

**Repair, Reinforcement and Restoration /  
Epoxy Based Repair, Renovation and Reinforcement Products****REPOX<sup>®</sup> 302****Epoxy Anchoring and Mounting Mortar****DESCRIPTION**

**Epoxy** resin based, three component epoxy **anchoring** and **mounting** mortar, highly resistant to corrosion. Used for anchoring bolts and irons to concrete, rock or walls.

**APPLICATION AREAS**

- Indoor and outdoor,
- Fixing connecting rods on reinforced concrete,
- Fixing anchoring elements,
- Repairing wide cracks,
- Highways, bridges, viaducts, dams,
- Fixing guardrails on bridges, steel ladders, cranes and viaducts,
- Anchoring and mounting all types of metal and steel components on reinforced concrete, metal and steel surfaces.

**TECHNICAL PROPERTIES**

<b>Components</b>	A: Epoxy resin, B: Hardener, C: Quartz aggregate
<b>Color</b>	Sand grey
<b>Mixture Ratio (5 kg)</b>	A: 1.19 kg, B: 560 g, C: 3.25 kg
<b>Mixture Ratio (25 kg)</b>	A: 3.57 kg, B: 1.68 kg, C: 9.75 kg
<b>Mixture Density</b>	~ 1.7 kg/L
<b>Application Temperature</b>	Between +10°C and +30°C
<b>Compressive Strength</b>	≥ 75 N/mm <sup>2</sup> 7 days (EN 12190)
<b>Flexural Strength</b>	≥ 15 N/mm <sup>2</sup> 7 days (EN 196-1)
<b>Bond Strength by Pull-off</b>	≥ 2 N/mm <sup>2</sup> 7 days (EN 1542)
<b>Modulus of Elasticity</b>	100,000 kgf/cm <sup>2</sup> (EN 13412)
<b>Pot Life</b>	~ 50 minutes
<b>Complete Curing Time</b>	7 days (20°C)
<b>Service Temperature</b>	-15°C / +60°C

**ADVANTAGES**

- Provides high and fast mechanical strength.
- Adheres perfectly to concrete and steel.
- Resistant to vibrations.
- Resistant to chemicals and corrosion.
- Water impermeable.
- Can be produced in thixotropic or fluid consistency upon request.
- Has high load bearing capacity.
- Does not shrink.

**CONSUMPTION**

For appr. 1.70 kg/m<sup>2</sup> (for 1 mm thickness) 8.3 L mortar is prepared with 15 kg product. The consumption depending on hole and bolt sizes are given below (in g).

Hole Diameter (mm)	Bolt Diameter (mm)							
	12	16	20	25	32	38	44	51
20	36							
25	68	52	32					
32	124	109	88	56				
38		168	148	116	59			
45			230	198	141	82		
51				279	223	163	94	
57				371	314	255	186	92
64				490	434	375	305	211
76					671	612	543	449

**PACKAGING**

Sets of 5 kg and 15 kg (A+B+C) tin cans

**APPLICATION****PREPARATION OF THE SURFACE**

- 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.
- If the surface is concrete or plaster, it must be cured, if it is metal, it must be cleaned from rust and oil.
- Drill the holes with a drill, clean with compressed air or water before application.

**MIXTURE**

- REPOX 302 is packaged in appropriate quantities as three components.
- Add component B (hardener) on component A (epoxy resin) and mix with a 400 - 600 rpm drill for 1 - 2 minutes. Then slowly add the C component (aggregate) into this mixture and mix again for 3 - 5 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 REPOX 302 by pouring onto the surface. Application thickness should be minimum 2 mm and maximum 30 mm.
- The diameter of the hole opened during the anchoring process should be at least 6 mm larger than the reinforcement diameter, clean the holes with a wire brush or compressed air.
- Apply the epoxy mixture by filling into the appropriate mortar gun and pulling from the bottom of the hole to the outside. Then place the anchor rod of the desired length and diameter in the hole and leave to harden.

**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.

**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. Do not bring food or beverages in application areas. Do not approach with fire. Ventilate the application areas. Keep 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 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.