

## TECHNICAL SPECIFICATIONS

Measured on powder product		REQUIREMENT
Colour:	grey	
Consistency:	powder	
Apparent density (according to MIT 13)*:	1.25 kg/litre	
Grain size: (according to MIT 10)*:	0 - 0.5 mm	
Chloride content (according to IBH Directives)	0.01 %	≤ 0.1 %
Loss at 550 °C (according to MIT 7)*:	2.5 % approximately	
Measured on fresh mix		
Mixing water:	21 - 23% equal to 5.25 - 5.75 litres per 25 kg bag (paddle) 23 - 25% equal to 5.75 - 6.0 litres per 25 kg bag (small brush, roller, large brush, spray)	
Mixing water to obtain consistency equal to 21 cm (according to DIN 18555/2)**:	22% equal to 5.5 litres per 25 kg bag	
Density of mix when fresh: (according to DIN 18555/2)**	1.970 kg/litre	
Air content (according to DIN 18555/2)**:	5.5 %	
Bleeding (according to DIN 4227/5)**:	0.0 %	≤ 1.0 %
Setting times (according to UNI EN 196-3)**:		
Start of setting:	4 hours and 40 min.	≥ 1 hour
End of setting:	7 hours and 30 min.	≤ 12 hours
Mix pot life:	approximately 1 hour under normal conditions (at +20 °C)	
Delay between application of one coat and the next:	from 4 to 6 hours depending on the porosity of the substrate and environmental conditions.	
Total curing time:	28 days	
Application temperature:	from +5°C to +35°C	
Operating temperature:	from -20°C to +90°C	
Measured on hardened product		
Waterproofing (according to DIN 1048)**:		
- 28 days at 1.5 bar of positive hydrostatic pressure:	resist	must resist
- maximum load under positive hydrostatic pressure:	3.0 bar	
- maximum load under negative hydrostatic pressure:	0.5 bar	
Compression strength after 28 days (according to UNI EN 196-1)**:	28.0 N/mm <sup>2</sup>	≥ 20.0 N/mm <sup>2</sup>
Bending strength after 28 days (according to UNI EN 193-1)**:	6.0 N/mm <sup>2</sup>	≥ 5.0 N/mm <sup>2</sup>
Tear resistance - adhesion by direct traction (according to DIN 24624)**:	1.4 N/mm <sup>2</sup>	≥ 1.0 N/mm <sup>2</sup>
Water shrinkage after 90 days (according to IBH Directives)**:	1.7 mm/m	≤ 2.0 mm/m
Capillary absorption coefficient - W (according to DIN 52617)**:	0.07 Kg·m <sup>2</sup> ·h <sup>0.5</sup>	≤ 0.10 Kg·m <sup>2</sup> ·h <sup>0.5</sup>
Coefficient of resistance to the diffusion of water vapour - μ (according to DIN 52615)**:	90	≤ 200
Consumption:	from 2.0 to 6.0 Kg/m <sup>2</sup>	
Max attainable thickness:	1 mm per coat (up to 4 mm in total)	

(\* Torggler Internal Methods (MIT) are available on request

(\*\*) In accordance with the specifications the parameters were measured with a quantity of water needed to obtain a consistency of 21 ± 1 cm (consistency for trowelling).

## ANTOL WATERPROOFING CEMENT MORTARS



To the best of our knowledge and belief, the contents of this data sheet are correct and accurate, but we cannot guarantee all the recommendations and suggestions given as these depend on the conditions of use which are beyond our control. When in doubt, it is always a good idea to make preliminary tests and/or consult our specialized staff. This data sheet replaces all previous ones.

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Antol  
**Aquaproof**

## FINE WATERPROOFING MORTAR

- New improved formula
- Very easy to apply with roller or brush
- Spray application
- Excellent waterproofing capability
- Good permeability to water vapour
- Can be used in environments with negative hydrostatic pressure
- Suitable for contact with drinking water

Fine osmotic cement mortar to waterproof cement substrates with both positive and negative hydrostatic pressure. Suitable for contact with drinking water.

