopped (up to 72 hours on new concrete) before applying subsequent products.
9. Displaced or purged contaminants, minerals or liquids must be thoroughly washed or mechanically removed prior to the application of other coatings**.**

Technical Data Sheet

PIP AM-PT-BW

Antimicrobial Concrete Pretreatment for Block & Walls

PROTECTIVE INDUSTRIAL POLYMERS
7875 Bliss Parkway North Ridgeville, OH 44039
440-327-0015 440-353-0549 - FAX

10. Active water or hydrostatic movement on walls or floors will require additional applications applied immediately following the first and continuing until transmission stops.

CLEAN-UP & SAFETY: No special clothing, breathing apparatus, goggles or gloves are necessary, but in enclosed areas it is advisable to wear an appropriate respirator to avoid possible irritation to breathing.

Attention should be made to watches, eyeglasses etc., as **PIP AM-PT-BW** can etch glass or discolor aluminum if allowed to dry.

Clean all equipment using water and mild soap. Never store spray equipment without cleaning and following manufacturer's recommendations for storage between usage.

SHELF LIFE: Self life is indefinite provided containers are kept tightly sealed when not in use.

PACKAGING: **PIP AM-PT-BW** is available in 5 gallon/18.9 liters and 55 gallon/208.2 liters drum size.

PIP AM-PT-BW is also available in bulk containers.

TECHNICAL SUPPORT: For application questions, please contact your salesman or PIP technical service at 440-327-0015.

WARRANTY AND CONDITIONS OF USAGE

WARRANTY AND LIMITATION OF LIABILITY: Protective Industrial Polymers Inc. ("PIP") warrants that its products shall conform to the manufacturer's written specifications and shall be free from defects for one (1) year from the date of purchase. PIP MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES AND DISCLAIMS THE SAME, INCLUDING, WITHOUT LIMITATION, FAILURE OF THE PRODUCT DUE TO ACTS OF GOD, FLOODING, EXTREME OR ABNORMAL TEMPERATURES, HUMIDITY AND MOSITURE, STRUCTURAL CONDITIONS, SITE PREPARATION AND CONDITIONS, ACCIDENTS, DAMAGE CAUSED BY INSTALLATION OF MACHINERY, EQUIPMENT OR FIXTURES WITHOUT ADEQUATE FLOOR PROTECTION OR WITHOUT ADEQUATE TIME FOR CURING, FAILURE TO COMPLY WITH CONDITIONS OF USAGE (SPECIFIED BELOW), VANDALISM, NEGLIGENT OR INTENTIONAL ACTS OF THIRD PARTIES OR OTHER CASUALTIES. If any PIP product fails to conform to this warranty, PIP shall either replace the product at no cost to Buyer or refund the cost of the product, in PIP's sole discretion. Replacement of any product or a refund of the cost of any product shall be the sole and exclusive remedy available to buyer, and buyer shall have no claim for incidental, special or consequential damages, including, without limitation, business interruption damages. Any warranty claim must be made within one (1) year from the date of delivery of products. PIP does not authorize anyone on its behalf to make any written or oral statements which in any way alter PIP's warranty or installation and storage information or instructions in its product literature or on its packaging labels. Any installation of PIP products which fails to conform to such installation information or instructions or the "Conditions of Usage" (specified below) shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of PIP's products for the Buyer's intended purposes.

CONDITIONS OF USAGE: Installation of all products purchased must be by professional installers periodically published by PIP or otherwise approved by PIP in writing. Modification to any of PIP's products voids the warranty. The installer shall maintain a written contemporaneous record of field conditions (including, without limitation, surface and atmospheric conditions, usage rates, and lot numbers of products installed). PIP reserves the right of inspection of any installed product, installation and maintenance records and records of field conditions and may conduct additional testing as is reasonably required to investigate any warranty claims. Warranty shall only apply for products or materials that have been paid for in full. Moisture Vapor Transmission (MVT) and ASR (Alkali Silica Reaction) Disclaimer and Exclusion: Although rare, some floors at or below grade level are sometimes subjected to saturation by moisture from beneath the concrete floor slab. This moisture can travel through the concrete and collect between floor toppings creating the potential for delaminating from hydrostatic pressure and or ASR. Conditions contributing to this include heavy rainfall, broken pipes, excess hydration within fresh concrete, and other factors or defective and old concrete. These factors are difficult, if not impossible to predict. PIP recommends testing for MVT and/or the presence of ASR in the concrete substrate prior to applying any polymer floor topping. The recommended test method for MVT is ASTM F 2170-11. ASR can be predicted by a higher than normal pH within the concrete. If high pH should be detected, it is recommended a lab test for ASR. If and when delamination of the floor occurs because of a moisture condition that exists beneath or in the concrete slab beyond the capacity of the individual product installed or failure of the concrete due to ASR, this Limited Warranty does not extend to such delaminating or topping failure. This writing constitutes the sole and only agreement of warranty relating to PIP products.