



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.

Restore missing parts, repair any imperfections if an aesthetic result is required and seal any cracks by applying a suitable cement-based levelling compound.

With surfaces that are partially water-soaked, with a relative surface humidity of no more than 10% (measured with a Storch electric hygrometer) apply PROFIX 80 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)

Substrate treatment in case of negative hydrostatic pressure

Apply BI MORTAR CONCRETE SEAL cement-based waterproofing compound (see relevant technical data sheet) or PROFIX 80 primer substrate to the surfaces.

If a primer with elastic performance is required, apply PLASTIVO elastic waterproofing compound in contact with concrete prior to using these products (see relevant technical data sheet).



CRYSTAL PURE

Preparing the product

Pre-mix component A (base) with a mixer at low speed, then pour it into a suitable container and add component B (reagent), taking care to thoroughly empty the containers. Mix using the same mixer until completely smooth.

Avoid mixing by hand.

Should it be required to prepare small quantities of product, it is recommended to strictly comply with the weight ratio of the two components.

Application

The mixed product must be applied evenly in a single coat via a brush, RULLO VOLTECO or airless machine (contact Volteco's Technical Service for further information on use via machine) for a thickness of approximately 200÷250 microns, equal to a theoretical consumption of 0.3 kg/m² of product, with room and substrate temperatures not below 15°C.

On particularly absorbent substrates, apply a second coat respecting the curing time for any subsequent layer, i.e. at least 12 hours and no more than 48 hours after the previous coat.

Protect it from rain for at least 12 hours.

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. 300 g/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) or direct exposure to the sun before being applied.

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.

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' a 20°C).

After 24 hours from applying the product (room temperature +20°C; room humidity 60%) the CRYSTAL PURE surface should be solid to touch, any soft and sticky consistency is an indication of probable anomalies during preparation (e.g. altered ratio between the two components, incorrect mixing, etc.), therefore, the product is considered unsuitable.

In case of prolonged exposure to UV radiation, there is a tendency for the original colour to turn yellow and/or chalking of the coating.

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

PHYSICAL AND TECHNICAL SPECIFICATIONS



CRYSTAL PURE

Specification	Values	
Appearance	Component A: White liquid Component B: Amber liquid	
Mixture consistency	Viscous fluid	
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	6500 - 9500 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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