

**Repair, Reinforcement and Restoration /
Epoxy Based Repair, Renovation and Reinforcement Products****REPOX® 310**

Epoxy Repair, Adhesive and Assembly Mortar

DESCRIPTION

Epoxy resin based, **solvent free**, thixotropic, double component structural repair, adhesive and assembly mortar.

APPLICATION AREAS

- Indoor and outdoor,
- Repairing reinforced concrete such as columns, beams and shear walls,
- Repairing wide cracks,
- Bonding ceramics, hard natural stones, mortars and brick walls,
- Bonding steel, iron, wood and glass.

TECHNICAL PROPERTIES

Components	A: Epoxy resin, B: Hardener
Color	A: White, B: Black
Mixture Ratio	A: 4.5 kg, B: 1.5 kg
Mixture Density	~ 1.80 kg/L
Application Temperature	Between +10°C and +30°C
Compressive Strength	≥ 65 N/mm ² 7 days (EN 12190)
Flexural Strength	≥ 25 N/mm ² 7 days (EN 196-1)
Bond Strength by Pull-off	≥ 2 N/mm ² 7 days (EN 1542)
Pot Life	~ 50 minutes
Complete Curing Time	7 days (20°C)
Service Temperature	-15°C / +60°C

ADVANTAGES

- Does not shrink and provides high mechanical strength.
- Very resistant to abrasion and impact.
- Resistant to chemicals. Has liquid and gas impermeability properties.
- Does not contain solvent.
- Does not require primer and bonds well to many structural materials.
- Thixotropic and does not sag in vertical applications.
- Provides adherence on dry and slightly damp surfaces.

CONSUMPTION

For 1.8 - 3.5 kg/m² (for 1 - 2 mm thickness) 3.3 L mortar is prepared with 6 kg product

PACKAGING

Sets of 6 kg (A+B) tin cans

APPLICATION

PREPARATION OF THE SURFACE

- Drain and block any water leakage, the surface should be dry.
- If it is to be used as repair mortar, cut the edges of the surface by breaking as perpendicular as possible and obtain geometric shapes such as square and rectangle.
- The surface must be free of weakly adhered parts, clear of materials which prevent bonding, such as dust, oil, paint, curing agents, detergents and mold release oils and dry.
- Remove the dust, dirt, concrete pieces on the surface with a brush or air compressor. Cover the hole with a sponge or piece of paper to prevent dust and dirt from entering until the application time and until the next hole is opened.
- If the surface is concrete or plaster, it must be cured, if it is metal, it must be cleaned from rust and oil.

MIXTURE

- REPOX 310 is packaged in appropriate quantities as two components. Add 1.5 kg component B (hardener) on 4.5 kg component A (epoxy resin) and mix with a 400 - 600 rpm drill for 3 minutes until it is homogeneous.
- The ingredients are packaged in the correct mixing ratio. Respect this ratio if only part of the product is to be used.

APPLICATION

- Apply the mortar with a trowel or spatula with a thickness between 2 - 30 mm. The thickness should not exceed 30 mm in a single coat.
- It may be necessary to use moulds for repairs.
- When used as thin coat adhesive, apply with a spatula, trowel or gloved protected hand.

CAUTION

- Avoid application at temperatures below +10°C and above +30°C.
- Mix with an appropriate mixing drill, do not mix manually or with a trowel.
- Mix in appropriate ratios. Do not add water or solvent.
- Working and curing times of epoxy resin based products depend on ambient and ground temperature. As viscosity increases at low temperatures, the amount of consumption also increases. The chemical reaction slows down, thus extending the pot life and working time. The opposite is the case at high temperatures.
- Avoid application in areas that are frozen, at risk of freezing within 24 hours, or in areas open to direct sun and wind.
- Do not touch for at least 24 hours after the application and prevent water contact for 48 hours.
- All equipment can be wiped with cellulosic thinner etc. after use.
- During application, the floor temperature must be at least 3°C above the condensation point.

SHELF LIFE

Expires in 12 months. Store unopened packages in cool and dry environments, between 5°C and 30°C. Keep against freezing.

HEALTH AND SAFETY

As with all chemical products, contact with food, skin, eyes and mouth should be avoided during usage and storing. In case of contact, rinse with water. If swallowed by accident, consult a doctor. During the application, work wears, protective gloves and goggles should be used according to the work place health regulations. Ventilate the application areas. Keep out of reach of children.



Technical Data Sheet (TDS)

Form No: 5.01 TDS Repox 310
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The application instructions and technical values given for the products have been obtained in accordance with our tests and experiences in accordance with international standards at $23\pm 2^{\circ}\text{C}$ temperature and $50\pm 5\%$ relative humidity conditions. These values may vary depending on ambient conditions. High temperatures shorten the times, low temperatures lengthen them. Before starting the application, the user should test whether the product is suitable for the application and purpose. FIXA Yapı Chemicals San. Trade Ltd. Sti. is not responsible. This Technical Data Sheet remains valid until the next revision is published. FIXA reserves the right to change the values specified in this Technical Data Sheet, provided that the new version is published. It is the user's responsibility to check that the document is up-to-date. Please contact our sales department for more information.