

PPC NOVOLAC EPOXY 100

PRODUCT TECHNICAL DATA SHEET

PPC Novolac Epoxy 100 is 100% solids, advanced novolac epoxy formulation engineered to deliver a dense, highly cross-linked film with exceptional resistance to harsh chemicals, including 98% sulfuric acid and a wide range of industrial solvents. This product maintains a practical working time, cures without blush, and hardens properly in temperatures as low as 40°F.

PPC Novolac Epoxy 100 is well-suited for demanding environments that require superior chemical protection. It is particularly effective in areas exposed to concentrated acids such as metal finishing operations, electronics manufacturing, chemical processing zones, storage rooms, and wastewater treatment facilities.

WHERE TO USE

- Pharmaceutical
- Beverage processing
- Kitchens
- Laboratories
- Food processing
- Washing rooms
- Manufacturing/Fabrication
- White Rooms
- Electroplating
- Battery Charging Areas
- Chemical Storage
- Or any installation that necessitates heightened protection against chemical damage.

ADVANTAGES

- Outstanding resistance to inorganic acids, including 98% sulfuric acid.
- Very good performance under elevated temperatures (up to 175°F / 80°C)
- Capable of curing low-temperature conditions down to 40°F (4.5°C)
- Low odor, 100% solids, low VOCs
- High chemical resistance (Immersion, splashes, and spills)
- Resistant to concentrated acids and aggressive chemicals (98% sulfuric, 40% nitric, 85% phosphoric)
- Excellent adhesion to concrete
- Traffic abrasion resistance
- Versatile, offering self-levelling or diffusion finishes
- Resistant to water immersion
- Easy to clean and maintain

THEORETICAL COVERAGE RATES

133-200 sq ft. per gallon at (8-12 WTF)

PACKAGING & COLORS

Packaging: 1.5 gallon (5.7 L), 15 gallon (56.8 L).

Mix ratio 2A: 1B

Color: 10 Standard colors & clear available.

MIX RATIO

PPC Novolac Epoxy 100 mix ratio is 2A:1B, meaning two parts A (resin) to one part B (hardener) by volume.

SHELF LIFE AND STORAGE

One [1] year from date of manufacture, in original unopened container with the exception of the Clear A Component only. Store away from heat sources. Store between 50°F and 85°F (10°C – 30°C). Do not allow to freeze.

PHYSICAL/CHEMICAL CHARACTERISTICS

Percentage solids by weight.....	100%
Mix Ratio (By Volume)	2A:1B
VOC Clear & Thixotropic.....	<1 g/l
VOC Pigmented & Thixotropic.....	<16 g/l
Hardness (Shore D)	81 ASTM D 2240
Tensile strength.....	8,200 psi ASTM D 638
Elongation, %	5% ASTM D 638
Compressive strength.....	12,500 psi ASTM D 695
Yield strength.....	13,790 psi ASTM D 695
Flexural strength	10,200 psi ASTM D 790
Bond strength to concrete	>350 psi ASTM D 4541
Cure Time (77°F):	
Dry to touch.....	4 Hours
Light Traffic.....	10 Hours
Full Cure/Chemical Resistance.....	7 Days
Cure Time (50°F):	
Dry to touch.....	18 Hours
Light Traffic.....	36 Hours
Full Cure/Chemical Resistance.....	14 Days

OVERVIEW OF INSTALLATION STEPS

Surface Preparation:

- Concrete must be fully cured for a minimum of 30 days and have a compressive strength of at least 3,000 psi.
- Substrates must be clean, structurally sound, and free of contaminants including waxes, loose paint, curing compounds, oil, or any material that may interfere with adhesion. Mechanical surface preparation is required to achieve an ICRI/CSP profile of 3–4.
- Acid etching is not acceptable and will void the manufacturer's warranty. After preparation, vacuum all surfaces to remove dust and debris.
- Previously coated substrates that are well bonded must be mechanically cleaned and uniformly abraded to produce a consistent, matte, open-pore surface suitable for receiving the new coating system.

Mixing:

- PPC Novolac Epoxy 100 is supplied in pre-measured kits and bulk sets. Accurate proportioning and complete homogenization are essential for proper performance.
- The mixing ratio is 2 parts A to 1 part B by volume. Premix the Part A component for approximately 3 minutes prior to combining the components. Mechanical mixing is required; do not hand mix.

- Ensure the drill mixer is moved throughout the container, thoroughly scraping the sides and bottom.
- If a color pack is required, add it to Part A first and blend until uniform before introducing Part B. Standard color packs should be added at 1 pint per 1.5 gallons of mixed material. Highly pigmented colors such as Safety Blue, Safety Red, Safety Yellow, and White require 1 quart of color pack per mixed gallon to achieve proper opacity and coverage.
- Add Part B to the premixed Part A and blend using a medium-speed drill mixer for three (3) minutes. Immediately place the mixed material onto the floor after blending to avoid premature reaction in the container.

Application:

- PPC Novolac Epoxy 100 may be applied using a roller, trowel, or squeegee. For standard applications, place the material with a flat squeegee and immediately back-roll using a high-quality 1/4" or 3/8" solvent-resistant roller.
- Apply in a thin, uniform film of 8–12 mils (0.20–0.30 mm). Do not use a dip-and-roll method; the mixed material should be poured onto the substrate right after blending.
- Verify that the primed surface is free of pores or pinholes. A second coat may be required to achieve a continuous, defect-free film before installing additional layers of the system.
- For areas exposed to heavy impact or mechanical stress, PPC Novolac Epoxy 100 must be installed as an aggregate-filled system at a minimum thickness of 50 mils. The material can be placed as a self-leveling slurry, slurry-broadcast, or trowel-applied system depending on project requirements.
- It is the installer's responsibility to verify concrete moisture levels in accordance with ASTM F2170–19. If moisture readings exceed 85% RH, a compatible moisture-mitigation system must be applied following the manufacturer's published technical guidelines. Contact PPC Technical Support for additional recommendations or clarification.

LIMITATIONS:

- Do not use in environments where the material will be exposed to continuous temperatures above 175°F (80°C).
- Before application, verify and document that ambient temperature and humidity conditions are at least 5°F above the dew point.
- This product is not recommended for use as a clear decorative topcoat.

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