

# Repar Tix HG Bic

Two-component, high-performance, structural, thixotropic, fibre mortar



Two-component thixotropic, structural, fibre reinforced cement mortar, with compensated shrinkage, with high intrinsic water tightness, and extraordinary physical and mechanical characteristics: adhesion, compression resistance, flexural strength, abrasion resistance, etc. Modified polymer mortar, with the addition of component B liquid, provided in canisters, containing special polymers in aqueous emulsion and hygrometric shrinkage reducers. Perfect for remediation of structural works and articles in degraded concrete and very high-performance coatings.

**CUSTOMS CODE:** 3824 5090

**COMPONENTS:** Two-components

**APPEARANCE:** Powder + Liquid

**AVAILABLE COLORS:** Gray

**PACKAGING AND DIMENSIONS:** Bag 25 kg [A] - Plastic can 5 kg [B] - Kit: 1 Bag 25 kg [A] + 1 Plastic can 5 kg [B]

## OBTAINED CERTIFICATIONS AND REGULATIONS



## FEATURES AND BENEFITS

After mixing the two components, Repar Tix HG Bic is perfectly workable with manual methods or with spraying machines. The applied and hardened material will have very high adhesion, durability, impermeable to water, with good vapor permeability, high physical-mechanical resistance (class R4 according to UNI EN 1504/3). The product contains migratory corrosion inhibitors in its B component. The thixotropic characteristics of the product allow excellent adhesion and easy spreadability on vertical surfaces, on the lower parts of beams, shelves or slabs, often even on structures indirectly subjected to light vibrations or dynamic stresses during application. It solves the problems of complex reconstructions or restorations, even on difficult-to-grip substrates and for a wide range of applied thicknesses: from a minimum of 3 mm (to be spread with a blade and finished with a trowel) to a maximum of 100 mm. and beyond, naturally in succession of layers of 25-30 mm / each. (for large thicknesses on large surfaces it is always advisable to provide a contrasting net on connectors fixed to the support). It does not require wetting or anti-evaporation protection after application. The superpozzolanic reaction of the peculiar reactive fillers contained in component A, the three-dimensional micro-armor provided by a balanced mix of READYMESH fibers, together with the special polymers and migratory corrosion inhibitors contained in component B, guarantee the hardened product very strong adhesion to the substrate, dimensional stability and maximum durability to environmental aggressions (from carbonation, acid rain, chlorides, sulphates).

## FIELDS OF APPLICATION

- Repairs and protective coatings of hydraulic works (pipes, dams, tunnels, etc.), offshore structures and artefacts in critical situations: chemical-physical aggressions, leaching water, marine atmosphere, etc.;
- structural restoration of pillars, beams, floors and walls in reinforced concrete, including prefabricated ones, subject to high sulphate aggression;
- volumetric reconstruction and bulking of concrete products with thicknesses from 1 to 4 cm, without the need for electro-welded mesh (the surfaces in this case must be appropriately hydroscarified with a roughness level > 7 on the ICRI \_ International Concrete Repair Institute scale);
- restoration of the cortical layer of the concrete and repair of the concrete cover detached following the oxidation of the reinforcing irons.

## PREPARATION OF SUPPORTS

Application surfaces should be clean, free of dirt, crumbling and non-adhering parts, dust etc., and saturated with water "saturated with dry surface". An adequate roughening of the surfaces by scarifying, sandblasting etc. is always necessary in order to obtain the maximum adhesion values to the substrate. The optimal values are obtained with high pressure hydro-scarification. Bare the irons undergoing disruptive oxidation or deeply oxidized, removing the rust of the exposed irons (by sandblasting or abrasive brushes).

## MODE OF USE

Pour component B (liquid) into a container (bucket or other) gradually adding and mixing component A (powder), continue mixing until total elimination of lumps. The optimal consistency of the product and the consequent physical-mechanical performances declared in this technical data sheet can be reached using 4.5 kg of COMPONENT B for each 25 kg bag. The excess quantity of COMPONENT B (0.5 kg) is particularly useful for priming the substrate, or for wetting the trowel in the final smoothing operation, or in hot and arid environmental conditions where the mixed product is kept at rest in the bucket it may require some light addition of liquid to regain its optimal consistency, thus avoiding uncontrolled water additions.

## KEY FEATURES

↔ Max. recommended thickness: 40 mm

↔ Min. recommended thickness: 7 mm

🌡️ Temperature of use: +5 / +35 °C

⊘ Maximum diameter of aggregate: 1.5 mm

🕒 Shelf-life: 12 months

🧤 Use wearing protective gloves

## TECHNICAL SPECIFICATIONS

UNI EN 12190

Compressive strength after 1 day  $\geq 22 \text{ N/mm}^2$

UNI EN 12190

Compressive strength after 28 days  $\geq 55 \text{ N/mm}^2$

UNI/EN 196/1

Flexural strength after 7 days  $> 7.0 \text{ N/mm}^2$

UNI EN 13295

Resistance to carbonation **0.5 mm**

Density **2140 kg/m<sup>3</sup>**

UNI EN 1542

Bonding force  $\geq 2 \text{ N/mm}^2$

EN 13501-1

Reaction to fire **B-s2 d0**

UNI EN 12190

Compressive strength after 7 days  $\geq 45 \text{ N/mm}^2$

UNI/EN 196/1

Flexural strength at 1 day  $> 4.0 \text{ N/mm}^2$

UNI/EN 196/1

Flexural strength after 28 days  $> 8.0 \text{ N/mm}^2$

UNI PdR 88:2020

Total recycled content  $\geq 5.3 \%$

EN 13142

Static elastic modulus  $> 24.000 \text{ N/mm}^2$

UNI EN 13057

Capillary absorption **0.30 kg•h<sup>0.5</sup>/m<sup>2</sup>**

UNI EN 1015-17

Chloride content  $< 0.01 \%$



## CONSUMPTION

Approximately 19,50 kg/m<sup>2</sup> of Repar Tix HG Bic for every centimetre of thickness to be implemented (approximately 1950 kg per cubic metre).

## PHOTO GALLERY



## ADDITIONAL CONTENT



## WARNINGS AND PRECAUTIONS

The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage. Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: [www.azichem.com](http://www.azichem.com). The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

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It is forbidden to dispose of the product and/or packaging in the environment.

