



CRYSTAL PURE

PRODUCT DESCRIPTION

CRYSTAL PURE is a waterproof epoxy coating suitable for horizontal and vertical concrete surfaces intended for permanent contact with drinking water. The product is two-component, white, non-toxic and solvent-free.



PRODUCT APPLICATION

- Collection tanks
- Piezometric tower tanks
- Concrete cisterns and boxes

ADVANTAGES

- Excellent coating capacity
- Frost-resistant
- Solvent-free

PREPARATION AND APPLICATION The preparation and installation data refer to normal environmental conditions (temperature +20 °C; relative humidity 60%).

Preparing the surface

Thoroughly clean the surfaces by brushing or pressure washing to remove all traces of dust, dirt, oils and greases, salt deposits, efflorescence and loose parts.

Proceed with the repair of missing parts using a suitable repair mortar and even out any imperfections with the application of a suitable cement skim coat.

With surfaces that are partially water-soaked, with a relative surface humidity of no more than 10% (measured with a Storch electric hygrometer) apply BI MORTAR ULTRA SEAL product (see relevant technical data sheet).

Preparation of surface discontinuity elements

- **CONSTRUCTION JOINTS, JOINTS AND CRACKS** Fill all construction joints, joints and cracks by means of BI FLEX System (see relevant technical data sheet)
- **SPACERS** Remove the spacers on both sides of the wall and plaster with SPIDY 15 rapid-setting mortar (see relevant technical data sheet)
- **PENETRATIONS** Seal all penetrations, including spacers and pipes, with AKTI-VO 201 mastic (see related technical data sheet)

Preparing the product

Pre-mix component A (base) using a mixer at low speed.

Then pour component A into a suitable container and add component B (hardener), taking care to empty the containers completely.

We recommend diluting the mixture made with ethyl alcohol (for food contact) in a proportion of between



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5% and 10% to improve workability.

Continue mixing with the same mixer until the mixture is perfectly smooth.

Manual mixing is not recommended.

If small quantities have to be prepared, it is essential to precisely observe the weight ratio between the two components.

Application in positive hydrostatic thrust

Apply CRYSTAL PURE in an even layer using the VOLTECO ROLLER, a brush or an airless machine. The final thickness should be at least 200-250 microns, with a consumption of approximately 0.3 kg/m². On particularly absorbent surfaces, a second coat of CRYSTAL PURE is required, which must be applied at least 12 hours after the first coat, but no later than 48 hours.

To ensure good adhesion and protection, avoid exposure to rain for at least 12 hours after application.

Application must take place under suitable ambient conditions, with a substrate and air temperature above 15°C.

If you use an airless machine, you should contact Volteco's Technical Service.

Application in negative hydrostatic thrust

Apply BI MORTAR ULTRA SEAL or BI MORTAR CONCRETE SEAL cement waterproofing to the surface (see relevant data sheets).

Curing

Should the ambient conditions be suitable (room temperature +20°C; ambient humidity 60%), wait at least 7 days after applying CRYSTAL PURE before filling the tank, which must in any case be preceded by a thorough rinsing.



References available at www.volteco.com

CONSUMPTION AND YIELD

CRYSTAL PURE approx. 0.3 kg/m², varying depending on the porosity of the substrate, equal to a thickness of approx. 200÷250 microns.

PACKAGING AND STORAGE

The product is supplied in 12.84 kg packages:

Component A (base) 8.3 kg

Component B (reagent) 4.54 kg

The product must be stored in a dry place without being exposed to frost and heat (at a temperature between +5°C and +30°C).

CRYSTAL PURE, stored in a dry place in its original packaging at a temperature between +5°C and +30°C, has a shelf life of 12 months.

WARNINGS - IMPORTANT NOTES

Do not apply the product on wet surfaces.

Do not apply directly on liquid waterproofing membranes; if necessary, interpose BI MORTAR ULTRA SEAL or BI MORTAR CONCRETE SEAL at the thickness indicated in the relevant data sheets.

To ensure optimal application, it is important to keep the product in an environment with a temperature of at least 20°C and to avoid direct exposure to the sun before application.

Once the product has been mixed, it must strictly be used within the indicated pot life.

Any mix residue in the container beyond the permitted limit must not be used under any circumstances, even if the mix has the right viscosity.

Low ambient and substrate temperatures and/or high air humidity lengthen the drying time and may prevent the product from fully curing. Hot air dispensers and/or dehumidification systems are required should this be the case.

High temperatures in the room and on the surface reduce the product's pot life (60'-80' at 20°C).

24 hours after the product has been applied (room temperature +20°C; room humidity 60%), the surface of CRYSTAL PURE should be solid to the touch. Any soft or sticky consistency indicates probable anomalies during the preparation phase (e.g. alteration of the ratio of the two components, incorrect mixing, etc.) and the product should therefore be removed.

In case of prolonged exposure to UV radiation, there is a tendency for the original colour to turn yellow



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and/or chalking of the coating.

Clean tools via an appropriate thinner while the product is still fresh.

PHYSICAL AND TECHNICAL SPECIFICATIONS

Specification	Values
Appearance	Component A: White liquid Component B: Amber liquid
Mixture consistency	Viscous fluid
Dilution	5 - 10% with ethyl alcohol (for food contact)
Application temperature	from +15 °C to +30 °C
Surface temperature	> 15 °C
Workability time at +20 °C	60-80'
Mixture ratio	65 parts of component A 35 parts of component B
Specific weight	1.35 ± 0.03 kg/l a 20 °C
Viscosity 25±2 °C	15000 - 20000 mPa s
Dry residue	100 (± 1) %

Feature	Test method	Declared performance
Adhesion to the concrete	UNI EN 1542	> 2 MPa
Abrasion (1kg 1000 rpm)	EN ISO 5470-1	< 100 mg
Reaction to fire	UNI EN 13501-1	Class Bfl-s1

Feature	Certification
Suitability for contact with drinking water EU Reg. n° 10/2011 CE 14/01/2011	Mérieux NutriSciences Report n° 23/000654659
Suitable for contact with drinking water (Italian Ministerial Decree 174 of 06/04/2004)	Mérieux NutriSciences Report n° 23/000636341

The quoted data are obtained in a laboratory at +20 °C and 60% RH.

SAFETY

Refer to the related Safety Data Sheet.

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