

TECHNICAL DATA SHEET
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# **Bi-Aqua WP-35**

# **Cement Based, Capillary Effect, Crystallized Water Isolation Material**

**Bi-Aqua WP-35**, It is a cement based, one component, waterproofing material which is applied to negative and positive side of concrete against surface waters in old and new structures, which is effective in capillary action.

## Areas of Usage

- · Indoors and outdoors.
- In horizontal and vertical applications,
- In water tanks
- On foundation, curtain and retaining walls,
- In elevator pits,
- It is used for floor moisture in basement floors.

# **Advantages**

- · Mix with water only,
- Easy to prepare and apply.
- The study period is long.
- Resistant to negative and positive water pressure.
- Provides waterproof due to its hydrophobic and capillary properties on concrete surfaces.
- Protect concrete and equipments from corrosion.
- Water vapor permeable.
- Resistant to frost and dissolution.
- Drinking water can be used in storage.
- The crystals that you have formed are insoluble, inseparable from the surface.
- It is the most economical solution that can be done in the negative direction.

#### Technical Specification

**Structure of Material**: Cement, mineral fillers, special admixtures.

Color : Gray

Pressure Resistance : 28 days 15 N / mm<sup>2</sup>

Application Floor Temperature : +5°C / +25°C

Service Temperature : -20°C/+80°C

Lifetime : 20 min.

Mixture Density : 2,00 kg / lt

**Note:** Above values are given at +23°C and 50% relative humidity. High temperatures shorten the duration, lower temperatures prolong the duration.

#### Preparation of Surface

The surface to be applied must be solid, cleaned of all kinds of oil, rust, paraffin, paint, bitumen residues and all loose parts which will prevent sticking to the floor. The iron and wooden blocks on the surface should be removed and repaired with gaps **Bia-Crete HS-1040**. If present, active water leaks must be stopped with **Bi-Aqua WP-Plug**; **Bia-Crete HS-1040** should be chamfered at least 4 cm radius on all corners and edges. The surface to be applied must be thoroughly saturated with water one day in advance and the surface must be moist before application.

#### Preparation of Mortar

Mixed water should be added onto the *Bi-Aqua WP-35* powder placed in a clean mixing bowl. no reverse process should be done and 20 min. enough material should be prepared for use. Mixture water is slowly added to product and mixed with a 400-600 rpm mixer. The mixture is stirred for about 2 min. until it is completely homogeneous and allowed to setting for about 2 min. Then again 1 min. are mixed and ready for application.



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# Mixing Rates

Bia-Aqua WP-35	1 kg powder	25 kg kraft bag
Mixture Amount	~0,30 lt kg	~6,00 It
Mixed Density	2,00 kg/lt	2,00 kg/lt

## **Application Information**

**Bi-Aqua WP-35** is applied with a brush on the previously moistened surface. The second layer can be applied if the first layer has reached adequate hardness without losing water and before crystallization begins. This time can be considered as 3 - 5 hours depending on ambient temperature. The application time between layers should be less than 6 hours.

**Important Note:** Do not apply curing material to the material after application and keep the material wet for 5 - 7 days. This application will enable crystallization to occur. Deposited twinning formation and depth of penetration should be increased 24 hours after application in water storage. The material becomes waterproof after 7 days. The material must be protected from direct sunlight and wind for 24 hours.

# Consumption

1st floor 1,00 kg /  $m^2$ 2nd floor 1.00 kg /  $m^2$ 

## **Packing**

20,00 kg polyethylene reinforced kraft bag;

#### Shelf Life

It is 1 years from the date of manufacture in the appropriate storage conditions. Opened packages should be kept tightly closed in suitable storage conditions and used within 1 week.

#### Storage

It should be stored in original unopened package, in cool and dry environment, protected from freezing. In short-term storage, maximum 3 pallets must be placed on top of each other and it must be shipped with the first-in first-out system. The pallets should not be placed on top of each other for long periods of storage.

#### Security Precautions

During the application, it must be used, in accordance with the Occupational Health and, Safety, the work clothes, protective gloves, goggles. Due to the irritant effects of curing materials, the components should not come into contact with the skin and the pore, in case of contact with plenty of soap and washed, if swallowed, seek medical advice immediately. Application areas should be ventilated and food and drinks stuffs should not be put into application areas. It should be stored at places where children can not reach it. For detailed information safety data sheet (Material Safety Data Sheet).

### Responsibility

The information given in this technical document is based on our scientific and practical knowledge. Orkim Ortaklar Boya Sanayi ve Pazarlama A.Ş. it is only responsible for the quality of the product. Orkim Ortaklar Boya Sanayi ve Pazarlama A.Ş. shall not be held liable for any consequences which may arise from outside of the written suggestions about where and how the product will be used and/or due to incorrect use. The responsibility of applying our product correctly is the responsibility of the user.

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