PIP AM-JF-Epoxy

Antimicrobial Epoxy Joint Filler

DESCRIPTION:

PIP AM-JF-Epoxy is a three-component, antimicrobial, flexible epoxy joint filler. Packaging is available in pails for machine or hand mixing. **PIP AM-JF-Epoxy** has superior chemical resistance, thermal shock resistance making it ideal for use as a control joint filler for concrete joints and epoxy mortar as well as standard concrete horizontal surface cracks.

PIP AM-JF-Epoxy 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-JF-Epoxy protects joints in industrial floor joints subject to heavy traffic and abuse from trucks, cars, forklifts and steelwheeled carts. Used to fill, rebuild and repair control and construction joints in concrete and polymer flooring mortars, as well as patching random cracks, patch gouges, holes and surface defects. **PIP AM-JF-Epoxy** is flexible, allowing for limited crack movement protecting concrete and polymer flooring edges from spalling under heavy loads.

ADVANTAGES:

- Low Odor
- High chemical resistance
- Excellent impact and abrasion resistance
- Flexible, 200% elongation
- Remains flexible
- Resists hot water dumping up to 250°F
- Resists staining and major chemical spills of cleaning and industrial chemicals
- Meets USDA requirements
- Complies with VOC regulations for Industrial Maintenance Coatings in the OTC and CA.

STORAGE: Materials should be stored in original un-opened containers indoors between $65^{\circ}F$ ($18^{\circ}C$) and $90^{\circ}F$ ($32^{\circ}C$) and at or below 50% RH.

SHELF LIFE: Un-opened containers 1 year from date of manufacture.

PACKAGING KITS/ PART NUMBERS: Volume Mix Ratio: 6A: 1B

PIP AM-JF-Epoxy 1.70 gallon kit 122LF at ½" x ½" JF-Epoxy-A/2SF, AM-JF-Epoxy-B/Q, CP-U###/P

Color packs designated as **CP-U###/P** can be used with **PIP AM-JF-Epoxy**. Many standard and custom colors are available; please refer to the price list for available colors. It is important to have a color consistent between the mortar and joint.



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

LIMITATIONS:

Contamination and surface defects (fisheyes): If contaminates of oils, silicones, mold release agents and/or others are present, Top coats of **PIP AM-JF-Epoxy** may fisheye or crawl away from the surface. Surface contaminates should be removed with a suitable detergent prior to application. Solvent cleaning of silicone contaminates may make the situation worse; please contact the lab for additional recommendations. **PIP AM-JF-Epoxy** May amber over time from UV exposure.

MATERIAL PROPERTIES*:

Properties	Test Method	Results
Flash Point	ASTM D3278	≥215 °F (102°C)
Volume Solids	ASTM D2369	100 %
Mixed Viscosity	ASTM D2196	> 100,000 cPs
Set Time – Tack Free	70 degrees - ¼ x ¼ "	6 - 8 Hours
Cure Time – Traffic	70 degrees - ¼ x ¼ "	12 - 24 Hours
Volatile Organic Compound	ASTM D3960	0 g/l

CURED PROPERTIES*:

Properties	Test Method	Results
Shore A Hardness	ASTM D2240	24 Hrs – 45 7 Days – 70 Ultimate – 75-85
Tensile Strength	ASTM C307	200 psi
Tensile Elongation	ASTM C307	200%
Adhesion to Concrete	ASTM D4541	350 psi concrete failure
Application Thickness		¼" x ¼" to 1" x 1"

*Properties and results are based on laboratory testing at 72°F (22°C) %50 RH, theoretical calculations and estimates.

COVERAGE RATE:

Linear Feet per Gallon (Approximate)

Inches	1/4	1/2	3/4	1
1/4	308	154	103	72
1/2	154	72	51	38
3/4	103	51	38	26
1	72	38	26	19

PIP AM-JF-Epoxy

Antimicrobial Epoxy Joint Filler

INSPECTION AND APPLICATION:

Caution! Follow all precautions and instructions prior to installation.

SUBSTRATE: Substrate concrete must be free of curing membrane, silicate surface hardener, paint, or sealer and be structurally sound. If you suspect the concrete has been treated or sealed, prepare substrate for complete removal of treatment.

MOISTURE: Concrete must be dry before applications of this floor coating. Test concrete for moisture vapor transmission (MVT) using calcium chloride testing ASTM F1869 or in-situ RH testing ASTM F2170. Do not exceed a maximum result of 3 pounds per 1000 sq. ft. over 24 hours or a value below 70% RH (internal concrete humidity). Consult your PIP technical representative for further details.

