



SPECIFICATION IN NBS FROMAT

C42/155

Kryton Leak Repair System

DESCRIPTION

The product line includes **Krytol Plug**, **Krytol Repair Grout** and **Krytol T1**, which can be used together to form the Krytol Leak Repair System.

Kryton Concrete Repair products are 100% compatible with the entire line of Krytol products. They can be used in concrete that was built yesterday, or structures needing waterproofing repair after decades of service.



Application

System to be used in the repair of active leaks within concrete, below ground or water retaining/excluding structures or for the repair of concrete defects in high-risk areas.

Krytol Plug™:

A rapid-setting hydraulic cement product that when mixed with water is used to stop flowing water and repair leaking cracks, holes and joints in concrete. Krytol Plug sets hard within two minutes and has high-compressive strength, which allows it to stop water even under high-hydrostatic pressure. Stopping water flow then allows permanent repair of the leak using Krytol technology.

Features and benefits:

- Can stop extreme leaks.
- Stops flowing water immediately.
- Sets fast, in one to two minutes.
- Easy to mix and apply.
- Will set up and harden under water.
- Has exceptional strength.
- Does not contain any chlorides.
- Safe for drinking water applications.

Krystol Repair Grout™:

Crystalline concrete waterproofing product that stops the flow of water to permanently repair leaking cracks, holes and joints in concrete, and can also be used to resurface and waterproof defective, damaged or deteriorating concrete. The grout employs advanced fibre technology and shrinkage controlling additives to prevent cracking.

Features and benefits:

- Contains Krystol crystalline waterproofing technology.
- Simple and easy to use.
- Non-shrink crack resistant.
- NSF 61 Certified; safe for contact with potable water.
- Colour matches concrete.
- Can also be used by itself to repair spalled or honeycombed concrete.

Krystol T1:

Surface-applied crystalline slurry treatment that transforms new or existing concrete into a permanent waterproofing barrier.

It lowers the permeability of the concrete to protect against the ingress of water and waterborne chemicals. Since it becomes integral to the concrete, it can be applied to either the positive (wet) or negative (dry) side of the water pressure which allows reliable hydrostatic waterproofing protection and remediation for even the most difficult applications.

Features and benefits:

- Contains Krystol technology. When applied to concrete, Krystol chemically reacts with water and un-hydrated cement particles to form needle-shaped crystals that fill capillary pores and micro-cracks in the concrete and permanently block the pathways for water and waterborne contaminants. Any moisture introduced over the lifespan of the concrete will initiate crystallization, ensuring permanent waterproofing protection
- Permanent concrete waterproofing solution.
- Increases reliability and quality control.
- Increases durability thereby decreasing building maintenance and repair costs.

General Information

Colour	Grey
Finish	Other
Material	Calcium Silicate
Shape	Formless Guidance for specification option: Powder

Length	Bespoke
Width	Bespoke
Height	Bespoke
Warranty Description	10 Years
Uniclass	<u>Ss 15 30 17 12 Concrete crack repair or filling systems</u> Primary
Caws	C42/155 Crack repairs

Specification data - Concrete crack repair or filling systems

Crack fill material	-
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Grout	<p>Krystol Plug™ and Krystol Repair Grout™. Guidance for specification option: Krystol Plug™ to be used to stop flowing water prior to applying Krystol Repair Grout™. Consult manufacturer's literature for application details.</p> <p>Krystol Repair Grout™. Guidance for specification option: Consult manufacturer's literature for application details.</p> <p>Manufacturer guidance Krystol Plug is a rapid-setting hydraulic cement product that when mixed with water is used to stop flowing water and repair leaking cracks, holes and joints in concrete. Krystol Plug sets hard within two minutes and has high-compressive strength, which allows it to stop water even under high-hydrostatic pressure. Stopping water flow then allows permanent repair of the leak using Krystol technology.</p> <ul style="list-style-type: none"> • Appearance: Dark grey powder. • Bulk density: 1.4 g/cm³ (88 lb/cu.ft.). • pH (when mixed with water): 12.
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Krytol Repair Grout™ is a crystalline concrete waterproofing product that stops the flow of water to permanently repair leaking cracks, holes and joints in concrete, and can also be used to resurface and waterproof defective, damaged or deteriorating concrete.

- Appearance: Grey powder with fibre additive.
- Bulk density: 1.3 g/cm³ (81 lb/cu.ft.).
- pH (when mixed with water): 12.

Consult manufacturer's literature for plastic and hardened properties for each component.

Coating

Krytol T1® Concrete Waterproofing.

Guidance for specification option:

Surface-applied crystalline slurry treatment that transforms new or existing concrete into a permanent waterproofing barrier.

Not required.

Admixture

Kryton Krytol Internal Membrane™ (KIM®).

Guidance for specification option:

- Appearance: Grey powder.
- Specific gravity: ~2.8.
- Bulk density: ~1.4 g/cm³ (88 lb/ft³).
- Chloride ion content < 0.1% by weight.
- VOCs: None.

Manufacturer guidance

Consult manufacturer's literature for effects on hardened and plastic properties.

Waterstop

Krytonite™ Swelling Waterstop, standard,

Guidance for specification option:

- Colour: Yellow.
- Shape: Trapezoidal.
- Dimensions: 5 x 20 mm (0.2 x 0.8 inches).
- Material: Hydrophilic rubber.
- Hardness (Shore A) to ASTM D2240: 24 ±3.
- Tensile strength to ASTM D412 >3 MPa (435 psi).
- Elongation to ASTM D412: >400%.
- Density 1.2–1.25 g/cm³.

Krytonite™ Swelling Waterstop, rain protected.

Guidance for specification option:

- Colour: Blue.
- Shape: Trapezoidal.
- Dimensions: 5 x 20 mm (0.2 x 0.8 inches).
- Material: Hydrophilic rubber.
- Hardness (Shore A) to ASTM D2240: 35 ±3.
- Tensile strength to ASTM D412 >2 MPa (290 psi).
- Elongation to ASTM D412: >400%.
- Density 1.2–1.25 g/cm³.

Not required

Adhesive

Smart Bond Adhesive

Guidance for specification option:

For use with Krytonite Swelling Waterstop to waterproof seal construction joints, around penetrations, between precast elements and other places where concrete joints occur.

- Yield per cartridge: 8–10 linear metres (26–32 linear feet).
- Density at 23°C (73.4°F): 1.40 ±0.05 g/cm³.
- Shore A hardness to ASTM D 2240: 50 ±2 (after 21 days at 23°C (73.4°F) / 50% RH).
- Tensile strength to ASTM D 412: 3.0 MPa (approximate).
- VOCs (Volatile Organic Compounds): No volatile components present.

Not required.

Performance Requirements

ASTM C494.

EN 934-2.

ACI 212-Chapter 15 – Permeability Reducing Admixture for Hydrostatic Conditions (PRAH).

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