

# Syntech Grout EP

Castable two-component epoxy mortar for restorations and anchoring



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.

**CUSTOMS CODE:** 3907 3000

**COMPONENTS:** Two-components

**APPEARANCE:** Liquid + Liquid

**AVAILABLE COLORS:** Light gray

**PACKAGING AND DIMENSIONS:** Pail 10 kg [A] - Pail 2.1 kg [B] - Kit: 1 Pail 10 kg [A] + 1 Pail 2.1 kg [B]

## OBTAINED CERTIFICATIONS AND REGULATIONS



## FEATURES AND BENEFITS

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 anti-shrinkage 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

## 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.

## ALLOWED SUPPORTS

Concrete



## PREPARATION OF SUPPORTS

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.

## MODE OF 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 package 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.

## APPLICATION METHODS

Pour out

## TOOL CLEANING

Thinner for resins

## KEY FEATURES

↔ Max. recommended thickness: 5 mm

🕒 Shelf-life: 12 months

🌡️ Temperature of use: +5 / + 35 °C

🧤 Use wearing protective gloves

**A:B** Mixing ratio: 10 : 2.1 \_

🧴 Solvent-free

🕶️ Use wearing protective glasses

## TECHNICAL SPECIFICATIONS

20 °C  
Walkability **4 h**

UNI EN 1015-17  
Chloride content **0.01 %**

Compressive strength > **45 N/mm²**

UNI EN 1504 -3  
Static elastic modulus **20 GPa**

UNI EN 1504 -3  
Capillary absorption **0.01**

20 °C  
Touch hardening at 20°C **2 h**

UNI EN 1504 -3  
**4.1 MPa**

UNI EN 1504 -3  
Skid resistance **CLASS I**

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



Produced and distributed by **AZICHEM srl**  
Via Giovanni Gentile, 16/A - 46044 Goito (MN), Italy  
Tel: +39 0376.604185 / 604365  
Fax: +39 0376 604398  
[www.azichem.com](http://www.azichem.com) - [info@azichem.com](mailto:info@azichem.com)

Update of **05-08-2021**  
Terms of sale and legal notices available at  
<https://www.azichem.com/general-sales-conditions>  
**Total pages of this document: 4**

## CONSUMPTION

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

## STORAGE AND CONSERVATION

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°C and +30°C.

## PHOTO GALLERY



## ADDITIONAL CONTENT



Produced and distributed by **AZICHEM srl**  
Via Giovanni Gentile, 16/A - 46044 Goito (MN), Italy  
Tel: +39 0376.604185 / 604365  
Fax: +39 0376 604398  
[www.azichem.com](http://www.azichem.com) - [info@azichem.com](mailto:info@azichem.com)

Update of **05-08-2021**  
Terms of sale and legal notices available at  
<https://www.azichem.com/general-sales-conditions>  
**Total pages of this document: 4**

## 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.

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](http://www.azichem.com).

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

