

## CRYST SEAL®

Article-No.: 07500

### HIGH PERFORMANCE POLYURETHANE JOINT SEALANT

#### DESCRIPTION

CRYST SEAL® is One Component joint sealant/adhesive based on polyurethane moisture curing, elastic sealing compound, Anti-bacterial, High movement, medium modulus, low VOC, UV resistant, heavy rain resistant, high performance, Joint paintable and trafficable Sealant. CRYST SEAL® suitable for movement and connection joints for indoor and outdoor applications. CRYST SEAL® design for weather-resistant sealant with versatile usage both as a sealant and a general adhesive in the construction industry for various substrates, including concrete, steel, wood, and many others.

#### FEATURE AND BENEFITS

- Weather-resistant, suitable for external & internal applications.
- Ideal to be sealant and adhesive at same time
- Excellent adhesion to the most substrate.
- High mechanical performance.
- When cured it forms a waterproof and durables seal.
- Permanente elasticity under all climate conditions.
- High bond strength to steel and concrete.
- Easy application using a caulking gun.
- Paintable with non-solvent or water-based paints after curing in static joints (i.e., around door perimeters).
- No crack or craze under UV exposure.
- Good chemical resistance as diluted acids and alkalis.
- Non-sag and non-staining.
- It does not require a primer and exhibits tenacious adhesion to most building materials.
- Excellent movement accommodation.

#### FIELD OF APPLICATION

- Sealing dynamically moving joints such as expansion and control joints.
- General elastic adhesive for materials with dissimilar properties and thermal expansion coefficients.
- Sealing precast and panel walls joints / expansion joints.
- Perimeter caulking windows, doors, and panels
- Movement and static joint sealing in most building material including concrete, glass, wood, stone, metal, and anodized aluminum.

#### MATERIAL PROPERTIES

Form:	Polyurethane based compound
Apperance:	white, grey, beige
Density:	approx.1.18 g/ml
Service temperature:	-20 to 85 °c
Application temperatur:	5°C to 75 °C

#### TECHNICAL DATA

Tear Resistance:	~ 7 N/mm
Capacity of joint movement:	approx. ±25 %
Shrinkage:	None
Shore-A hardness:	25-30
Elongation at Break:	> 750 %

Elastic recovery:	> 85 %
Tensile Strength:	1.5 N/mm <sup>2</sup>
Consistency:	Non-sag paste
Skin forming time	90 minutes
Cure speed (23° 50% RH):	2 – 3 mm /24 hrs.
Peel Strength:	15 N/mm <sup>2</sup>
Adhesion to Concrete	No adhesion loss (> 2.5 N/mm <sup>2</sup> )
Specific Gravity @ 20 °C (g/cm <sup>3</sup> )	1.40±0.05

## DIRECTION FOR USE

### Surface preparation:

All joint surfaces in contact with CRYST SEAL® must be clean from any dust, unsound material, plaster, oil, paint, grease, corrosion deposits, or algae. Roughen the surfaces, remove any laitance and expose aggregate by light scabbling or grit-blasting. Remove oil and grease deposits by steam cleaning, detergent scrubbing, or use a proprietary degreaser. Before positioning a bond breaker, check any expansion joint filler to ensure it is tightly packed with no gaps or voids at the base of the sealing slot. The use of a bond breaker is not required in expansion joints containing cellular polyethylene joint filler, backing rod. For construction or contraction joints, use a bond breaker tape or back-up strip.

Where a particularly neat finish is required, mask the joint's face edges before sealing and remove immediately after tooling is completed.

### Application:

Cut and remove the end of the sachet and place the sachet in the bulk gun. Fit the nozzle and cut at 45 degrees to a suitable size for sealing the joint. Extrude the sealant firmly into the joint. Tool flush within 5 minutes of application to ensure good contact between the sealant and the substrate. After application the sealant must be tooled into place to ensure adhesion with the joint profile is achieved. Finish using a solution of soap and water onto a gloved finger or tooling stick. Apply CRYST SEAL® with maximum 50 mm joint width and 25 mm joint depth.

### Cleaning:

Remove CRYST SEAL® from tools, and equipment immediately after use. Hardened material can only be removed mechanically.

## RECOMMENDED TOOLS

Bulk gun, Gloves, and Safety glasses.

## PACKAGING

CRYST SEAL® is available in 600 ml sausages.

## 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 SEAL® is made of Polyurethane based compound may irritate your eyes and skin. CRYST SEAL® is toxic and danger. 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  
15

EN 15651-1:2012

Unique identification code of the product-type 07500  
EN 15651-1: F-EXT-INT-CC Class 25 HM Sealants for  
facade elements

CRYST SEAL®

Reaction to fire:	E
Release of chemical dangerous to The environment and health	NPD
Water tightness and air tightness	
Resistance to flow	≤ 3 mm
Loss of volume	NPD
Tensile properties at maintained extension after water immersion	NF
Durability	Pass

**CRYSTARM®**

Drescherstraße 53,  
D-71277 Rutesheim, GERMANY  
TEL +49 (0) 7152 300 330  
FAX +49 (0) 7152 300 355  
Email info@crystarm.com  
www.crystarm.com

**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.