

# Syntech Acid Resistant

## Chemical-resistant two-component epoxy coating



Chemical-resistant coating based on modified epoxy phenolic resins, for the protection of walls, floors and concrete, steel and fiberglass structures.

**CUSTOMS CODE:**

**COMPONENTS:** Two-components

**APPEARANCE:** Liquid + Liquid

**AVAILABLE COLORS:** Gray

**PACKAGING AND DIMENSIONS:** Can 6.7 kg [A] - Can 3.3 kg [B] - Kit: 1 Can 6.7 kg [A] + 1 Can 3.3 kg [B]

## OBTAINED CERTIFICATIONS AND REGULATIONS



## FEATURES AND BENEFITS

Two-component epoxy phenolic resin, applicable by spray, roller or spatula, for the coating and waterproof protection of structures subject to strong chemical aggression.

Property:

- high mechanical and abrasion resistance,
- high adhesion to surfaces
- good elasticity
- high chemical resistance to acids, bases and solvents
- very high tenacity and ease of cleaning and maintenance
- high chemical resistance to petrol, fuels and hydraulic oil
- applicable in thick layers, even several times.

## FIELDS OF APPLICATION

Industrial floors in concrete. Waste water purification tanks and related technical rooms. Tanks, ducts and food containers. Digesters and plants for the production of biogas. Coating of pipes and liquid containment tanks. Water treatment, purification and distribution plants. Containers of acidic and basic substances. Stables, milking rooms, veterinary rooms, slaughterhouses. Analysis laboratories, warehouses, raw material storage areas and production areas. Containment tanks for accidental spills of petroleum products, chemicals and food products. Protective coating of floors and walls of food, dairy, wine, breweries, distilleries, oil mills, oil mills.



## ALLOWED SUPPORTS

Concrete - Cement-based or lime-based mortars - Prefabricated concrete - Metal surfaces - Floor screed - Steel - Calcestruzzo armato

## PREPARATION OF SUPPORTS

The substrate on which the resinous system is to be placed must be suitable for withstanding the stresses resulting from the intended use, such as for example static or dynamic loads, impacts, thermo-hygrometric expansion, vibrations, etc. As regards the characteristics of the substrate (maximum humidity, cohesion, resistance class, flatness, etc.) and the preparation of the surface that will receive the resinous system, all the provisions set out in chapter 5 of the UNI 10966 standard ("RESINOUS SYSTEMS FOR SURFACES HORIZONTAL AND VERTICAL - INSTRUCTIONS FOR DESIGN AND APPLICATION").

Evaluate the most convenient type of mechanical preparation (shot peening, sandblasting, pressure washing, etc.). Follow the instructions for the different types of support listed below.

### Concrete

The surfaces to be coated must be stable, clean and free from substances that can affect the adhesion of the coating such as dirt, grease, oil, traces of coatings and surface treatments, etc. Any weak or flaking parts must be removed before applying the product by mechanical sanding with diamond discs and dust extraction. The tensile strength must not be less than 1.5 N/mm<sup>2</sup>.

### Cracks and fissures

In case of static cracks, use a mortar from the REPAR line for sealing. The sealing of dynamic cracks or greater than > 4-5 mm must be assessed on site. Generally they can be grouted using elastomeric materials or worked as movement joints.

### Localized grouting and repairs

Any holes, deficiencies, repairs of portions of concrete can be carried out by applying Floor Tenax high-performance mortar.

### Support humidity control

Before laying resinous systems and coverings, always check the residual humidity content. Check for the presence of residual humidity using the plastic sheet method according to the ASTM D 4263 standard: fix a heavy polyethylene sheet of at least 45x45 cm in size to the support with an adhesive tape. 24 hours after laying, lift the sheet and check for signs of humidity. If testing with a carbide hygrometer, the moisture content of the substrate should be < 4% by weight.

### Wet support

In case of residual humidity, apply two or more coats of Syntech Pavidamp three-component epoxy primer. All cracks in the substrate must be treated and sealed before applying the three-component primer.

### Fiberglass

The surfaces to be coated must be stable, clean and free from substances such as dirt, grease, oil, etc. which can affect the adhesion of the coating. Sand the surface by mechanical sanding with diamond discs and dust extraction. We recommend washing the surfaces and waiting for them to dry completely before applying the finish

### Steel

Any welding residues must be removed and the joints ground. Blast clean to Sa 2½ according to EN ISO 12944-4. The surfaces to be coated must be free from dirt, oils, greases and impurities. Average surface roughness degree RZ ≥ \_50.

The surfaces must also be free from discontinuities, and eventually leveled and regularized with products from the FLOOR line or the REPAR line. Apply approximately 150 to 200 g/m<sup>2</sup> of Syntech Primer EP-W by roller, brush or spray to consolidate the substrate and facilitate adhesion of the subsequent coating. Apply Syntech Acid Resistant when the primer is completely dry and no later than 24 hours after applying it. In the event of the presence (even suspected) of humidity deriving from capillary rising from the substrate, it is recommended to first apply the Syntech Pavidamp epoxy resin for "wet substrates".

Tiled floors, or floors covered with pre-existing resin, must be subjected to mechanical roughening carried out with shot blasting, milling, bush-hammering, etc., until the total elimination of the waterproof crust and the opacification of the surfaces. Remove dust after abrasion.



