WATER BASED EPOXY

PRODUCT TECHNICAL DATA SHEET

PPC WATER BASED EPOXY is a two-component, waterborne epoxy coating system formulated for use on both damp and dry concrete surfaces, as well as various substrates, including metal. It promotes excellent adhesion for subsequent coatings such as epoxy, polyurethane, and polyurea systems. This versatile formulation provides good corrosion protection, excellent abrasion resistance, long-term durability, and reliable chemical resistance. Suitable for use as both a primer and protective sealer, PPC WATER BASED EPOXY delivers a durable, high-performance finish for a wide range of commercial and industrial applications. Available in three finish option: Gloss (G)

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WHERE TO USE

- Garage Floors
- Food Processing Plants
- Freezers and Cold Storage
- Showroom and restaurant floor
- Industrial/Manufacturing Facilities
- Hospital and healthcare facilities
- Warehouses
- Waste Water Treatment Plants
- Restrooms and cafeterias
- Commercial and Industrial facilities

ADVANTAGES

- Low VOC & Fast dry speed
- Early water resistance & Long pot life
- Dense surface resistant to bacteria and moisture and
- easy to clean
- May apply several layers onto itself
- Contains no solvents, allowing for interior application
- without harmful odors
- Excellent adhesive properties, allowing application
- on many substrates
- Resists to many chemical products
- Can be used on damp or dry surfaces
- Can be used for water basins

THEORETICAL COVERAGE RATES

Mileage per gallon (4-6 mils thickness as primer): 300 - 400 ft2/gal
6-10 mils thickness as a second coat: 267 – 160 ft2/gal

PACKAGING & COLORS

3-gallon kit: (11.35 liters)
Color: Part A – Clear, Part B - Amber

MIX RATIO

PPC WATER BASED EPOXY may not be diluted under any circumstance.
Mix Ratio, by volume A: B = 2:1

SHELF LIFE AND STORAGE

12 months in original unopened factory sealed containers. Keep away from extreme cold, heat, or moisture. Keep out of direct sunlight and away from fire hazards

PHYSICAL/CHEMICAL CHARACTERISTICS

Recommended Thickness	
Primer	4 - 6 mils
PPC Water Based Epoxy	6 - 10 mils
Drying time	1-2 hours @ 25°C (77°F)
Solids Content, by volume	
Part A	50-60%
Part B	50-58%
Mix	55-60%
VOC	29 g/L
Specific Gravity	
Part A	1.10
Part B	1.05
Thinner Recommended	Water
Recoat Window	2 - 24 hours
Pedestrian Traffic	24 hours
Normal Traffic	48 hours
Heavy Equipment Traffic	> 72 hours
Viscosity @ 25°C (cps)	
Part A	150-250
Part B	220-280
Mix	200-300
Permeance ASTM E96 Water –Procedure B	12.6 perms at 4 mils dry 7.3 perms at 6 mils dry
Water Absorption (%), ASTM D570	0.3%
Abrasion resistance, ASTM D4060 Taber Abrade CS-17 Wheel 1000g/1000 cycles	177 mg loss
Resistance to direct impact (Asbestos cement CGSB 1-GB-71)	Not affected at 6 lb.-in
Friction CGSB 1-GP-71 (125.1) 10000 cycles	Not affected
Loss of luster before and after 10000 rubbing cycles, ASTM D523	No loss
Adhesion to concrete ASTM D4541	>350 lb./po2 (substrate failure)
Static friction coefficient, ASTM C1028 5.3cm/minute	Dry surface 0.85 Wet surface 0.67
VOC Content	29 g/liter

***Please note that the indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material to cover the surface area. ***

****Please note that the indicated viscosity is for clear product only. Any addition of colorant may affect the viscosity. ****

SURFACE PREPARATION

Old Concrete

Concrete surface must be cleaned and mechanically prepared using shotblasting, sand blasting, and/ or diamond grinding. All oils, sealers, curing agents, waxes and fats must be removed prior to product application. Do not apply onto wet substrates. Chloride, moisture, and pH levels should be checked prior to application. All cracks and substrate imperfections should be filled prior to application.

