

# **CRYST SEALER®**

Article-No.: 02100

# WATER REPELLENT SEALER

#### **DESCRIPTION**

CRYST SEALER® is a water-repellent sealer applied onto cured concrete that forms a sub-surface barrier inside the concrete, that protects concrete against water penetration for the long term. When sprayed CRYST SEALER® onto a concrete surface, it is penetrating deeply and reacts to form a non-soluble gel sealing pores, capillaries, and cracks.

# **FEATURE AND BENEFITS**

- Not optically noticeable after the complete reaction.
- Rapid development of water repellency.
- Highly durable and effective beading effect.
- Helps to protect reinforcing steel from corrosion
- Can be used outdoors or indoors.
- Increase resistance against water, chloride, sulfate ingress, carbonation, and other chemical attacks.
- Heat resistant after setting.
- Helps to prevent freeze or thaw damage
- Non-toxic ideal for potable water.

# FIELD OF APPLICATION

CRYST SEALER® is ideal to apply on concrete, block or brick walls:

- Concrete roof.
- Roof tiles and unglazed floor tiles.
- podium decks, Bridge decks.
- Parking structures.
- Traffic-bearing structures.
- Driveways, including exposed aggregate.
- Sidewalks, patios, balconies, steps.
- Concrete pavers and retaining walls.
- Marine floats and docks.
- Airport runways.

In short, everywhere concrete is directly exposed to the elements and considerable thermal stress can be expected.

# **MATERIAL PROPERTIES**

Form: liquid

Appearance: colorless transparency
Density: approx. 0.9 g/ml
Application temperature: from 5°C up to 50°C

VOC zero

### **DIRECTION FOR USE**

#### Surface preparation:

The surface must be, dry, sound, absorbent, clean and have an open capillary structure. Remove any loose part, moss, algae, release agents, grease, formwork oil and other adhesion reducing separation layers before apply CRYST SEALER®. Surface damaged area like cracks, holes or cavities have to be chased out, and treated with CRYST MORTAR®.



# Application:

CRYST SEALER® applied undiluted, 2 times wet in wet using simple flood method, brush, roller, and hand spraying equipment. Any repeated application can be processed immediately after the liquid has been completely absorbed into the substrate. Avoid pooling on horizontal surfaces, evenly distribute excess liquid CRYST SEALER® is deep penetration active if applied in sufficient quantity it deeply penetrates the absorbing substrate and react to form a layer of permanently proactive. Surface applied with CRYST SEALER® initially appear optically moist after drying and reaction time of approx. 2 weeks, the surfaces cannot be distinguished any more visually from the untreated surface, only to a slight extent. Depending on the type and condition of the substrate or on the applied quantity of CRYST

SEALER®, slight deviations in color shade after drying cannot be ruled out. Create sample area to ensure that the result will meet your requirement. After application all equipment should be thoroughly cleaned with water. Contact your CRYSTARM® representative for further details on spraying equipment.

## Application rates:

CRYST SEALER® Coverage approximately  $0.1 - 0.3 \text{ kg/m}^2$ , depending on the porosity of the substrate.

### NOTES:

- > CRYST SEALER® is ready to use and not to be diluted with water.
- > Surface should be minimum 14 days old (28 days is recommended), clean, free of dust and dry.
- > Avoid application when rain is imminent or in heavy wind.
- Apply only to properly vibrated structural concrete of 20 mpa and above.
- ➤ CRYST SEALER® is not suitable for the repair of structural or design cracks. For cold joints, expansion joints, penetrations and pour joints, appropriate joint treatment products such as CRYST MORTAR®, waterstops, elastomeric sealants, etc., need to be applied in addition to the CRYST SEALER® treatment.
- CRYST SEALER® is not normally recommended to be used for negative side waterproofing. Where waterproofing from the negative side is required, CRYST COAT® for this application.
- Do not spray CRYST SEALER® onto glass, aluminum, wood or painted surfaces. In case this happens, remove the product with water.
- ➤ CRYST SEALER® should not be used as a replacement or a solution for poor design, detailing and workmanship.
- ➤ CRYST SEALER® can be used on concrete that contains fly ash, slag or silica fume, as long as these ingredients do not exceed 30% of the total cementitious materials in the concrete mix. To ascertain suitability, execute a trial on a small area or obtain concrete mix design from supplier. To increase suitability of such concrete, a calcium treatment may be applied to the surface. This can also be done to increase effectiveness on old and heavily carbonated concrete.
- Pour structural slabs to fall where possible. No screed is required, saving time and money compared to membranes.
- For more detailed instructions, or information concerning the compatibility of the CRYSTARM® application contact the CRYSTARM® Technical Department or your local CRYSTARM® representative.

### **RECOMMENDED TOOLS**

For processing: Low- pressure spryer, brush, roller

Personal protective equipment: gloves, Safety glasses, and respiratory protection when spray-applied.

#### **PACKAGING**

CRYST SEALER® is available in 20 l gallon and 180 l drum.

# **BASIS OF PRODUCT DATA**

All technical data stated in this Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.



# STORAGE & SHELF LIFE

Keep CRYSTARM® products must be stored dry and at a temperature of no less than 45°F (7°C). 15 months is the maximum shelf life when stored under proper conditions in original unopened packaging. DO NOT ALLOW TO FREEZE!

#### SAFETY HANDLING

Avoid skin and eye contact by taking adequate precautions, such as wearing protective gloves and using breathing apparatus if applied in enclosed environments. If contact is made, flush areas with lots of water. For further information please refer to Safety Data Sheet. KEEP OUT OF REACH OF CHILDREN.

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CRYSTARM®

Drescherstraße 53, D-71277 Rutesheim

CRYST SEALER®

Impregnation for protection and repair of concrete structures

Protection against penetration Class 1.2 (I) and increasing of physical resistance Class 5.2 (I)]

Abrasion resistance: 30 % improvement

Capillary water absorption: Class II

Impact strength: Class III (20 Nm)
Bond strength by pull-off: 0,8 N/mm²
Penetration depth: 5 mm

# **CRYSTARM®**

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WARRANTY: The Manufacturer warrants that the products manufactured by it conform to the formulation standards contained in all components in their proper proportion and are free from material defects. If any of the products are found to be defective the subsequent liability to The Manufacturer shall be limited only to the replacement of the product proven to be defective and shall not be liable for any other claim or for incidental or any consequential damages that may arise directly or indirectly with the said defective product. The user shall determine the suitability of the product for its intended use and the user assumes all liability in connection therein and the manufacturer shall not be liable save for terms of this warranty.