

PEP[™]

High Performance Epoxy Primer



Building
&
Transportation



Oil, Gas
&
Industrial



Offshore
&
Onshore



Water
&
Wastewater



PRODUCT DESCRIPTION

The CTech-LLC[®] High Performance Epoxy Primer (PEP[™]) is a setting, damp-tolerant epoxy resin system intended for priming the surface specifically for use in wet or damp substrates. PEP[™] is a clear, low viscosity, 100% solids formulation with excellent flow, good application and adhesion properties. The low viscosity wets the surface rapidly and penetrates minor cracks and surface imperfections. Primer is an easy to use 5:1 volumetric mix, and cures quickly with low odor. PEP[™] can be used in different fields like strengthening and retrofitting of structural members and also concrete repair works.

ADVANTAGES

- Very low viscosity
- Excellent adhesion to poorly prepared substrates and a wide range of substrates.
- Good humidity and corrosion resistance
- Improves substrate chemical resistance
- Fast cure response
- Epoxy primer penetrates deeply to eliminate concrete dusting, providing for easy cleanup and minimum maintenance.
- PEP[™] will effectively protect against the intrusion of destructive salts, oils, solvents, and gasoline.
- Top-graded anti-corrosive primer.

PHYSICAL DATA

Net Weight	Component A = 20 kg Component B = 5 kg
Color	Component A is clear Component B is amber
Final Consistency	Moderately thin liquid form Suitable for brush or roller application
Pot Life	1-3 hours at 16o - 27o C
Density at 20 °C	Component A = 1.13 kg/L Component B = 0.99 kg/L Mixed Product = 1.07 kg/L

TYPICAL USES

- Is used in moist surface to interfere with the normal adhesion of epoxy materials to bondable substrates.
- This material is used as a primer under the carbon wrap systems and laminates.
- Is used for filling spalls and bug holes.

INSTALLATION PROCEDURE

SURFACE PREPARATION

Substrate preparation can effect on the quality of the Epoxy primer systems in retrofitting and concrete repair applications. All the surfaces must be cleaned from dirt, grime, dust, curing compounds, oils, grease, waxes and all the other contaminated materials which may cause voids behind systems. An industrial vacuum cleaner must be used to remove dust and dirt. All the surfaces need grinding, Sandblasting, shot blasting, pressure wash or other common mechanical methods to reach an even concrete substrate. In case that use water for preparing, it should be dried for 24 hours.

Remember that concrete surfaces must be fully dried or cured.

APPLICATION

Surface of all the contaminated elements must be cleaned thoroughly. Mix part A and B together with a low speed mixer. it can be applied with a brush, roller or trowel. Use care to apply an even coat over the entire surface to help prevent sagging. Using a roller can help to

eliminate air bubbles in the primer and substrate, it can also ensure that there is a good bonding between them. Coverage rate will vary depending upon surface porosity. One coat is usually sufficient for sealing substrates when epoxy primer is used as a primer. And in case of using as sealer/finish, two coats are required to achieve a uniform sheen. Two coats may also be required when sealing lightweight concrete or other highly porous surfaces.

TECHNICAL DATA

PROPERTY	ASTMN METHOD	TYPICAL TEST VALUE
Tg	E-1356	67° C
Tensile Strength*	D-638 Type 1	54.0 MPa
Tensile Modulus	D-638 Type 1	2.11 GPa
Elongation Percent	D-638 Type 1	3.4%
Flexural Strength	D-790	104.6 MPa
Flexural Modulus	D-790	53 GPa

*Curing Schedule 72 hours post cure at 60° C.

STORAGE & SHELF LIFE

- PEP™ must be stored at 5°-35°C and cool place but do not allow to freeze. Temporary storage should not be in areas of high temperatures, the lids of both components should be kept tightly sealed.
- Wet epoxy primer (PEP™) can be stored for 2 years in unopened packaging.

CAUTION

All components of FRP systems and concrete repair mortar may cause skin irritation and sensitization. Use of chemical resistant gloves is recommended. Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty. Resins products can cause strong eye irritation. Avoiding eye contact and Using safety goggles is necessary.

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IMPORTANT NOTE:
Before using any CTech-LLC[®] product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at www.ctech-llc.com.

WARANTY:
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