

CRYST GROUT[®]

Article-No.: 07300

WATERPROOFING GROUT BY CRYSTALLIZATION TECHNOLOGY

DESCRIPTION

CRYST GROUT[®] is crystalline waterproofing grout, ready-to-use, non-shrinkable, free-flowing, non-metallic, chloride-free, and high strength for grouting and anchoring applications. As well as it is effective at various consistencies from extremely fluid to dry pack by simply adjusting the quantity of mixing water, and need not be confined in order to develop full strength.

FEATURE AND BENEFITS

- Environmentally friendly.
- Non-shrink crack-resistant - Hardens free of bleeding.
- A single component that is easy to use – needs only to be mixed with water prior to application.
- Flowable consistency - ensures complete filling.
- Resist hydrostatic pressure from either the positive or negative surface of the concrete.
- Resistance to chemical attack.
- Protects reinforcing steel against corrosion.
- Active crystallization to seal cracks up to 0.5mm wide, even if they appear after the setting of concrete.
- High strength - provides good early and ultimate strengths.
- Non-toxic - ideal for potable water tanks.
- Fast setting.
- High bond strength to steel and concrete.

FIELD OF APPLICATION

- Use for general purpose grouting.
- Filling cavities, voids, big gaps and recesses.
- Pile head treatment.
- Installation of manhole frames and Precast wall panels.
- Repairing track and runway concrete pavements.
- Screws, connection bolts anchoring, and anchoring of signposts.
- Non-shrink repairs and protection from corrosion effect.
- Structural grouting of beams and columns.
- Heavy machinery or equipment setting bases.
- Factories, refineries, chemical industries, etc.
- Bridge bearing applications.

MATERIAL PROPERTIES

Form:	powder
Apperance:	grey
Bulk Density:	approx.1.6 g/cm ³
Application temperature :	+8°C up to +40°C

TECHNICAL DATA

Compressive strength:	Moderate Flow
	28 days 82.8 N/mm ²
Processing time:	approx. 30 minutes, depend on temperature
Pot life (30°C):	approx. 45 minutes, depend on temperature

Consumption:	approx. 1.8 kg/l	
Tensile Strength:	28 days	3.5 N/mm ²
Flexural strength:	28 days	7 N/mm ²
Permeability:	< 5 mm	
Rapid chloride permeability:	< 500 columns	
Application thickness:	30 mm- 500 mm	

DIRECTION FOR USE

Surface preparation:

All surfaces in contact with CRYST GROUT® must be solid, stable, and clean from adhesion inhibiting substances such as separating agents, dust, oil, grease, gypsum or bitumen must be removed before the application. Additionally, roughen adjacent concrete surfaces where possible. The surface must be humid, if necessary pre-wet the area thoroughly for 12 hours prior to grouting. Remove excess water before placement. Maintain ambient and surface temperatures between (8°C and 40°C). Ensure formwork is secure and watertight to prevent movement and leaking during the placing and curing of the grout.

Product mixing:

For best results add dry grout to water; not water to dry grout. Temperature, mixing method, and batch size will determine the actual amount of water required to place grout correctly. The size of the mixer should be appropriate to the volume of grout required. Use the minimum amount of water needed for placement. Use a mechanical mixer for approximately 3-5 minutes until a smooth, uniform, lump free consistency is achieved. Mix as close to the grouting area as possible. Mix only enough grout that can be placed in 20 minutes. Working time is approximately 30 minutes.

Water Requirements for 20 kg bag:

MIX CONSISTENCY	MINIMUM FLOW	MORDERATE FLOW	HIGH FLUIDITY
Clean Water	2.25 L	2.5 L	3 L

Application:

After mixing Place immediately Grout into the prepared area in such a manner that the grout has the shortest distance to flow. Pour the grout continuously and from one side avoiding the entrapment of air pockets. Sufficient vent holes should be provided. Remove voids through rodding and vibrating. CRYST GROUT® can be placed in thicknesses up to 100mm in a single pour when used as an under-plate grout. When grouting areas of more than 100 mm in depth, add 30-50% by weight washed pea gravel that is 3/8" (10 mm) or less in size. Then mix and place as outlined.

CRYST GROUT® is suitable for use with most types of pumping equipment. Immediately after the grout is placed, cover all exposed grout surfaces with clean wet burlap during the first 48 hours or apply a curing compound.

Forms may be removed after the grout has hardened to an initial set and retains in shape. This time period may vary according to temperature. Protect from excessive heat and cold.

NOTE:

- Store in a dry environment.
- 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

Trowel, spatula, gloves, and safety glasses, stirring mixing machine.

PACKAGING

CRYST GROUT® is available in 20 kg bags or pails.

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). one year is the maximum shelf life when stored under proper conditions in original unopened packaging.

SAFETY HANDLING

CRYST GROUT® is made of Portland cement and silica sand may irritate your eyes and skin. Take 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.



CRYSTARM®
Drescherstraße 53, D-71277 Rutesheim

CRYST GROUT®
for the structural and non-structural protection
and repair of concrete structures
EN 1504-3

Compressive strength	Class R4
Chloride ion content	≤0,05%
Adhesive bond:	NPD
Restrained shrinkage/expansion	NPD
Elastic modulus:	NPD
Carbonation resistance	NPD
Thermal compatibility	NPD
Reaction to fire:	NPD
Release of dangerous substances	NPD

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.