### APPLICATIONS

- Hard waterproof coatings for cement surfaces, indoors and outdoors, resistant to damp, underground water and stagnant water subject to positive or negative pressure.
- Waterproofing with negative pressure for foundation walls, foundation beds, basements, cellars, lift shafts, swimming pools, tunnels, underground passages, drinking water tanks and underpasses.
- Waterproofing under situations of positive pressure for pillars, plinths, swimming pools, dams, silos, tanks, irrigation channels, prefabricated cisterns, drinking water containers.
- Smoothing and levelling before coating with other types of waterproofing (bitumen emulsions, bitumen or polymer sleeves) of underground walls and manufactures.

### TYPES OF SUBSTRATE

- Prefabricated concrete laid on site.
- Cured cement screeds.
- Cement mortars.
- Very resistant cement renderings.

### MAX ATTAINABLE THICKNESS

1 mm per coat (up to 4 mm in total).



# Torggler

Chimica

Technology leaders  
for over 140 years  
in the field of chemicals  
for the building industry.

## FEATURES

**ANTOL AQUAPROOF** is a grey, ready-to-use single component cement mortar. The product is made from very resistant cements, selected fine grain aggregates, special synthetic resins and organic additives. Special resins, latest generation water repellent agents, filler compounds and optimum aggregate grain size ensure excellent waterproofing even with thin coats. Excellent workability and ease of application using various methods (paddle, small brush, roller, large brush, spray). Excellent adherence to the substrate, very good water retention, deep filling of support capillaries thanks to osmotic penetration followed by swelling. **ANTOL AQUAPROOF** is suitable for contact with drinking water.

## IMPORTANT

- Do not apply **ANTOL AQUAPROOF** on gypsum substrates or over gypsum based mortars, renderings and fillers.
- Do not apply **ANTOL AQUAPROOF** on plastic renderings, painted substrates, wood or asbestos cement.
- Do not apply **ANTOL AQUAPROOF** on flexible substrates or those subject to deformation. In these cases use **ANTOL FLEX 1K** or **ANTOL FLEX 2K**.
- Do not apply **ANTOL AQUAPROOF** when the temperature is less than +5 °C and more than +35 °C.
- Do not mix the product with other binders such as cement, hydraulic lime, gypsum, etc.
- The mix cannot be diluted with water once it has started setting.
- Do not use the mixed product when it has already started to set. Therefore, always prepare quantities of mix which can be used within the pot life.

## INSTRUCTIONS FOR USE

The surfaces to be covered must not be seeping, solid and regular yet sufficiently rough, clean and free of oils and greases, dust, loose material, dirt of any kind and any traces of old paint. The surfaces must also be sufficiently cured and free of significant shrinkage. Any surface blooming must be carefully removed using mechanical cleaning equipment and the surface should then be treated in depth using **ANTOL RISAN SYSTEM ANTISALE**. Surface irregularities such as gravel pockets, eroded or deteriorated points and reinforcement formwork spacer holes must be repaired and filled out using a special mortar such as **ANTOL UMAFIX**, **ANTOL CLS SYSTEM KO-SMETIC** or **ANTOL CLS SYSTEM MONORASANTE**. The joints between the floor and walls must be concave and shell-like. Wet the surface to be waterproofed until saturated then allow the excess water to evaporate or remove it using a sponge. Make sure any surface water film is removed.

For the first coat, to be applied with a small brush, mix **ANTOL AQUAPROOF** with 23-25% of clean water (equal to 5.75-6.25 litres per 25 kg bag) using a mechanical mixer (low-speed drill with mixer attachment) until the mixture is smooth and free of lumps. Allow the mixture to stand for 10 minutes then mix again briefly. If necessary adjust the consistency by adding a little more water.

To ensure good rendering on substrates treated with **ANTOL RISAN SYSTEM ANTISALE**, mix the first coat of **ANTOL AQUAPROOF** with approximately 24-26% (equal to 6.0-6.5 litres per 25 kg bag) of a 1:3 solution of **NEOPLAST LATEX** (1 part **NEOPLAST LATEX** with 3 parts water).

