

CRYST INJECT MULTI[®]

Article-No.: 01300

2 in 1 MULTI POLYURETHANE INJECTION (SOLID ELASTIC RESIN , FOAM IN CONTACT WITH WATER) FOR PERMANENT WATERTIGHT SOLUTION

DESCRIPTION

CRYST INJECT MULTI[®] is a two-component, water-reactive, phthalate-free, low viscous, and elastic polyurethane injection resin. CRYST INJECT MULTI[®] is designed to have two phases of reaction property. In contact with water, it reacts to a closed-cell elastic foam within seconds. In case there is no water CRYST INJECT MULTI[®] reacts as an elastic solid resin. This newly developed injection resin combines two injection resin systems in one product (foam and solid resin). Due to its very low viscosity, CRYST INJECT MULTI[®] has excellent penetrates deep in fine cracks to seal water, moist and dry cracks permanently, making a watertight system.

FEATURE AND BENEFITS

- Environmentally friendly.
- Multi-purpose in one product that can work as elastic solid resin or as foam in contact with water.
- Can be injected through one component pump.
- Long processing time when a mixed component is kept in closed condition.
- High volume expansion within a few seconds.
- Phthalate-free.
- Permanent watertight solution.
- Closed cell foam.
- Good chemical resistance and alkaline stability.
- Excellent adhesion to wet surfaces.
- Shape-retaining does not shrink after curing.
- Low viscous that have Excellent penetration properties.
- Ideal for potable water.

FIELD OF APPLICATION

CRYST INJECT MULTI[®] is used for elastic sealing injection of cracks, voids, and joints in concrete structures, brickwork, and natural and artificial stonework.

Typical areas of application are e.g., tunnels, basements, diaphragm walls, manholes, elevator pits, reservoirs, sewage tanks, water tanks, pools, soil stabilization, etc.

TECHNICAL DATA

Material properties

	Component A	Component B	
Form:	liquid	liquid	
Appearance:	transparent	brown	
Density:	1.06 g/ml	0.95 g/ml	DIN 53479
Viscosity	170 mPas	170 mPas	EN ISO 3219
Elongation:	approx. 17 % (DIN EN 53 455)		
Reaction time:	approx. 10 – 25 seconds		
Max volume expansion:	20-30 times (unconfined)		
Mixing ratio	1:1 by volume and weight part		
Curing time in contact with water	approx. 2 minutes (foam)		
Pot life:	approx. 40 minutes		
Consumption:	depends of cavity occurrence		
Application temperature:	+8°C up to +40°C		

RECOMMENDED TOOLS

single-component injection pump, gloves, safety glasses, CRYST Packer CRYST MORTAR, CRYST CLEANER.

DIRECTION FOR USE

Before starting the injection procedure, an analysis of the waterproofed subject is required. Based on analysis results (water situation, crack properties, crack width, cavity occurrence, water temperature, etc.). For crack and concrete joint Injection packers must be installed in a 45° direction to the crack or concrete joint. The packers must be set and tightened by using the right tools, so they do not release even at high injection pressures. The distance of the drilled holes depends on the width of the crack.

The CRYST INJECT MULTI® components are supplied and ready to use. So will be injected through a 1K injection pump. The material (components A + B) should be mixed in the predetermined mixing ratio and filled in the injection pump (material hopper) afterward. Use only the required quantity of this mixture.

The ready mixed material should be injected within the specified processing time/pot life. CRYST INJECT MULTI® has to be injected as long as the crack or concrete joint is filled with resin, begin the injection at the lowest point of the crack. Depending on cavity occurrence it can take seconds or minutes. The injection pressure can rise depending on the site situation. Change to the next installed packer after the injection material came out of the next packer, of the crack surface, or out of the joint. Continue the procedure until the crack is completely filled with CRYST INJECT MULTI®.

After complete curing (reaction) of CRYST INJECT MULTI® Fill and seal all holes left by the injection packers with CRYST MORTAR®. Depending on cavity occurrence the mentioned material consumption can change.

Tools and equipment should be cleaned immediately after use by CRYST CLEANER. Cured material can only be removed mechanically.

NOTE:

- For more detailed instructions, or information concerning the compatibility of the CRYSTARM® application contact the CRYSTARM® technical department or your local CRYSTARM® representative.

PACKAGING

CRYST INJECT MULTI® is available in
Component A : 10 ltr metal canister
Component B : 10 ltr metal canister

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

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.



CRYSTARM®
Drescherstraße 53, D-71277 Rutesheim
CRYST INJECT MULTI®
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EN 1504-5:2004
Unique identification code of the product-type
EN 1504-5:ZA.1b
Concrete injection for elastic filling of cracks
U(D1) W (1)(1/2/3)(5/30)

Adhesion	≥0,2 N/mm ²
Elongation	< 10%
Water tightness	D1
Glass transition temperature	-23°C
Injectability into dry medium	0.1
Injectability into non dry medium	0.1
Durability (Compatibility with concrete)	No failure by compressive testing, Lost deformation work <20%
Corrosion behavior	It is assumed that no corrosive effects are present
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.