

# BETOSIL

Crystalline waterproofing admixture for concrete.

# Description

**BETOSIL** is an admixture in powder form for creating water-tight concrete. It consists of Portland cement, aggregates and a compound of special active chemicals which reacts with moisture in fresh concrete and causes a catalytic reaction with the by-products of cement hydration. This reaction generates an insoluble crystalline formation that fill the pores and small capillary cracks preventing any further ingress of water erven under strong hydrostatic pressure.

# Features - Benefits

- Becomes integral part of the structure offering permanent protection.
- Water impermeability against positive and negative hydrostatic pressure.
- Crack healing ability for hairline cracks up to 0,4mm.
- Non-toxic, free of chlorides and other corrosive ingredients.
- Minimization of maintenance and repair costs.
- Reduction of capillary absorption.
- Protects embedded steel of the concrete from corrosion.
- Increases concrete resistance to freeze / thaw cycles.
- Increases concrete compressive strength.

# Examples of applications

**BETOSIL** can be applied to any concrete structure where it comes in contact with water and water penetration should be permanently avoided :

- Foundation / basements
- Parking structures
- Swimming pools
- Tunnels / canals
- Parking garages
- Sewage & wastewater
- Parking lot levels etc.

#### Specifications

Form: grey dry mortar

Dry mortar density: 0,80 kg / L

Maximum chloride content : chloride - free

#### Instructions for use

**BETOSIL** must be added to the concrete at the time of batching and not directly to wet concrete as the admixture will not be dispersed correctly.

#### Application No.1 : Add to the aggregates

**BETOSIL** is dosed first to the aggregates and mixed thoroughly.

# Application No.2 : Add to drum

Mix **BETOSIL** with water to form a very thin slurry at a ratio of 15 kg powder to 20 lit of water. Pour the slurry into wet concrete at a ratio of 1,8 -2,20 kg per 100 kg of cement. Further mixing is required for minimum 5 minutes to ensure even distribution of **BETOSIL** throughout the concrete.

# Mixing ratio

0,8 % - 1 % by weight of cement

# Packaging

Heavy duty paper bags, 15 kg each.

#### Storage

Preferably in shady and roofed locations, low in moisture, for at least 12 months.

#### Setting time and strength

The setting time of concrete is affected by the chemical and physical composition of ingredients, temperature of the concrete and climatic conditions. Concrete containing **BETOSIL** may develop higher ultimate strengths than plain concrete. Trial mixes should be carried out under project conditions to determine setting time and strength of the concrete

#### Precautions and safety

The product contains cement and is classified as an irritant. No special precautions are necessary for product application except for standard precautions applicable to all construction operations i.e. using gloves and goggles; preventing prolonged skin contact, etc. In case of eye contact, immediately wash with plenty of water and seek medical advice if necessary. Collect empty bags and plastic covers and dispose of in refuse bins designated for this purpose. Consult instructions for safe use indicated on product packaging. For more information please refer to the material safety data sheet of the specific product.

#### Notes

Technical details, properties, recommendations and information on BAUER products are supplied in good faith. They are based on the company's research and experience, provided that they are stored and applied under normal conditions. As the method of using materials as well as project and environment conditions are beyond the control of the company in each individual application setting, the product user is held solely responsible for the result of application. No responsibility under any legitimate relationship can be substantiated against the company, based on the information set out hereunder. Product users are advised to refer to the latest revision of the technical manuals available.

#### Other information

BAUER BUILDING TECHNOLOGIES Megara Industrial Estate, Attica Tel: 210 5744222 Fax: 210 5740777 Email: info@netbauer.com http// www.netbauer.com

Frankfurt, Reg. No 312310 QM Qualitätsmanagementsystem Zertifiziert nach DIN EN ISO 9001

