

PRODUCT DESCRIPTION

The CTech-LLC® Epoxy Resin Adhesive (ERA™200) is a two-component, high performance, solvent-free, 100% solids, low odor, offering outstanding shear and peel adhesion and very high levels of durability. This system consists of a resin and a hardener that can be formulated to offer a wide range of mechanical, thermal, optical and electrical properties.

Some of the benefits of using epoxy resin adhesive in strengthening and retrofitting of structures:

- Exceptional adhesion properties
- Good high and low temperature properties
- High Strength
- Moisture Insensitive
- Ambient cure
- Uniform stress distribution
- Easy application
- Long-term durability
- Gap filling capability
- Resistant to extreme shock, vibration, and flexing
- High fatigue strength.
- Low odor improves workplace environment

USES

- Connection of concrete to metals, overhead or vertical surfaces, and undersides of beams when applying composite materials, horizontal or vertical surfaces where excellent adhesion to a substrate is necessary for maximum strength, wall surfaces, and any surface where bonding between fabric and substrate is critical.
- Rigid pick-proof sealant for windows doors, joints, and more
- Cap seal for crack injection and repair of concrete defects.
- Paste new concrete on old concrete sections
- Use in passages, streets, bridges, sidewalks and factory loading locations
- Covering concrete surfaces against permanent moisture

SHELF LIFE

Epoxy resin adhesive can be stored for two years in its original packaging. Lid of the container should be kept closed. Moisture can decrease shelf life of epoxy adhesive.

STORAGE CONDITIONS

ERA™200 should be stored in a dry and cool place at 10° to 32° C. Avoid freezing the product and keep it away from direct sunlight, flame or other hazards.

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 2-3 minutes with a low speed mixer. After mixing resin and hardener, you'll have about 20 minutes time to apply the material. Clean mixing tools with a proper towel to reuse them.

EPOXY MATERIAL PROPERTIES

Color, Part A	Lt. Gray
Color, Part B	Tan
Color (Mixed)	Lt. Gray
Solids, %	100
Mixing Ratio (Parts A:B) by Weight	100:13
Gel Time	10 (min)
Consistency	Non-Sag Paste
Ultimate Strength @ 14 days, MPa	50
Elongation at break, %	2.5
7 day, 24-hour immersion, %	0.31

Data presented is typical laboratory values.

HOW TO USE

SURFACE PREPARATION

For retrofitting applications, substrate preparation can highly effect on the quality of the performance of systems.

- All the surfaces must be cleaned from dirt, grime, dust, curing compounds, oils, grease, waxes and all the other contaminated materials.
- 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 concrete 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.

APPLICATION

Surface of all the contaminated elements must be cleaned thoroughly. Prime the surface with a suitable type of primer.

Using a roller can help to eliminate air bubbles in the resin and substrate, ERA™200 can also ensure that there is a good bonding between them.

Mix part A and B together with a low speed mixer. Each compound is designed to meet specific performance requirements and is available for use in small to large. ERA™200 are widely used in the marine, automotive, aerospace, appliance, general assembly and construction industries. Applications are diverse and include bonding handles onto tools, aerospace structures, kitchen counter

tops, motor housings and mounting brackets.

LIMITATIONS

Proper temperature for applying adhesives is between 4°C to 40°C. For applying them must use adequate ventilation. They should not be used in cold and humid weather.

CAUTION!

Epoxy resin adhesive may cause skin and eye irritation and sensitization so use of chemical resistant gloves and safety goggles is recommended.

Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty.

SAFETY PRECAUTIONS

- Avoid breathing vapors
- Avoid contact eyes and skin
- Use safety gloves or a face shield and glasses.
- Wear rubber boots and protective suits.
- Do not eat, drink or smoke when using the products.

If any symptoms happened, go to open air and get medical attention.

FIRST AID

Flush eyes with large amounts of water If eye contact happened.

In case of skin contact, wash your skin with soap and hot water

If there is cough or difficulty in breathing, go to open air.

Eventually get medical attention if the irritations persist.

WARANTY

CTech-LLC® warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the date of purchase. CTech-LLC® shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory. The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before utilizing.