

Bonding bridge / Admixture for the manufacture of polymer-modified concrete and mortar



AREA OF USE

Cementol Concrete Contact is an aqueous dispersion of artificial resins that allows the preparation of:

- polymer modified mortar and concrete resistant to increased mechanical, physical and chemical stress,
- repair mortars,
- adhesive mortars,
- bonding layers between old and fresh concrete or mortar.

ACTION

During hydration the polymer molecules are deposited on the surface of the cement particles and aggregate to form a continuous film after hydration is complete. The resulting polymer network penetrates the hardened cement gel and connects the aggregate and cement paste. This improves the quality of the hardened cement paste as well as the contact between the cement paste and the aggregate grains.

TECHNICAL CHARACTERISTICS

Characteristic	Declared value
Appearance	Milky-white liquid
Density, 20 °C	approx. 1 kg/L
pH	5.5 ± 1

DOSAGE AND INSTRUCTIONS FOR USE

1. POLYMER-MODIFIED CONCRETE OR MORTAR

Preparation of solution

Cementol Concrete Contact is mixed into concrete or mortar previously diluted with water. Dilution rate is determined by the complexity of the work performed and varying within the limits of:

Cementol Concrete Contact : water = 1 : 1 to 1 : 3 [weight or volume parts]

Preparation of concrete/mortar

Prepare only the amount of concrete/mortar that can be used immediately.

The solution of diluted Cementol Concrete Contact and water is dosed in such a way that it allows the preparation of suitable or desired workability concrete/mortar.

Substrate preparation

Concrete/mortar containing Cementol Concrete Contact is applied to a pre-prepared substrate:

The substrate must be clean, firm and moistened. Remove all impurities, dust, old paints, greases, and poorly bonded parts first.

It is best to soak the substrate thoroughly with water the day before you begin working, and then remove any excess [standing] water just before you begin, so that the surface is "matte" moist.

If the surface on which we will apply concrete/mortar prepared with Cementol Concrete Contact is **very porous**, it can be impregnated beforehand with a precoat prepared by diluting Cementol Concrete Contact with water in the ratio:

Cementol Concrete Contact : water = 1 : 4 [weight or volume parts]

Consumption for impregnation is dependent on substrate absorption and amounts to approx. 0.02 – 0.10 kg/m².

Installation and care

Freshly installed concrete/mortar must be protected from drying out too quickly [wind, draughts, sun] by covering it with damp tarpaulins or plastic sheeting.

In winter conditions, however, we must take care of frost protection.

Cleaning of work accessories

The mixer, containers, and tools must be washed with water as soon as the work is finished.

2. BONDING BRIDGE ACCORDING TO THE FRESH TO FRESH SYSTEM

Prepare only the amount of bonding layer that will be used immediately.

Composition of the bonding layer

Cement: usually CEM II/B-M[L-S] 42.5 N or CEM II/A-M[LL-S] 42.5 R

Sand: construction sand or stone aggregate 0/4 mm

Ratio: cement : sand = 1 : 1 to 1 : 2

Solution: Cementol Concrete Contact : water = 1 : 2 to 1 : 3

Preparation of solution

Cementol Concrete Contact is mixed into a dry mixture of cement and sand previously diluted with water. Dilution rate is determined by the complexity of the work performed and varying within the limits of:

Cementol Concrete Contact : water = 1 : 2 to 1 : 3 [weight or volume parts]

Substrate preparation

The bonding layer will be installed on the substrate, which will need to be further prepared.

The substrate must be clean, firm and moistened. Remove all impurities, dust, old paints, greases, and poorly bonded parts first.

It is best to soak the substrate thoroughly with water the day before you begin working, and then remove any excess [standing] water just before you begin, so that the surface is "matte" moist.

Preparation of the bonding layer

Prepare only the amount of bonding layer that can be used immediately.

First mix the dry components – cement and sand. While stirring, add the solution of Cementol Concrete Contact and water to the dry mixture until a homogeneous mass with suitable workability is obtained.

Installation and curing

Apply the prepared mass to the substrate at a thickness of about three times the maximum thickness of the sand used. Apply it on as much surface as can be covered with cement screed or concrete in about 30 minutes [fresh-on-fresh installation].

After the work is completed, the fresh screed or concrete is protected from excessive evaporation of water or freezing.

Cleaning of work accessories

The mixer, containers, and tools must be washed with water as soon as the work is finished.

Consumption for the bonding layer

approx. 0.5 kg/m² for a bonding layer of approx. 5 mm and at dilution with water 1 : 3

ADVANTAGES OF USAGE

- Improvement of mechanical properties of concretes and mortars.
- Improvement of adhesion of fresh concrete/mortar with already hardened concrete/mortar.
- Improvement of mortar/concrete resistance to the action of salts, dilute acids and alkalis, oils, and gasoline.
- Improved workability of fresh concrete/mortar.
- Improved impermeability or lower permeability of water, oils, and petroleum products.
- Increased abrasion resistance.

PACKAGING

bottles 1 kg, cans 5 kg and 10 kg

STORAGE

- The product should be stored at temperatures between +5 °C and +35 °C. Protect it from damage, freezing and direct sunlight.
- A properly stored product has a shelf life of at least 2 years after the date of manufacture.
- The product may still be used after the date of expiry, but the characteristics important for the intended use have to be examined.

HEALTH, SAFETY AND ECOLOGY

Protective gloves must be worn when working with Cementol Concrete Contact. Follow the general instructions for working with chemicals: take care of cleanliness, do not eat, drink or smoke while working. After finishing work, wash hands thoroughly with water.

More information on safe handling and disposal of the product is available in the safety data sheet, which is provided on request, and is also available from the dealer or distributor where you purchased the product.

WARNING

Instructions and recommendations are given based on tests in our laboratories and experience to date. Due to specific conditions and work methods, preliminary tests are advised for every type of use, for each individual case of use of the product alone, or in combination with other admixtures.

Since we cannot influence the course of work, we cannot be held responsible for its quality!



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