VAPOR/CONTAMINATION: Testing for MVT is critical, however it does not guarantee against future problems. If there is no vapor barrier or the vapor barrier is damaged, this to can contribute to floor failure. Contamination to concrete from oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) may also contribute to floor failure.

TEMPERATURE AND HUMIDITY: During the application and cure of the coating, the substrate temperature, material temperature and room conditions should be maintained between 65°F (18°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30-80%. DO NOT apply coatings unless the floor temperature is more than five degree over the dew point.

APPLICATION EQUIPMENT:

- Protective equipment and clothing as called for in the MSDS
- Jiffy[®] Mixer Blade model ES
- Clean container for mixing material
- Low speed high torque drill motor

CHEMICAL RESISTANCE*:

PIP AM-JF-Epoxy	1 Day	7 Days		
ALKALIES				
10% Ammonium Hydroxide	E	E		
50% Sodium Hydroxide	E	E		
SOLVENTS				
Ethylene Glycol	E	G		
Isopropanol	F	F		
Methanol	Р	Р		
d-Limonene	E	E		
Jet Fuel	G	G		
Gasoline	Р	Р		
Mineral Spirits	F	F		



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

Xylene	Р	Р		
MISCELLANEOUS				
20% Ammonium Nitrate	E	E		
Brake Fluid	E	G		
Bleach	E	E		
Motor Oil	E	E		
Skydrol®	F	Р		
20% Sodium Chloride	E	E		
10% TSP	E	E		

*Based on spot testing of the clear coating after 14 days of cure. Pigmented versions may see reduced chemical resistance and staining.

Legend: E- Excellent (Not Effected) G-Good (Limited Negative Effect) F-Fair (Moderate Negative Effect) P-Poor (Unsatisfactory)

PREPARATION:

Existing Joints: The best performance is achieved with a chase cut of existing cracks. Do not wet cut. Cut Joint must be completely dry.

New Joints: Cut the joint to the desired thickness and depth. Deep joints should be filled with dry sand or backer rod.

JOINT SELECTION: PIP AM-JF-Epoxy is ideal for filling control joints. Construction joints may be filled with PIP AM-JF-Epoxy but might need to be re-built and re-cut depending on conditions. Isolation or expansion joints must be filled with a flexible material designed for expansion and should not be coated over.

PRIMERS: PIP AM-JF-Epoxy does not require a primer, but epoxy primers can be used.

APPLICATION:

MIXING: Pour the **AM-JF-Epoxy-B/Q** into the **JF-Epoxy-A/2SF** and mix with a Jiffy[®] Mixer Blade model ES. While mixing, add the color pack (**CP-U###/P**) and continue to mix for 3 minutes.

MIX: Shake caulk tube together for 3 minutes to mix color prior to dispensing with caulk gun.

APPLY PIP AM-JF-Epoxy: at a rate of 1/4''-1'' to the joint using a caulk gun or dispensing pump. Do not over fill as joint material will over flow onto the surface of the floor.

CURING (DRYING): Allow the **PIP AM-JF-Epoxy** to cure for a minimum of 12 hours after application at 75°F (24°C) and 50% RH before and applying the other coatings as a top coat or opening to traffic. Only open the floor to light traffic after sufficient cure, allow more time for low temperatures and higher humidity or for heavier traffic. Full coating properties may take up to 7 days to develop.

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

DISPOSAL: Dispose in accordance with federal, state, and local regulations.

PIP AM-JF-Epoxy

Antimicrobial Epoxy Joint Filler

READ MATERIAL SAFETY DATA SHEET (MSDS) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED. FOR INDUSTRIAL USE ONLY. KEEP OUT OF REACH OF CHILDREN.

MAINTENANCE GUIDELINES:

Allow filler to cure at least one day before cleaning by mechanical means (IE: sweeper, scrubber, disc buffer).

Use only neutral non butyl cleaning detergents on your joint filler. Test any new cleaning product on a non-conspicuous area prior to using to avoid damage to the filler.

CAUTION: Heavy objects dragged across the joint can scratch and damage the filler. Avoid gouging or scratching the surface.

Pointed items or heavy items dropped on the floor may cause chipping or concrete pop out damage.

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, 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



PIP AM-JF-Epoxy

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

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.