

ACS EPOXY FIX®

Epoxy Based, Anchorage and Adhesive and Repair Mortar



Description

ACS EPOXY FIXY® is a two-component epoxy based repair anchorage and adhesive mortar. (Poz No: 04.613/8-e)

Place of usage

- Chemical anchoring in concrete and brick walls.
- Crack and surface protection (coating).
- Anchoring the rods and deformed bars to the concrete, stone or brick.
- Concrete repair.
- Cap seal and entry ports installation in epoxypolyurethane injection works.
- Fixing the guard bars and seismic isolators to the bridges and viaducts.
- Available for wide crack (> 5 mm) fill.
- Repair and insulating of wide cracks.
- Bonding of various types of construction materials such as steel, concrete, brick to each other.

Consumption

1.68 kg/m² for obtaining 1 mm thick layer.

Advantages

- Perfect adhesion to the damp surfaces on concrete. Provides adherence to moist surfaces. Solvent free.
- Pasty consistency, easy to apply and non - sag properties in over-head applications.
- Can be used on dry and damp surfaces.
- Perfect adhesion to the concrete and steel. Quickly gains mechanical strength. Resistant to chemicals.
- Can be applied without flowing even at high temperatures. Water and gas impermeable.
- Provides early high strength.
- Abrasion and chemical high resistance.
- Pasty consistency, easy to apply and non- sag properties in over-head applications.
- The components are in different colors (to provide mixing control)
- Hardened without shrinkage.
- Easy to apply

TECHNICAL CHARACTERISTICS

ACS EPOXY FIXY® Component A		Epoxy based resin	
ACS EPOXY FIXY® Component B		Catalyst-hardener	
Color		Grey	
Mixture Density		1,68 ± 0,05 kg/liter	
* Pressure Strength (TS EN 196)	1 Days	35-40 N/mm ²	
	7 Days	60-75 N/mm ²	
* Flexural Strength (TS EN 196)	1 Days	18 N/mm ²	
	7 Days	30 N/mm ²	
Adhesion Strength (28 days) To	Concrete	3,0 N/mm ²	
	Steel	3,5 N/mm ²	
Application Thickness		Min. 2 mm Maks. 30 mm	
The Temperature of The Ground		+5°C +30°C	
Use Time (+20 °C)		45 Minutes	
Re-coatability (+20 °C)		16 - 24 Hours	
Time to Walk on it (+20 °C)		24 Hours	
Service Temperature		-15 °C +90 °C	
Fully Cured Time (+20 °C)		7 Days	



*Typical values have been obtained as a result of experiments done at +23°C, 50% relative humidity, 4x4x16 cm mortar prism. The values may change due to the difference in site ambient. High temperatures shorten and low temperatures extend the process.

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APPLICATION PROCEDURE / SURFACE PREPARATION

The concrete surfaces must be sound, clean and dry. It shouldn't be weakened by over-troweling and lack of curing. The concrete should be free of frost, curing membranes, waterproofing treatments, oil stains, laitance, friable material and dust. Steel surfaces should be cleaned from rust by sand blasting and if needed new reinforcement should be installed. The edges of the broken surfaces should be saw cut. If there is a water leakage it must be drained or properly plugged.

MIXING

ACS EPOXY FIXY®, has two components in pails, produced according to right mixing ratio. Material temperature should be between 15 - 25°C before mixing. Component B should be added into the Component A without any remaining material in the pail. It should be mixed with using a proper mixer (~300rpm) for polymer mixing. Mix the components at least 3 minutes to have a homogenous mixture.

MIXING RATIOS

ACS EPOXY FIXY®	Component A	Component B
Mixture Amount	3,75 kg	1,25 kg
Mixture Density	1,68 kg / liter	

APPLICATION METHOD

ACS EPOXY FIXY®, should be applied to the prepared surface by using a steel spatula or steel trowel. Application thickness should be between 2-30 mm. For anchoring the anchor holes should be drilled 6 mm wide than anchor bar's diameter and in designed depth. The holes should be cleaned by using steel brush and air guns. Mixed material should be put in a mortar gun with a proper nozzle and start to fill the holes into half depth. Install the anchor bar into the hole slowly by screwing and do not drive the bars.

TIPS TO NOTICE

- During the application the substrate and ambient temperature should be between 5 - 30°C.
- Resinous materials' pot life and curing times vary depending on the relative humidity, substrate and ambient temperature. Reaction gets slow in low temperatures and it causes to ex-

tension on pot life and working time. On the other hand high temperatures speed up the reaction, which results to short pot life and working time.

- For full curing of material, both the substrate and ambient temperature shouldn't be under allowed application temperature.
- **ACS EPOXY FIXY®** is provided in ready to mix pails. Do not add any solvent etc. into the mixture during the application.
- Mixing should be made with proper mixers and do not allow mixing by hand.

CLEANING OF TOOLS

After the application all tools should be cleaned with a solvent. **ACS EPOXY FIXY®** can be cleaned with only mechanical abrasion after hardening.

PACKAGING

5 kg set Component A : 3,75 kg pail Component B : 1,25 kg pail

STORAGE

In unopened original package, it should be stored in a cool and dry environment at + 10 °C + 25 °C temperature protected. In short-term storing, maximum 3 palettes can be stowed on top of each other and delivery has to be according to first in first out system. In long-term storing, the palettes must not be stowed on top of each other.

SHELF LIFE

The shelf life is 12 months from the date of production under suitable storage conditions. Opened packages should be closed firmly and consumed within 1 week.

SAFETY

During the application, work clothes, protective gloves, goggles and masks should be used in accordance with the Occupational Health and Safety Rules. Due to the irritating effects of uncured materials, the components should not be allowed to come into contact with the skin and the eye. In case of contact, immediately wash with plenty of water and soap. If swallowed, seek medical advice immediately. Food and beverages should not be left at the application areas. Keep out of reach of children. Please refer to the Material Safety Data Sheet for detailed information.

□ Responsibility

The technical information given in this publication is based on the present state of our best scientific and practical knowledge. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is only responsible for the quality of the product. **ACS A PLUS CONSTRUCTION SOLUTION YAPI ANONİM ŞİRKETİ** is not responsible for results that may occur because the product is used other than advised and/or out of instructions regarding the place and the method of use. This technical form is valid only till a new version is implemented and nullifies the old ones (06/2019)