

# PIP 1875

## High Elongation, Hard, Rapid Cure Epoxy System



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

### DESCRIPTION:

**PIP 1875** is a two or three-component high elongation, fast curing epoxy coating which provides the hardness, adhesion, and durability of epoxies with a degree of flexibility common to polyurethane or polyurea. **PIP 1875** possesses a very fast cure compared to epoxies with similar elongation properties. It is recommended for use as a hard yet flexible membrane in various applications where it is important to protect a structure from damages due to repeated shift and movement, including above grade mezzanines. **PIP 1875** can also be used to fill control joints in combination with a foam backer rod or similar barricade. It also provides cured coatings with the flexibility and strength needed for heavy stress concrete flooring. **PIP 1875** can also be used as a membrane and/or broadcast with aggregate to form a tough but flexible impact resistant wear course. It is compatible with all PIP epoxy and urethane coatings.

### ADVANTAGES:

- Productivity/fast return to service
- High elongation and hardness
- Low temperature 50F cure
- Easy 1:1 mixing ratio
- Excellent adhesion
- Solvent free/Low VOC

**STORAGE:** Materials should be stored in original un-opened containers indoors between 65°F (18°C) and 90°F (32°C) and at or below 50% RH.

**SHELF LIFE:** 1 year from date of manufacture (un-opened).

### KIT PART NUMBERS:

**PIP 1875 Kit – 2.00 Gal**  
1875-A/1, 1875-B/1

**PIP 1875 Kit – 10.00 Gal**  
1875-A/5, 1875-B/5

**PIP 1875 Kit – 106.00 Gal**  
1875-A/55, 1875-B/55

**PIP 1875** can be tinted in the field with PIP CPU Universal epoxy and urethane colorant at a rate of 4 oz/ mixed gallon.

### MATERIAL PROPERTIES\*:

Properties	Test Method	Results
Flash Point	ASTM D3278	≥255 °F (124°C)
Volume Solids (mixed)	ASTM D2369	100 %
Mixed Viscosity	ASTM D2196	2000-3000 cPs
Pot Life		10-12 minutes
Cure time to foot traffic		2.5 hours 75F 4.5 hours 50F
Elongation	ASTM D638	140 %
Tensile Strength	ASTM D638	2400 psi
Tensile Modulus	ASTM D638	22446 psi
Hardness	ASTM 2140	Shore D 80
Compressive Modulus	ASTM D695	6400 psi

\*Properties and results are based on laboratory testing at 72°F (22°C) %50 RH, theoretical calculations and estimates. Typical properties, as stated, are to be considered as representative of current production and should not be treated as specifications.

### INSPECTION AND APPLICATION:

**Caution! Follow all precautions and instructions prior to installation.**

**SUBSTRATE:** The substrate must be free of curing membranes, silicate surface hardener, paint, or sealer and be structurally sound. If you suspect concrete has been treated or sealed, proceed with complete removal process. Consult your PIP representative for further instruction if silicate hardeners or membranes have been utilized.

**MOISTURE:** Moisture and moisture vapor transmission rates are dynamic in nature and may change over time. Initial testing does not guarantee future results. If the relative humidity of the concrete substrate is over 75% (using ASTM F2170), Protective Industrial Polymers must be consulted and issue a written moisture mitigation recommendation prior to product use.

**VAPOR/CONTAMINATION:** Testing for MVT does not guarantee against future problems. If there is no known vapor barrier or the vapor barrier is inadequate, there is an elevated risk of bond failure. Other factors including the migration of oils, chemicals, excessive salts or Alkali Silica Reaction (ASR) from the concrete from may also elevate the risk of adhesion difficulties. Consult your PIP representative for approved mitigation treatments.

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**TEMPERATURE AND HUMIDITY:** During the application and cure of the coating, the substrate temperature, material temperature and room conditions must be maintained between 50°F (10°C) and 90°F (32°C). Relative Humidity (RH) should be limited to 30-80%. DO NOT apply coatings unless the surface temperature is more than five degree over the dew point.

