

Repair, Reinforcement and Restoration / Epoxy Based Repair, Renovation and Reinforcement Products

REPOX® 310

Epoxy Repair, Adhesive and Assembly Mortar

DESCRIPTION

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

APPLICATION AREAS

- Indoor and outdoor,

In structural adhesive applications:

- On concrete and prefabricated lightweight concrete structural elements,
- On iron, steel, and aluminum,
- On wood, hard natural stone, brick, polyester, glass, and epoxy surfaces,
- Bonding of expansion tapes.

In repair mortar applications:

- Repair of reinforced concrete structures such as columns, beams, and shear walls,
- Repair of corners and edges,
- Repair of wide cracks,
- Repair of cracks and joint edges in industrial floors,
- Filling holes and voids.

TECHNICAL PROPERTIES

Appearance and Color	Component A (Resin): Thixotropic paste – Cream Component B (Hardener): Thixotropic liquid – Dark grey	
Packaging	Component A: 6 kg, Component B: 2 kg	
Mixture Density	1.65 ± 0.05 g/cm ³ (TS EN ISO 2811-1)	
Application Temperature	Between +10°C and 30°C	
Compressive Strength	≥ 65 N/mm ² (TS EN 12190) 7 days	
Flexural Strength	≥ 40 N/mm ² (TS EN 12190) 7 days	
Adhesion Strength	≥ 2 N/mm ² - Failure within the concrete substrate (TS EN 1542) 7 days	
Pot Life (8 kg)	<u>Temperature</u>	<u>Duration</u> (TS EN ISO 9514)
	10°C	60 mn
	20°C	30 mn
	30°C	15 mn
Complete Curing Time	7 days (23°C TS 4317)	
Service Temperature	Between -10°C and +60°C	

ADVANTAGES

- Does not shrink and provides high mechanical strength.
- Very resistant to abrasion and impact.
- Does not contain solvent, resistant to chemicals.
- Does not require primer and bonds well to many structural materials.
- Has high initial and final strength, adheres well.
- Thixotropic; does not sag in vertical applications.
- Combines bonding and filling properties in a single product.
- Components have different colors for mixing control.

CONSUMPTION

For 1.65 – 3.3 kg/m² (for 1 – 2 mm thickness) 4.8 L mortar is prepared with 8 kg product.

PACKAGING

Sets of 8 kg (A+B) tin buckets

APPLICATION

PREPARATION OF THE SURFACE

- Clear the surface of all weakly adhered parts and materials that prevent bonding, such as dust, oil, tar, bitumen, paint, silicone, curing compounds, detergents and form-release oils. If there is water leakage, seal it with **AQUASTOP Rapid-Setting Powder Plugging Mortar**, and ensure the surface is dry.
- When used as a repair mortar, the edges of the surface created by breaking should be cut as vertically as possible. A geometric shape such as a square or rectangle should be formed.
- Remove dust, dirt and loose concrete particles from the surface using a brush or compressed air.
- If the application surface is concrete, it must have completed its curing (28 days) and have a minimum compressive strength of 25 N/mm² and a tensile strength of at least 1.5 N/mm².
- If the application surface is metal, it must be cleaned of rust and oil and sandblasted.
- The moisture content of the concrete surface must be max. 4%, and the surface temperature must be at least 3°C above the dew point. The surface temperature must be between +10°C and +30°C.
- Where necessary, the surface may be primed with **REPOX A Solvent-Free Epoxy Primer** prior to application.

MIXTURE

REPOX 310 is supplied as a double-component system packaged in appropriate proportions. Add Component B (hardener) to Component A (resin) and mix for 3–4 minutes using a low-speed drill with a mixing paddle at 400–600 rpm until a homogeneous consistency is achieved. To minimize air entrapment avoid mixing too fast or at high speed. The components are supplied in the correct mixing ratios. If partial quantities are to be used, the specified mixing ratio must be maintained.

APPLICATION

- Apply the mortar using a trowel or spatula at a thickness between 2–30 mm. The application thickness must not exceed 30 mm in a single layer.
- Formwork may be required for repairs.
- When used as a thin-layer adhesive, apply the material with a spatula or trowel.
- The product completes its curing after 7 days at +23°C and becomes resistant to mechanical loads and abrasive chemical effects.

CAUTION

- Avoid application below +10°C or above +30°C.
- Mix with a low-speed suitable drill; do not mix by hand or with a trowel.
- Mix the components in the correct ratios. Do not add water or solvents and do not thin with thinner.
- Bring the materials into the application area at least 24 hours beforehand to acclimatize to ambient conditions.
- Working and curing times of epoxy resin-based products depend on ambient and substrate temperature. At low temperatures, viscosity increases and consumption may rise. The chemical reaction slows down, extending pot life and working time. At high temperatures, the opposite occurs.
- If heating is required in the application area, use only electric warm-air systems.



Technical Data Sheet (TDS)

Form No: 5.01 TDS Repox 310
Rev: 05 – 11/2025

Date
10 July 2026

Page
3 / 3

- Do not apply on frozen substrates, surfaces at risk of freezing within 24 hours, or areas directly exposed to sunlight and wind.
- Do not touch the surface for at least 24 hours after application.
- Prevent water exposure for 48 hours after application. Otherwise, carbonation may occur. In such cases, sand the surface and re-apply a thin coating layer.
- After application, clean the equipment only with solvent. Hardened material can only be removed mechanically.

SHELF LIFE

Expires in 18 months. Store unopened packages in cool, dry and shaded environment between +10°C and +25°C. Protect from freezing. If Component A crystallizes, it can be heated at 60-70°C.

HEALTH AND SAFETY

As with all chemical products, avoid contact with food, skin, eyes and mouth during use and storage. In case of contact, rinse immediately with plenty of water; if swallowed, do not induce vomiting and seek medical attention immediately. Wear protective clothing, gloves, goggles and a mask in accordance with occupational safety regulations. Do not bring food or beverages into application areas. Keep away from open flame. Ensure proper ventilation in application areas. Store out of reach of children.

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±2°C temperature and 50±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 Construction Chemicals Ltd. 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.