

PT Reactive-Slurry Crystalline

**- reactive sealing slurry -
(crystalline, permanent active, deep penetration, waterproof)**

Product description

PT Reactive-Slurry Crystalline is a reactive, powdered, active crystalline, rigid cement based sealing slurry with special deep crystallization properties. based on cement and special additives. PT Reactive-Slurry Crystalline penetrates deep into the substrate and claws by active crystallization into the pores of the substrate to achieve a very good bonding to the surface. PT Reactive-Slurry Crystalline retains the crystalizing reaction over the whole working time. Immediately after application the crystallization starts and is permanent working.

Application areas

PT Reactive-Slurry Crystalline is used for reliable and permanent waterproofing against pressurized water on positive side (outside) as well as on negative side (inside) of buildings. PT Reactive-Slurry Crystalline is used on vertical and on horizontal surfaces which have to be waterproofed. It is applicable on nearly all mineral sufficiently solid surfaces with an ideal strength of $>1,5 \text{ N/mm}^2$. Typical application areas are basements, concrete elements, car parkings, tunnels, water tanks, wet rooms or manholes. PT Reactive-Slurry Crystalline is also usable as waterproofing under walls against rising dampness.

Product advantages

- **Dry mortar**
- **According to DIN 1504**
- **Watertight against pressurized water (14 bar, depend of surface)**
- **Active crystallization**
- **Integral waterproofing system**
- **Durable working**
- **Salt water resistant**
- **Frost resistant**
- **High compressive strength**
- **Capillaries will be blocked**
- **Low consumption**
- **Easy application**
- **Sprayable**
- **„Made in Germany“**


Specification

Base : cement, quarz sand, alkaline reactive silicates
Color : grey

Processing temperature	: + 5°C up to + 35°C
Buld density	: approx. 1.18 g/cm ³
Water vapour diffusion resistance factor μ :	: approx. 65
Trafficable	: after approx. 1 day
Loadable	: after approx. 2 days
Water requirement	: approx. 8 liter per 25 kg slurry
Applicable	: approx. 3 hours at 20°C/50% rel. h.
Curing time	: after approx. 9 hours
Complete curing	: after 28 days
Shrinkage	: <0,02%
Consumption	: no pressurized water approx. 2 kg/m ² pressurized water approx. 4 kg/m ²
Minimum thickness	: approx. 1.4 mm at no pressurized water approx. 2.5 mm at pressurized water

All technical datas are measured in our laboraty.

Please take notice about the safety information and advice given on the safety data sheets and packaging labels. GISCODE: ZP1

	<p>proof-tec GmbH Wiesedermeerer Hauptstr. 24 D-26446 Friedeburg</p> <p>17 EN 1504-3:2005 Unique identification code of the product-type proof-tec 0520 EN 1504-3: ZA.1a Product of structural and non structural concrete repair Applying mortar by hand (3.1)</p>
Compressive strength	Class R3
Chloride ion content	≤0,05%
Adhesive bond	≥ 1,0 MPa
Restrained shrinkage/expansion	NPD
Carbonation resistance	NPD
Elastic modulus	> 10 GPa
Thermal compatibility	NPD
Coefficient of thermal expansion	NPD
Capillary absorption	≤0,5 kg/m ² x h 0,5
Reaction to fire	Class A1
Release of dangerous substances	NPD

Delivery form

25 kg unit

Article-No. 0520025

Storage

6 months (frost-free and dry, +5°C up to +25°C in original packaging).

Application

Surface preparation

The surface must be mineral, dry or light humid, sound, absorbent and clean. Bonding inhibiting agents such as grease, oil, formwork oil and all loose particles and dust must be removed before application PT Reactive-Slurry Crystalline. Damaged area like cracks, holes or cavities have to be reprofiled with PT Swelling mortar. Cavities or surface damages >5mm have to be reprofiled with PT Surface Sealing Mortar. The pores of substrate must be open, so PT Reactive-Slurry Crystalline can penetrate. Cracks have to be treated or waterproofed separately by using injection systems. Dusty or salt damaged surface have to be treated with PT Deep Primer prior application of the slurry. So the substrate is re-solidified and salts are transferred from soluble to insoluble and during curing time of the slurry no salts can penetrate into the PT Reactive-Slurry Crystalline during curing.

Negative side waterproofing

The old salt and humid damaged "old plaster" must be removed minimum 80 cm above the visible damaged surface. Loose, sandy and damaged material has to be cleaned out of the joints, minimum 2 cm deep. Maybe the surface requires a mechanical cleaning by grinding. Damaged bricks must be replaced. In case of salt damaged and dusty surface, the surface must be treated with PT Deep Primer. Joints and cavities must be reprofiled with PT Swelling Mortar.

PT Reactive-Slurry Crystalline must be mixed with using of a slow speed mixer with clean water (approx. 8 ltr per 25 kg) or according our recommendation with a liquid out of water + 20% PT Bonding Emulsion Plus or with one canister PT Reactive Flex. Put firstly water (or admixture) in a pail and add the whole bag of sealing slurry, mix it until a lump-free compound is attained. After mixing wait 1 minute and mix again. The application on the surface must be done with a hard brush or spraying device. The coating in principle done by minimum 2 layers, whereby the minimum thickness has to be observed. The first layer must not be completely cured before the second layer is applied or the surface has to be pre-wetted.

The whole system has to be secured against too fast drying (wind, sun etc.), frost and rain. At negative side waterproofing the rel. air humidity should not be higher than 65%. PT Reactive-Slurry Crystalline can be covered with coating which open for water vapor diffusion or plasters. In case of negative side waterproofing in basements, we recommend to cover the coating with PT Restoration Plaster white or rapid, to prevent condensate water on the coating.

Positive side waterproofing

PT Reactive-Slurry Crystalline must be mixed with using of a slow speed mixer with clean water (approx. 8 ltr per 25 kg) or according our recommendation with a liquid out of water + 20% PT Bonding Emulsion Plus or with one canister PT Reactive Flex. Put firstly water (or admixture) in a pail and add the whole bag of sealing slurry, mix it until a lump-free compound is attained. After mixing wait 1 minute and mix again. The application on the surface must be done with a hard brush or spraying device. The coating in principle done by minimum 2 layers, whereby the minimum thickness has to be observed. The first layer must not be completely cured before the second layer is applied or the surface has to be pre-wetted.

The whole system has to be secured against too fast drying (wind, sun etc.), frost and rain. At negative side waterproofing the rel. air humidity should not be higher than 65%.

Recommended tools

Hard brush

Roller

Gloves

Safety glasses

Mixer

Spraying device

Application areas:**Remarks**

The information given in this technical data sheet corresponds to the current state of development and is based on our experience, our knowledge and is non-binding. An investigation has to be done with focus on the respective building project and the area of application. The technical expert advice of proof-tec employees does not exclude the planning or control by an engineer. We are liable within the scope of our general delivery and sales conditions, we are not liable for the application of our materials. The generally accepted rules of technology must be observed. If necessary, preliminary tests have to be carried out.

Version 02/2021

All previous versions of this technical data sheet are not valid anymore and should not be used anymore.