

TECHNICAL DATA SHEET
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Bi-Aqua WP-27

Two component, semi-flexible waterproofing material

It is semi-flexible waterproofing material designed for cement and acrylic based, all kinds of reinforced concrete surfaces and cement based cisterns.

Areas of Usage

- Indoors and outdoors, vertical and horizontal water from the direction,
- Semi-Olympic swimming pools and thermal pools,
- In water tanks (provided it is protected)
- In the walls and upholstery of cold weather stores,
- In wet areas like WC, bathroom, balcony, kitchen,
- On the terraces (with the condition of being covered)
- On foundation, curtain and retaining walls,
- It is used for flowerpot insulation.

Advantages

- Semi-flexible and waterproof
- Easy to prepare and apply.
- Can be applied with a brush or sprayer.
- The study period is long.
- Due to its high adhesion performance and semi-elasticity, it forms a jointless, seamless, permanent, impermeable layer under grout and ceramics.
- Resistant to chemical and salt solutions in the ground.
- Water vapor permeable.
- It is resistant to the freeze-thaw cycle.
- Drinking water can be used in storage.

Technical Specification

Bi-Aqua WP-27 Component A : Special cement, mineral fillers, polymer

Bi-Aqua WP-27 Component B : Copolymer Acrylic Dispersion

Color : Dark cement color (final product), Greenish Gray, Gray

Adhesive Strength : 1,5 N / mm²

Capillary Water Absorption (TS EN 12808-5): 0.10 gr (after 4 hours)

Pressurized Water Resistance : 2 bar (positive) (2 mm dry film thickness)

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

Service Temperature : -20°C/+80°C

Fresh Mixing Time : 2 hours

Ready to Use Time (Mechanical Strength) : 2 days later

Ready to Use Time (Waterproof) : 7 days later

Coating (Plaster or Ceramic) : 3 days later

Mixture Density : 1.9 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 (especially reinforced concrete surfaces) should be moistened with water before application, but no pond formation allowed. During application, the coating material immediately loses water and appears to have a



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matte appearance, indicating that the surface is not sufficiently moistened or dried quickly. If such air is hot or the materials remain in the wind, only water up to 10% of component B may be added into the blended material for the first layers.

Preparation of Mortar

Bi-Aqua WP-27 Component B (liquid component) is emptied into a clean mixing cup. On the **Bi-Aqua WP-27 Component A** (powder component) is added slowly while stirring with a mixer of 400 - 600 rpm. The mixture is stirred for about 3 - 5 minutes until it is completely homogeneous and allowed to setting for about 3 - 5 minutes. Then again 30 sec. are mixed and ready for application.

Mixing Rates

Bia-Aqua WP-27	Component A	Component B
MIXTURE AMOUNT	20 kg	5 kg
MIXED DENSITY	1,90 kg/lt	1,90 kg/lt

Application Information

The prepared *Bi-Aqua WP-27* mixture is applied in two or three coats with the help of an insulating brush. The direction of brush application on each floor should be perpendicular to each other. The waiting time between layers varies according to the ambient conditions. For the second and third layer application, the previous layer has to be completely dried. It is recommended to apply spraying method for large areas.

Consumption

1st floor 1,00 kg / m² 2nd floor 1.50 kg / m² 3rd floor 1.50 kg / m²

Packing

Bi-Aqua WP-27 Component A 20,00 kg polyethylene reinforced kraft bag;

Bi-Aqua WP 27 Component B 5,00 kg plastic drum.

Shelf Life

It is 1 years from the date of manufacture in the appropriate storage conditions. *Bi-Aqua WP-27 Component B* freezes at temperatures below 0°C. Opened packages should be kept tightly closed in suitable storage conditions and used within 1 week.

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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