



1.0 Description:

- EPICHOR 500 is a two component, solvent free, clear epoxy system.
- It has low viscosity which allows for excellent penetration.
- Its low molecular weight combined with a long pot life makes it highly suitable for injection.

2.0 Uses:

- Used for crack injection, electrical encapsulation, and for bonding new concrete to old concrete.

3.0 Approval & Certification:

Shall be available on request

4.0 Colours:

Clear Liquid

5.0 Product Data:

Solid Content	: 99.00 %±1
Density	: 1.10 gm/cm ³
VOC	: nil

Notes: All above data is for the final mixed components.

6.0 Consumption:

Typical consumption for crack injection (per linear metre of crack) — depends on crack width and depth. Calculated using density 1.1 g/ml:

Width × depth Of crack (mm)	Volume of Crack (ml/m)	Mass of EPICHOR 500 (g/m)	Mass of EPICHOR 500 (kg/m)
0.5 × 10	5	5.5	0.0055
0.5 × 20	10	11.0	0.0110
0.5 × 30	15	16.5	0.0165
1.0 × 10	10	11.0	0.0110
1.0 × 20	20	22.0	0.0220
1.0 × 30	30	33.0	0.0330
2.0 × 10	20	22.0	0.0220
2.0 × 20	40	44.0	0.0440
2.0 × 30	60	66.0	0.0660
5.0 × 10	50	55.0	0.0550
5.0 × 20	100	110.0	0.1100
5.0 × 30	150	165.0	0.1650

Notes:

- *Field losses, leakages, porosity, multiple passes and tool losses occur. Add a safety factor of 10–30% depending on job conditions.*



- For variable cracks take the average width × depth over sample lengths, or calculate per length segment and sum.
- For porous substrates or leaking cracks expect higher usage — do a site trial.
- State on the datasheet that values are "typical" and depend on crack shape, porosity, site conditions and application method.
- For bidding, perform at least one trial injection on site to refine consumption and add a contingency in the bill of quantities.

7.0 Surface Preparation:

- The crack must be clean, dry, and free from any contaminants that may affect adhesion.
- Begin by removing dust, loose particles, laitance, weak edges, oils, grease, curing compounds, or any foreign material.
- Grease or oil must be removed either chemically or mechanically.
- If necessary, slightly widen the crack to ensure full penetration of the epoxy and remove any loose or separated layers.
- The substrate must be fully dry before starting.
- After cleaning, install the injection ports along the length of the crack and seal the crack on the surface between ports with an epoxy putty to prevent leakage during injection.
- Once the sealing material has cured, the area is ready for epoxy injection.

8.0 Application Methods:

1. Clean the crack thoroughly and remove all contaminants.
2. Grease must be removed either chemically or mechanically.
3. Widen the crack as needed and remove any weak or loose material.
4. Wear gloves, eye protection, and ensure proper ventilation.
5. Install injection nipples along the entire crack.
6. Seal the crack surface between the nipples with an epoxy mortar such as EPICHOR 1768.
7. Add the resin to the hardener in a suitable container and mix thoroughly.
8. Inject the mixed epoxy starting from the lowest nipple and continue until the material exits from the highest nipple, confirming complete filling of the crack.
9. Application must be completed within 120 minutes from mixing.
10. The following day, remove the nipples and seal the holes with epoxy mortar (e.g., EPICHOR 1768).
11. Clean tools with a suitable solvent such as thinner.

9.0 Product mixing Ration by weight:

Resin : Hardener : 2.85 : 1.00 by weight
Container : Sealed pre weighed Steel Containers

Notes:

- Product components shall not be divided as total weight of each shall be totally used.
- Mixed components should be transferred to a third container and remixing should take place.

10.0 Pot life, Drying and curing time:

Initial Curing Time : 24 hours at 24°C
Final Curing Time : 7 days at 24°C
Pot Life : 120 min. at 24°C
Reinjecting : shall not exceed 1 week

11.0 Disclaimer:

- The information in this document is given to the best of our knowledge, based on laboratory testing and practical experience. We cannot guarantee anything but the above-mentioned quality of the products themselves. Minor product variations may be implemented to comply with local requirements. We reserve the right to change the given data without further notice. Users should always consult us for specific guidance on the general suitability of this product for their needs and specific application practices.
- Samples of any approved delivered materials shall be retested after delivery.
- These products are for professional use only. The applicators and operators shall be trained, experienced and have the capability and equipment to mix/stir and apply the coatings correctly and according to our technical documentation. Applicators and operators shall use appropriate personal protection equipment when using this product. This guideline is given based on the current knowledge of the product. Any suggested deviation to suit the site conditions shall be forwarded to our responsible representative for approval before commencing the work.

12.0 Handling of Epoxy Products:

- Avoid contact with eyes and skin. Emergency showers and eyewash stations should be readily accessible.
- Adhere to work practice rules established by government regulations.
- Use personal protective equipment.
- When using, do not eat, drink, or smoke.

13.0 Compatibility:

- Primers applied prior to specified product shall always be epoxy based products.

14.0 First aid Measures:

- General advice: Seek medical advice. If breathing has stopped or is laboured, give assisted respirations. Supplemental oxygen may be indicated. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation immediately.
- Eye contact: Hold eyelids apart, initiate and maintain gentle and continuous irrigation until the patient receives medical care. If medical care is not promptly available, continue to irrigate for one hour.
- Skin contact: Immediately remove contaminated clothing, and any extraneous chemical, if possible, to do so without delay. Initiate and maintain gentle and continuous irrigation.
- Take off contaminated clothing and shoes immediately.
- Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.
- Inhalation: Move to fresh air.

15.0 Storage:

- Store in steel containers, above ground, and surrounded by dikes to contain spills or leaks.
- Do not store in humid or extra hot weathering conditions.
- Keep containers tightly closed away from heat & in dry, cool, and well-ventilated place.