On older substrates where good rendering with **ANTOL AQUAPROOF** is more difficult to achieve, mix the first coat with approximately 26-28% (equal to 6.5-7.0 litres per 25 kg bag) of a 1:2 solution of **NEOPLAST LATEX** (1 part **NEOPLAST LATEX** with 2 parts water).

Apply the **ANTOL AQUAPROOF** mix using a small brush making sure that you cover irregularities uniformly and fill any surface holes. Special care must be taken with corners, edges, shells and floor-wall joints.

If you wish to apply the remaining coats using a paddle, mix **ANTOL AQUAPROOF** with 21-23% of clean water (equal to 5.25-5.75 litres per 25 kg bag) using the same procedure utilised to prepare the mix applied with a small brush.

In all cases the mix has a pot-life of 1 hour under normal conditions (20 °C).



The pot-life is shortened at higher temperatures and lengthened at lower ones. Successive coats must be applied crossways relative to the previous coat if using a small brush.

Applications using a roller or large brush do not require the first coat to be applied using a small brush. Use the same quantity of water in the mix as seen with the small brush application.

Applications using a spray system do not require the first coat to be applied using a small brush. Use the same quantity of water in the mix as seen with the small brush, roller and large brush applications. However the product must be mixed with water in a separate container, allowed to stand for the time indicated above and then poured into the rendering machine feed hopper. If necessary adjust the amount of water in the mix in accordance with the type of rendering machine and nozzle used.

Whether you are using a paddle, large brush, roller, small brush or spray system, apply coats with a thickness of 1 mm and wait for the previous coat to harden sufficiently before applying the next one. Do not exceed this thickness to prevent the formation of cracks.

In the event of damp or moisture seepage, apply at least 2 coats of the product. In the event of underground water, stagnant water and water subject to positive or negative pressure, apply at least 3 coats.

The delay between application of one coat and the next can vary significantly depending on the porosity of the substrate and environmental conditions. A period of 4-6 hours between coats is usually enough. Apply a fine spray of water onto the surface to prevent the application hardening too quickly in the event of high temperatures or windy conditions.

If necessary the final coat can be finished off using a sponge float as with any normal smoothing mortar.

If the **ANTOL AQUAPROOF** is going to come into contact with very soft water (from 0 to 10 French degrees), contact the Technical Office.

The tools used for applying the mortar may be cleaned with water before it hardens. Once hardened, the mortar must be scraped off.

## SETTING/HARDENING TIME

Delay between one coat and the next: 4-6 hours depending on the porosity of the substrate and environmental conditions.

Delay before use: at least 7 days.

## CONSUMPTION

The consumption of **ANTOL AQUAPROOF** is approximately 1.6 Kg/m<sup>2</sup> per mm of thickness. The total needed depends on the waterproofing requirements of the structure being treated.

For small brush, roller, large brush and spray applications: 1-1.2 Kg/m<sup>2</sup> per coat

For paddle applications: approximately 1.5 Kg/m<sup>2</sup> per coat

Minimum consumption:

- To counteract damp and moisture seepage: 2-3 Kg/m<sup>2</sup> (in two coats)
- To counteract underground and stagnant water: 4 Kg/m<sup>2</sup> (in three coats)
- To counteract water subject to positive pressure: 5 Kg/m<sup>2</sup> (in three coats)
- To counteract water subject to negative pressure: 6 Kg/m<sup>2</sup> (in four coats)

## STORAGE

**ANTOL AQUAPROOF** must be stored in a dry place. Unopened in its original bags, the product can be stored for at least 12 months.

## PACKAGING

25 kg valve bags.

## CERTIFICATION

***ANTOL AQUAPROOF** is suitable for contact with drinking water in accordance with Ministerial Decree 174 dated 06/04/2004. The test report is available on request.*

## TO BE SPECIFIED AS

**ANTOL AQUAPROOF**  
*Waterproofing treatment in the presence positive or negative pressure for concrete manufactures, prefabricated concrete, cement mortars, very resistant cement rendering, achieved using fine osmotic concrete mortar, suitable for contact with drinking water, such as **ANTOL AQUAPROOF** from Torggler Chimica S.p.A. The coats must be applied crossways on specially prepared wet substrates. Approximate consumption of ..... kg/m<sup>2</sup>.*