

TECHNICAL DATA SHEET

Construction Joints & Details



Krystol Waterstop Grout™

Product Code: K-322

DESCRIPTION

Krystol Waterstop Grout is a crystalline waterproofing grout used to create an internal or external waterstop at construction joints, pipe penetrations, tie-holes and control joints. Krystol Waterstop Grout contains fiber reinforcements that reduce shrinkage and limit cracking. It is typically used in conjunction with Krystol Waterstop Treatment™ as part of the Krystol Waterstop System. Krystol Waterstop Grout contains Krystol technology. When applied to concrete, Krystol chemically reacts with water and unhydrated cement particles to form insoluble needle-shaped crystals that fill capillary pores and micro-cracks in the concrete and block the pathways for water and waterborne contaminants. Any moisture introduced over the lifespan of the concrete will initiate crystallization, ensuring permanent waterproofing protection.



FEATURES & BENEFITS

- Multi use –internal or external waterstop
- Permanent crystalline waterproofing and protection
- Crack Resistant
- NSF 61 certified; safe for contact with potable water,
- Durable; resistant to rain, foot traffic and shifting
- Allows for flexible scheduling; Concrete can be placed / keyways can be filled days or weeks after installation

RECOMMENDED USES

Use with Krystol Waterstop Treatment as part of the Krystol Waterstop System as either an internal or external waterstop at all static concrete-to-concrete joints, and as an external waterstop at all pipe penetrations, tie holes and control joints where water penetration is a concern.

PROPERTIES

<u>Physical Properties</u>	
Appearance	Gray powder
Bulk density	1.3 g/cm ³ (81lb. /cu. ft.)
pH (when mixed with water)	12
<u>Plastic Properties</u>	
Working time (20°C, 50% RH)	30 minutes
Hardening time (20°C, 50% RH)	1 hour
<u>Hardened Properties</u>	
Hydrostatic head pressure resistance	140 m (460 ft.)
Compressive strength (ASTM C109)	16 MPa (2300 psi) @ 1 day 38 MPa (5500 psi) @ 3 days 45 MPa (6500 psi) @ 7 days 49 MPa (7100 psi) @ 28 days 52 MPa (7500 psi) @ 56 days
Pull off Strength (ASTM C1583)	2.8 MPa (400 psi)

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APPLICATION

Refer to Application Instruction: 4.11, 4.12, 4.14, 4.16, 4.17, or 4.21 (as applicable) before using this product.

Consult a Kryton Representative for help with selecting the appropriate joint detail.

Mix Krystol Waterstop Grout as follows: Slowly add powder to water while mixing (approximately 4.5 parts powder to 1 part clean water by volume). Mix thoroughly once all powder is added to obtain a non-sag putty consistency.

Internal Method: Apply the mixed grout to the center of the construction joint using Kryton's triangle shaping trowel. Form a continuous and seamless triangular shaped strip that measures 50 mm (2 in.) wide by at least 30 mm (1.25 in.) high.

External Method: Tightly pack mixed grout to pre formed, clean concrete keyway or tie hole while in a Saturated, Surface Dry (SSD) condition.

Protect the grout application from damage by rain, rapid drying or freezing for at least 24 hours.

Drawings and Specifications:

For section drawings, CAD details and specification language related to this product, visit www.kryton.com/technical-info/ or contact your authorized Kryton representative.

LIMITATIONS

Krystol Waterstop Grout is effective for rigid structures only and may not reliably seal joints that experience variable loading or repeated movement. Consult a Kryton representative for project specific recommendations.

SAFETY

Read the Safety Data Sheet (SDS) for this product. For professional use only. This product becomes caustic when mixed with water or perspiration. Avoid contact with skin or eyes. Avoid breathing dust. Wear long sleeves, safety goggles and impervious gloves.

PACKAGING

Krystol Waterstop Grout is available in 5 kg (11 lb.) and 25 kg (55 lb.) resealable pails.

SHELF LIFE

When stored in a dry enclosed area, Krystol Waterstop Grout has a shelf life of at least 3 years for unopened pails.

WARRANTY

Kryton International Inc. (Kryton) warrants that Kryton products are free from manufacturing defects and comply with the specifications given in their respective technical data sheet. Because conditions of use, such as site conditions, surface preparations, workmanship, concrete ingredients, weather, structural issues and other factors are beyond the control of Kryton, no warranty can be given as to the results of use. Purchaser agrees to seek the advice of qualified professionals and to determine for themselves the suitability of the products for their intended purpose and assumes all risks. Purchaser's sole remedy is limited to replacement of any product proven defective or at Kryton's option refund of the purchase price paid. THIS LIMITED WARRANTY CONTAINS THE ENTIRE OBLIGATION OF KRYTON. NO OTHER WARRANTIES, EXPRESS OR IMPLIED, SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KRYTON SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES. No representative of Kryton has the authority to make any representations or provision except as stated herein. Kryton reserves the right to change the properties of its products without notice.