### APPLICATION EQUIPMENT:

- **Protective equipment and clothing as called for in the SDS (Safety Data Sheet)**
- **Jiffy® Mixer Blade model ES**
- **Clean container for mixing material**
- **Low speed high torque drill motor**
- **High quality short nap roller covers- ¼-3/8" inch nap**
- **Application Squeegee**

### PREPARATION:

Surface dirt, grease, oil and contaminants must be removed by detergent scrubbing and rinsing with clean (clear) water.

*Mechanical Preparation:* Blasting or grinding the surface is the preferred method of preparation. The success of industrial diamond grinding as a concrete preparation method will vary depending on technique and the hardness of the concrete.

**JOINTS:** All non moving joints (control joints) can be filled with **PIP 1875** providing a hard but flexible joint compound. Isolation or expansion joints must be filled with a more flexible material such as a Polyurea or flexible urethane sealant designed for expansion and strapped with 6" chopped strand fiberglass before coating over.

**MIXING:** Use a Jiffy® ES mix blade attached to a slow speed drill. Mix only enough material at one time that can be applied without exceeding the pot life. **Note:** Once this material is opened and mixed it can't be resealed for later use. Do not add solvents or thinners without first consulting Protective Industrial Polymers for specific application requirements.

**Volume Mix Ratio: 1A: 1B: .0625-.125C (8-16 oz).**

Color amount is variable depending on color and application thickness. Up to 1 pint per 2 gallon mix may be added.

**Mix ratio is critical and must be measured very accurately or poor adhesion is likely with urethane or epoxy top coats. As both materials are relatively high in viscosity, it is imperative to remove all hang-up in metering pails and cans for both Parts A and B.**

**MIX:** Mix all components together for 2-3 minutes. **DO NOT THIN!**

### APPLICATION:

**PIP 1875 has a very short working time. Material should be placed and spread onto the floor with a squeegee within 5 minutes and leveled with a roller within 10 minutes for best results.**

**Application thickness range is 10-25 mils.**

The coating may be broadcasted to saturation with decorative flake, quartz, or other skid resistant media. For best results, start the broadcast after the film has self leveled and before 20 minutes has expired.)

**PIP 1875** is not UV stable and therefore will yellow. Do not use as a clear coating in decorative situations.

**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.

**READ SDS (SAFETY DATA SHEET) FOR SAFETY AND PRECAUTIONS. USE PRODUCT AS DIRECTED. KEEP OUT OF REACH OF CHILDREN.**

### MAINTENANCE GUIDELINES:

**Allow floor coating to cure at least one week before cleaning by mechanical means (IE: sweeper, scrubber, disc buffer).**

**CARE:** Increased life of the floor will be seen with proper maintenance and will help maintain a fresh appearance of your new Protective Industrial Polymers floor. Regularly sweep to avoid ground in dirt and grit which can quickly dull the finish, decreasing the life of the coating. Spills should be removed quickly as certain chemicals may stain and can permanently damage the finish.

Only soft nylon brushes or white pads should be used on your new floor coating. Premature loss of gloss can be caused by hard abrasive bristle Polypropylene (Tyrex®) brushes.

**CAUTION:** Heavy objects dragged across the surface will scratch all floor coatings. Avoid gouging or scratching the surface. Pointed items or heavy items dropped on the floor may cause chipping or concrete pop out damage. Plasticizer migration from rubber tires can permanently stain the floor coating. If a rubber tire is planned to set on the floor for a long period of time, place a piece of acrylic sheet between the tire and the floor to prevent tire staining. Rubber burns from quick stops and starts from lift trucks can heat the coating to its softening point causing permanent damage and marking.

**REPAIR:** Repair gouges, chip outs, and scratches as soon as possible to prevent moisture and chemical under cutting and permanent damage to the floor coating.

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### 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 MOISTURE, 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, NEGLIGENCE 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.

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