

ERS™ PW

Epoxy Resin Saturant for Potable Water Applications



Building
&
Transportation



Oil, Gas
&
Industrial



Offshore
&
Onshore



Water
&
Wastewater



PRODUCT DESCRIPTION

The CTech-LLC[®] epoxy resin saturant (ERS™ PW) is epoxy matrix materials for saturating composite fibers and bonding applications. As a two part epoxy, ERS™PW epoxy resin system designed for applications in areas where contact with potable water.

ADVANTAGES

- Ideal for areas where contact with potable water.
- The reactivity can be adapted by mixing the hardener.
- Good impregnation due to optimized mixed viscosity for wet lay-up.
- ERS™PW epoxy resin is easy to use and can be known as an eco-friendly product.
- Curing of ERS™PW epoxy resin is very quick and convenient.

PHYSICAL PROPERTIES

Chemical Base	Epoxy resin
Mixing Ratio	100:50 Part A: 100 Part B: 50
Color*	Component A is white Component B is grey paste Mixed resin and hardener is grey paste
Pot Life	90 Minutes at 21° C
Density at 21° C ASTM D792	Mixed product = 2.1 kg/L
Application Methods	Hand lay-up
Tg** (ASTM D4065)	70°C
Shelf Time	18 months
Storage Condition	Store dry and away from direct sunlight 4° - 40° C

*Different Colors are available by customer's order

TYPICAL USES

The ERS™PW epoxy resin is designed to thoroughly wet out the fiber forming a composite matrix. ERS™PW is especially suited to the hand lay-up process and can be used where drinking water approval is needed.

INSTALLATION PROCEDURE

PREPARATION OF SUBSTRATE

- For retrofitting / gfrp lining applications, substrate preparation can highly effect on the quality of the performance of CFRP and GFRP composite systems.
- 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 the CTech-LLC[®] composites.
- Repair mortar must be used to repair all the eroded or damaged concrete surfaces.
- 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 substrate.
- The sharp edges must be smooth and rounded to a minimum radius of 30 mm.
- Note that concrete surfaces must be fully dried or cured so adhesive can properly dry.

MIXING

Epoxy compounds are usually supplied in two different containers. Before pouring the contents of component B into contents of component A, each part should be stirred separately to avoid deposit in container. Then part A and B should be mixed together depending on the required quantity. Process of mixing should take 3-5 minutes with a low speed

mixer. After mixing resin and hardener, you'll have about 90 minutes time (at temperature 21°C) to apply the material. Clean mixing tools with a proper towel to reuse them.

APPLICATION

- For retrofitting and gfrp lining apply the mixed Product to the prepared substrate by brush, roller or trowel ensuring uniform and complete coverage.
- Cut fabric with a pair of scissors to the desired size.
- Place the carbon/glass fabric onto the first coat of adhesive.
- For multiple layers repeat the above steps.
- If exposed to sunlight, top coat the wrap with a light stable top coat.

STORAGE & SHELF LIFE

- ERS[™]PW must be stored in a dry and cool place. Temperature should be between 4° to 40° C. Avoid freezing the product and keep it away from direct sunlight, flame or other hazards.
- ERS[™]PW must be stored in its original packaging. Lid of the container should be kept closed. Moisture can decrease shelf life of epoxy resins. With proper storage, resin and hardeners remain usable for at least 18 months.

PACKAGING

- Component A = 20 kg / Component B = 10 kg

CAUTION

All components of anti-acid mortar systems 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.