



**TECHNICAL DATA
SHEET / APPLICATION
GUIDELINES**



K100

INJECTION GROUT

1K Water Stopping Hydrophillic Prepolymer

DESCRIPTION

K100 is a moisture curing single component hydrophilic prepolymer, based on diphenylmethane diisocyanate (MDI). The polymer backbone has been formulated to react on contact with water to form a tough flexible, highly adhesive and impermeable closed cell polyurethane seal stopping water seepage. K100 reacts with both seawater or mineral water, conforming to Potable Water standards AS/NZS 4020:2005 resistant to mild acids, alkalis and most organic solvents. K100 is also solvent free and environmentally safe.

APPLICATION USES / ADVANTAGES

Properly applied K100 adheres strongly to surfaces, forming a tough rubbery gasket that rapidly stops water. K100 may be injected direct as a single (1K) component system / or as a two-component system by means of a mixing metering machine using water in a range of 1:1 - 1:4 (water: resin).

Typical uses include shutting off water seepage, forming a waterproof membrane applied to positive side of walls, water leakage in sewage and drainpipes, ground stabilisation, prevention of water leaks through expansion or construction joints, etc.

Advantages include: -

- ✚ Easy to handle on the jobsite
- ✚ None of the ingredients are corrosive in both liquid / and in cured film
- ✚ Solvent free
- ✚ Strong adhesion to wet as well as dry concrete
- ✚ Low viscosity providing superior substrate penetration
- ✚ Cured material is non-toxic

TYPICAL REACTION TIMES (21 Deg C)

Cream Time: 20-30 seconds
Gel Time: 2 minutes
Tack Free Time: 5 minutes

PROPERTIES

Appearance:	Brownish Opaque Coloured Liquid
Density at 25°C	1:1
Viscosity: mPaS (25°C)	400-700
Expansion:	700-800%
Elongation	40% - 400% (thick – thin sections)
Adhesion Testing	3.84 MPa
Bond Strength	10.0 N/mm ²

SUBSTRATE PREPARATION

Remove debris, old or failed sealant from joints, clean up the injection holes by using a blower (compressed air) and then flush out with water. If application is over a joint, remove all old & failed sealant, then clean up and flush the joints with water.

MIXING

To prevent condensation on the liquids at the start of work, the temperature of the drum should be at least as high as the ambient temperature.

All drums of K100 should be capped when not in use.

TYPICAL APPLICATIONS

K100 is a hydrophilic polyurethane pre-polymer liquid for injection water stopping, either injected directly into a leaking crack or joint, or it can be injected 1:1 with water.

After injection the K100 will foam to expand and fill the void, forming a tight, impermeable elastomeric seal, stopping water flow.

K100 can also be used within the OAKUM method, where the pre-polymer is saturated in strips of oakum, foam rubber or other absorbent materials and packed into the joint or crack recess. Please consult CREST CORMIX technical personnel for specific application procedures.

APPLICATION PROCEDURE & GUIDELINES

K100 can be injected by itself in a single component pump that is equipped for high pressure. The pressure being injected will need to be at a higher pressure to that of the escaping water. Alternatively, a twin piston pump can be utilised to pump a water/resin ratio variable to form different density foams. Refer to below table;

RATIO between Water: Resin at 25°C	CREAM TIME Seconds	RISE TIME Seconds	FOAMING RATIO
1:1	48	95	5X
1:2	40	87	5X
1:3	36	105	6X
1:4	28	118	7X

PACKAGING

K100 is supplied in 20kg Pails/ or 200kg DRUMS.

STORAGE & SHELF LIFE

K100 should be stored at room temperature (ideally minimum 10°C and maximum 35°C). Keep dry and away from direct sunlight. If these conditions are met and product is un-opened 18mths can be expected.

CLEAN-UP

Use CREST PU Purge for cleaning of injection equipment.

Proudly Manufactured in Australia by

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DISCLAIMER

Performance data is achieved testing in accordance with International Standards. Testing by others may result in different results from those published as a result of external factors such as poor sampling, incorrect mixing, varying temperatures, varying substrate moisture, curing, crushing procedures etc ..

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