

# Torggler

## Waterproofing

# ASFREDOL 2000

**Resin-bonded cold bituminous emulsion ready to use.**



- Odourless
- Easy to use
- Fast drying
- High flexibility
- High impermeability and chemical resistance
- Great thixotropy
- Non-toxic, solvent-free product
- Good resistance to saline solutions



### APPLICATION AREAS

Asfredol 2000 can be used for:

- Waterproofing of concrete structures of foundations, walls against the ground and against infiltration and soil humidity
- Protection against chemicals
- Bonding of perimeter insulation panels in contact with soil.

### TYPES OF SUBSTRATE

Asfredol 2000 adheres perfectly to wood, cement, fibre cement, brick, asphalt and felt. Asfredol 2000 adheres even on wet surfaces, provided they are clean.

### FEATURES

Asfredol 2000 is a special bituminous emulsion based on special emulsifying agents and synthetic resins which improve the flexibility and mechanical properties of the dried bitumen film. It is ideal for the waterproofing of foundations, basements, tanks, basins, etc. whose size and mobility require treatments with greater flexibility. Asfredol 2000 adheres perfectly to wood, cement, fiber cement, brick, asphalt and felt and can be applied both

indoors and outdoors on horizontal and vertical surfaces without dripping. Asfredol 2000 is highly resistant to acid and alkaline solutions, vapours, smoke, gas, etc. Due to its polymer modification, one hardened layer of Asfredol 2000 is more flexible and has better adhesion compared to normal bituminous emulsions.

## WARNINGS

- It is recommended to apply the product at an ambient temperature not lower than +5°C and when there are no fog, rain or frost conditions, avoiding extreme cold and heat.
- Apply the product on the side of the product exposed to water (positive pressure water stress).
- Do not use to coat surfaces in contact with drinking water.
- Do not apply on very hot substrates as this would adversely affect the cohesion and adhesion of the product to the substrate.
- On highly absorbent surfaces it is advisable to apply a first coat of Asfredol 2000 diluted with water (see application instructions).

## INSTRUCTIONS FOR USE

### Preparation for use

The surfaces to be treated must be clean and free of dust.

### Product preparation

Mix the product before use.

### Instructions for use

Asfredol 2000 is applied cold using a brush, roller, spatula or trowel. It can also be sprayed on. Asfredol 2000 can be used to waterproof foundations against moisture in the ground (DIN 18195-4) or as internal lining of concrete tanks.

Important: Asfredol 2000 must always be applied on the side exposed to the water (positive pressure waterproofing) and never on the opposite side (negative pressure waterproofing). The surface must be smooth, clean and cohesive, but can be slightly damp.

– *Waterproofing of foundations:* Asfredol 2000 can be used to waterproof foundations against moisture in the ground (DIN 18195-4). Due to its simplicity of use, Asfredol 2000 is widely used to waterproof foundations against ground moisture and non-accumulating seepage water (DIN 18195-4 “Waterproofing against ground moisture”). Asfredol 2000 is applied cold on clean and dust-free surfaces. The first coat of Asfredol 2000 is diluted with two parts water and is applied with a paint brush or a long-handled scrubbing brush. This preliminary coat will penetrate into the pores and prepare the substrate for the application of at least two coats of undiluted Asfredol 2000. Coverage: approximately 2 kg per m<sup>2</sup>.

– *Internal lining of concrete tanks:* Asfredol 2000 is completely odourless, is highly stable and once dry it leaves a film of bitumen which will not re-emulsify, even in continuous contact with water. It is therefore ideal for the waterproofing of concrete tanks and basins. Application is easy. For the first coat Asfredol 2000 should be diluted with 2 parts of water, this ensures the perfect adhesion of the subsequent coats of undiluted Asfredol 2000. It can be applied using a paint brush, a long-handled scrubbing brush or a spatula. Apply at least two coats. As soon as the bitumen dispersion has dried, the treated tanks and basins can be filled. Not to be used for drinking water tanks. Coverage: Approximately 1 kg per m<sup>2</sup>.

Asfredol 2000 should always be mixed before use. To improve penetration and to help the adherence of subsequent coats, the first coat should be diluted with water. The dilution ratio depends on the absorption of the substrate and can vary from 1:1 to 1:6. Subsequent coats are to be applied as is.

For the bonding of insulating panels, to obtain thicker coats or to accelerate the drying reaction, cement or a mixture of sand and cement can be added to the Asfredol 2000. To avoid making the mass excessively thick, do not exceed 5% by weight of cement compared to the Asfredol 2000 (20 kg of Asfredol 2000, plus 1 kg of cement). The amount of sand to be added depends on the particle size of the sand and on the thickness to be obtained. A 2:1 mixture of sand to cement is normally used.

## WAITING TIMES

Asfredol 2000 is completely dry after 3-7 days.

## TECHNICAL SPECIFICATIONS

Appearance	Pasty liquid
Colour	dark brown
Colour after drying	black
Dry residue at 130°C according to UNI (EN ISO 3251)	57-63%
Brookfield viscosity at +20°C (impeller 5;10 rpm) (EN ISO 3219)	28000 ±6000 cP
Density UNI (EN ISO 2811-1)	0,95 – 1,01 kg/l
pH at +20 °C	9,0 – 11,0
Drying times *	6 hours
Waiting time between coats	12-24 hours
Complete drying time	2-4 days
Application temperature	from +5°C to +35°C
<b>PERFORMANCE FEATURES (EN 1504-2:2004 – C COATINGS – PI MC IR)</b>	
Permeability to CO2 (EN 1062-6)	Sd > 50 m
Permeability to water vapour (EN ISO 7783)	Class I – Sd < 5 m
Capillary absorption and water permeability (EN 1062-3)	w < 0,1 kg/m <sup>2</sup> *h <sup>0,5</sup>
Direct traction adhesion test (EN 1542)	> 1 N/mm <sup>2</sup>

\* The value is indicative and depends on the temperature and relative humidity. Low temperatures and/or high relative humidity increase the drying times.

Color	Black
Packaging	bucket
Packaging size	20kg
Pallet	33 buckets

## CONSUMPTION

The consumption of Asfredol 2000 (undiluted) is approx. 1-2 kg per m<sup>2</sup>, depending on the substrate and area of application.

## STORAGE

When stored in a cool, dry place in its original sealed packaging Asfredol 2000 is stable for at least 12 months.

### PROTECT FROM FROST.

The information contained in this document is reported on the basis of our experience and knowledge; therefore, any recommendations and suggestions made are without any guarantee and must be verified before using the product by those who intend to use it, who assume all responsibility that may result from its use since the conditions of use are not under our direct control. In case of doubt, it is always advisable to make preliminary tests and/or ask for the intervention of our technicians. Torggler reserves the right to modify, replace and/or delete the items, as well as to change the product data in this document without prior notice; in this case the indications given here may no longer be valid. Always refer to the latest version of the data sheet, available at [www.torggler.com](http://www.torggler.com). Version 17.11.2021.