## MODE OF USE

Apply the appropriate primer according to the type of substrate as specified below:

### Concrete

The application of Syntech Acid Resistant on cementitious substrates must always be preceded by the application of a coat of Syntech Primer EP-W anchoring epoxy primer. Wait 8-12 hours before applying the coating

### Resin coatings

The application of Syntech Acid Resistant on resinous and multilayer systems must always be preceded by sanding the entire surface in order to promote and guarantee optimal adhesion of the product to the substrate.

### Steel

The application of Syntech Acid Resistant on steel substrates must always be preceded by the application of a coat of epoxy-polyamide primer in the "surface tolerant" solvent phase Syntech Poliurea Primer-Epoxy Metal. Wait 24 hours before applying the coating

### Application temperature (air and substrate)

Minimum +10°C \_ Maximum + 35°C . The substrate must have a temperature at least +3°C higher than the dew point to reduce the risk of condensation or whitening of the finish.

### Environmental relative humidity

Minimum 35% \_ Maximum 80 %

### Mixing

Combine the two components in the indicated mixing ratio. Add component B (hardener) to component A (base) and mix thoroughly until the product is completely homogenised.

It is advisable to start mixing briefly with an electric drill at low rpm and then intensify the stirring up to a maximum of 300-400 rpm

### Application

The product can be applied by spray, trowel or roller. On the suitably prepared substrate, apply the product in two or more coats, respecting the indicated consumption and overcoating times. It is advisable to prepare a quantity of product not exceeding that which can be applied during the useful life of the material. High temperatures accelerate hardening and reduce the usage time of the prepared material


## APPLICATION METHODS


Paint roller - Spatula - Sprayer

## TOOL CLEANING


Thinner for resins


## KEY FEATURES


 Dosage: 200 - 400 g/m<sup>2</sup>


 Shelf-life: 12 months

 To be applied in two coats

 Use wearing protective gloves

 Pot-life: 45 (a 20°C) min

 Temperature of use: +10 / +35 °C

 Use wearing protective glasses



## TECHNICAL SPECIFICATIONS

EN 1062/6

Permeability to CO<sub>2</sub> **sd > 50 m**

Physical / Mechanical Resistance **Elevata %**

a 20°C

Complete hardening at 20°C **7 day**

H17 / 1000 giri / 1000g EN ISO 5470/1

Resistance to abrasion **60 mg**

EN ISO 7783-1

Permeability to water vapor **sd > 50 m**

EN 1542

Concrete adhesion (direct traction) **> 3 N/mm<sup>2</sup>**

**1.6 ± 0.05 kg/l**

Heat resistance ~ **+ 50 °C**

ISO 868

Longitudinal elongation at break **60-70 %**

EN 1062/3

Capillary absorption **w < 0.1 kg•h<sup>0.5</sup>/m<sup>2</sup>**

su acciaio EN 12188

Adhesion by direct traction **> 14 N/mm<sup>2</sup>**

Chemical resistance **Allegato 1**

a 20°C

Touch hardening at 20°C **12 h**

a 20°C

Time before second coat at 20°C **24-72 h**

Dry residue **90 %**

Shore A ASTM D2240

Hardness **85-90**

## CONSUMPTION

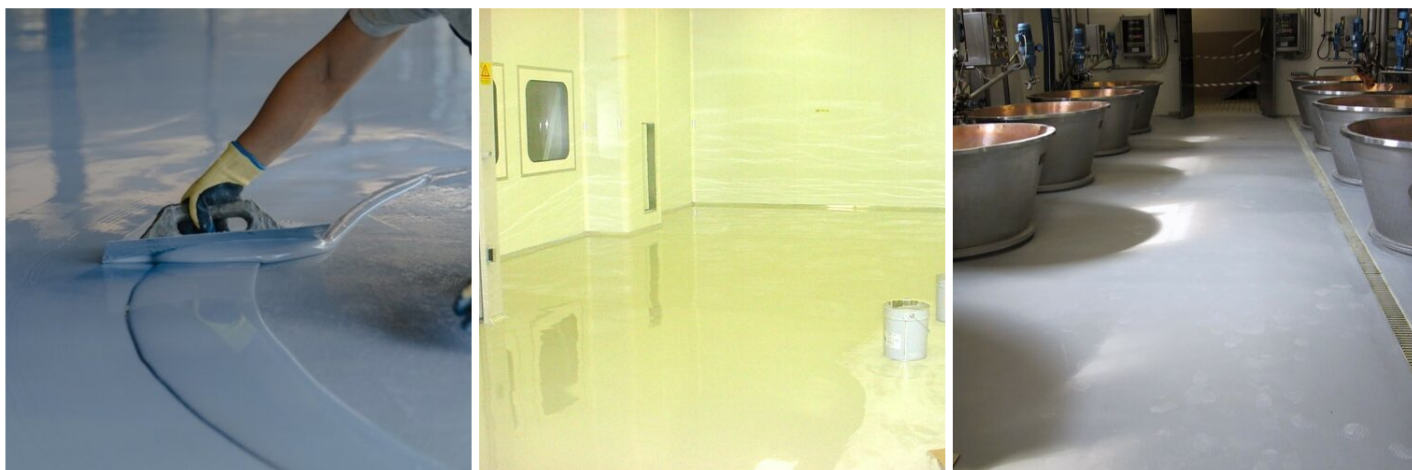
**As a primer:** 0.20 - 0.25 kg of Syntech Acid Resistant for each square meter of surface to be primed.

**As a coating:** 0.40 kg of Syntech Acid Resistant for each square meter of surface to be coated.

## 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. Protect from humidity. Store the product at a temperature between +5°C and +35°C.

## PHOTO GALLERY



## 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.

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