

SYN.0366

# **SYNTECH GROUT** EP

Castable two-component epoxy mortar for restorations and anchoring



#### Packaging

- Pail 10 kg [A]
- Pail 2.1 kg [B]
- Kit: 1 Pail 10 kg [A] + 1 Pail 2.1

# **Application**

- Pour out



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Family

Syntech Epoxy or polyester based adhesives and mortars

**Product Lines** Functional Cathegories Infratech

· Fastening and anchoring metallic connectors, inserts and

· Structural precision anchoring

· Maintenance interventions on road and railway

infrastructures

Components Appearance **Two-components** Liquid + Liquid

#### **Certifications** and legislations



EN 1504-3

Products and systems for the protection and repair of concrete structures -Structural and non-structural repair (R4)

#### General **description**

SYNTECH GROUT EP is a solvent-free fluid epoxy mortar consisting of epoxy resins, special additives and selected aggregates of varying granulometry to restore structures in reinforced concrete, concrete paving, to create rigid joints, high-strength anchors and bar grouting. It is easily applied via simple pouring, to create layers of up to 5 mm in thickness.

#### General **features**

SYNTECH GROUT EP is specifically formulated to ensure tenacious adhesion to the substrate. It is characterised by its high mechanical resistance, friction and abrasion resistance. It is antishrinkage and effectively resists industrial atmospheres, not being at risk from the effects of atmospheric agents and aggressive chemicals. Being solvent-free, it is safe for users and the environment, also being applicable in indoor environments in progress. It is easily applied by pouring and has a good workability time. An anti-slip finish is easily achieved by applying a dusting of quartz.

Some important characteristics include:

- Hardened prism density (UNI EN 12190): 2.1 kilograms/litre
- Shake table workability (UNI EN 13395/1): 280 mm
- Touch dry: 2 hours at 20° C 4 hours at 10° C
- Passable with trolleys: after 4 hours at 20° C after 8 hours at 10° C

### Dosage

Approximately 2 kilograms/square metre of SYNTECH GROUT EP for each millimetre of thickness to be achieved.

## Fields of application

SYNTECH GROUT EP is used to restore reinforced concrete and cement structures. Thanks to its ease of use, it is ideal for restoration work on deteriorated flooring such as the regularisation of uneven areas where lumps, heavy objects falling or the friction of moving vehicles has caused gaps (especially near the contraction joints), erosion or the loss of the wear layer. Thanks to its mechanical characteristics, it is ideal for high-strength anchor castings, rebar grouting, metal pins and studs, both indoors and outdoors.

#### Basic **features**

← Max. recommended thickness: 5 mm

Shelf-life:

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Solvent-free

**A:B** Mixing ratio:

10:2.1

Temperature of use: +5/+35 °C

12 months

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Use wearing protective glasses

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Use wearing protective gloves

Available **colours** Milky white

### Technical specifications

Determinazione dell'aderenza per trazione diretta (Fh) UNI EN  $4.1~\mathrm{MPa}$  1504~-3:

Capillary absorption UNI EN 1504 -3: 0.01 kg/(m $^2$  • h $^0$ 0.5)

Chloride content UNI EN 1015-17: 0.01 %

Hard to touch 20 °C: 2 h

Resistance to the extraction of the steel bars with improved 0.32 mm adhesion 1504-6:

Skid resistance UNI EN 1504 -3: CLASS I  $\_$ 

Static elastic modulus UNI EN 1504 -3: 20 GPa

Walkability 20 °C: 4 h

#### Tools cleansing

#### Applicable on

• Thinner for resins

Concrete

## Substrate preparation

The surfaces to be treated must be clean, free from oil, grease, efflorescence, dust and crumbly parts that could affect adhesion. Slight moisture in the surface is tolerated so long as there are no stagnations of water that must be removed. In the case of application at low temperatures, the area must be insulated and protected with mobile guards to create heated environments. Do not apply with ambient or substrate temperatures below 5° C. Vertically cut the perimeter of the areas to be repaired. If applying SYNTECH GROUT EP for repairs with significant thickness, attach a suitable reinforcing metal mesh to the surface with nails for concrete or with dowel bars secured with epoxy adhesive in specific holes.

#### **Instructions** for use

Mix the contents of the drums before use. Add components A and B in the special container and slowly mix with a whisk for at least 3-4 minutes, until a homogeneous mixture is obtained, free from lumps and air bubbles. It is possible to withdraw partial quantities from the packages but only by carefully weighing the two components to exactly respect the proportions of the two components stated on the packaging so as to prevent any errors in the mixing ratio that would cause incorrect hardening. Immediately after mixing, apply SYNTECH GROUT EP for casting, preparing - where necessary - a formwork that is suitably disarmed with polyethylene sheets to contain the jet. If metal elements are used to channel the casting, they must also be protected with polyethylene sheeting or silicone release agent to prevent the adhesion of the product. For horizontal grouting or to fill cracks or cavities, be sure to confine the mortar then pour the product, taking care to slightly vibrate to promote air release. On horizontal surfaces, use a toothed trowel to help with the distribution of SYNTECH GROUT EP. When repairing concrete floors, pass a roller to eliminate any air that may be incorporated during mixing. In the bar grouting or other metal elements, slowly and repeatedly insert and extract an iron wire into the cast section in order to facilitate the release of air. To clean tools, use special epoxy thinner. Once hardened, SYNTECH GROUT EP can only be removed by mechanical means. To make thicknesses greater than 5 mm, it is recommended to pour several times, with intervals of at least 4 hours.

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### Storage and preservation

Protect from freezing. Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Store the product at a temperature between  $+10^{\circ}$ C and  $+30^{\circ}$ C.



#### Warnings, Precautions and Ecology

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. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.

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

SYNTECH GROUT EP is produced/distributed by





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