New Concrete

New concrete should be allowed to cure for a minimum of 30 days. Compression resistance of concrete must be at least 25 Mpa (3625 lbs./inch2) after 28 days and traction resistance must be at least 1,5 Mpa (218 lbs./inch2). Shotblasting, sand blasting, and/or diamond grinding is required to remove the surface laitance that appears during the concrete finishing and curing process. All cracks and substrate imperfections should be filled and repaired prior to application.

OVERVIEW OF INSTALLATION STEPS

Mixing: Materials should be pre-conditioned to a minimum of 15°C (59°F) prior to use. Thoroughly mix each component separately using paddle mixers and a drill for a minimum of 2 minutes to place the solids content evenly in suspension. Pour component B into component A using the proper mixing ratio of 1A:1B by volume. Mix both components for at least 3 minutes using a drill at low revolution (300 to 450 rpm) to reduce trapping of air. While mixing, scrape bottom and walls of container at least once to ensure a homogeneous mix. Only prepare quantity that may be applied during pot life of mixture.

APPLICATION BASICS

Apply mixed product on the prepared surface tightly (thin film) using a rubber rake and pass a roller to obtain a uniform coating. Avoid creating puddles.

CLEANING

Clean all tools and materials with the cleaner/thinner for epoxies. Wash hands and skin carefully with warm soapy water. Once product has hardened, it may only be removed through mechanical means..

LIMITATIONS

- Minimum/Maximum temperature of substrate: 15°C / 30°C (59 °F / 86°F)
- Maximum relative humidity during application and curing: 80%
- Humidity content of substrate must be < 4 % when coating is applied
- Do not apply on porous surfaces where a transfer of humidity may occur during application
- Avoid exterior use on substrates at ground level
- Protect from humidity, condensation and contact with water during the 24-hour initial curing period
- Surface may discolor in areas exposed to regular ultraviolet light

HEALTH AND SAFETY

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult a physician. For respiratory irritations, move affected person to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet

LIMITED WARRANTY

PPC warrants its products to be free of manufacturing defects and that they will meet PPC current published physical properties. PPC warrants that its products, when properly installed by a state licensed contractor according to PPC guide specifications and product data sheets over a sound, properly prepared substrate, will not fail for a period of 12 months. Seller's sole responsibility shall be to replace that portion of the product which proves to be defective. There are no other warranties by PPC of any nature whatsoever expressed or implied, including any warranty of merchantability or fitness for a particular purpose in connection with this product. PPC shall not be liable for damages of any sort, including remote or consequential damages resulting from any claimed breach of any warranty whether expressed or implied. PPC shall not be responsible for use of this product in a manner to infringe on any patent held by others. In addition, no warranty or guarantee is being issued with respect to appearance, color, fading, chalking, staining, shrinkage, peeling, normal wear and tear or improper application by the applicator. Damage caused by abuse, neglect and lack of proper maintenance, acts of nature and/or physical movement of the substrate or structural defects are also excluded from the limited warranty. PPC reserves the right to conduct performance tests on any material claimed to be defective prior to any repairs by owner, general contractor, or applicator.

DISCLAIMER

All guidelines, recommendations, statements, and technical data contained herein are based on information and tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest or guarantee that any hazard listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and PPC makes no claim that these tests or any other tests, accurately represent all environments. For further information please contact us at the following email address: orders@premierprotectivecoatings.com or visiting www.premierprotectivecoatings.com

DISPOSAL

Any surplus material, including both Part A and Part B components, should be combined and allowed to cure. Upon curing, the product can be disposed of without any restrictive conditions. Uncured materials should be securely stored in an appropriate sealed container and disposed of in strict adherence to the applicable provincial, state, municipal, and federal regulations.

CAUTION

ALWAYS KEEP OUT OF THE REACH OF CHILDREN
KEEP FROM FREEZING CONDITIONS

INTENDED FOR INDUSTRIAL USE ONLY