

# LEAKMASTER LV-Z

## HYDROPHILIC GUN GRADE WATERSTOP



### PRODUCT DESCRIPTION

**Leakmaster LV-Z** is a one component polyurethane water-swelling (hydrophilic waterstop) sealant with excellent and unique physical properties. It can be applied to places such as joints in concrete, in civil engineering construction and water services for seals where conventional seals cannot be applied easily. After hardening, it has excellent physical properties together with rubberlike elasticity and water sealing properties.



### ADVANTAGES

- **Easy Application** As a moisture-cure one component type water-sealing. Standard caulking guns can be used as for conventional sealants.
- **Physical Properties** After hardening, it has better physical properties than those of conventional putty type sealants.
- **Water-swelling** Swelling up to 2 times (approximately) by Volume as a result of its water absorption ability.
- **Good Adherence** It adheres to various materials such as concrete, metals, glass, etc.



### AREAS OF APPLICATION

- Water sealing of joints in cast-in-situ concrete
- Water sealing around steel posts/columns, king posts, that are cast into concrete
- Water sealing around pipes for pipe penetrations through concrete
- Box culverts & manholes joints
- Form tie holes and form ties
- Rough concrete surfaces of joints
- Hydrostatic head pressure resistance of up to 2 bar (20metres)

*Note: The products design and performance, its intended use, installation and final confirmation and approval for use, must be provided by the project's Design Engineer and Project Manager.*



## PHYSICAL PROPERTIES

Before curing :-

ITEM	UNIT	RESULT	TEST METHOD
Appearance	-	Putty-Like	-
Color	-	Grey	-
Extrudability	Second	7.0	In house Test
Slump	mm/1 hour	0.5	In house Test
Specific Gravity	-	1.26	In house Test
Tack Free	Hour	<8	In house Test

Note : Above values are typical measured values and not specific values.

After curing :-

ITEM	UNIT	SPEC.	RESULT	TEST METHOD
Hardness	-	A41 ± 8/s	A39/s	JIS K 6253
Tensile Strength	MPa	5.8 ± 1.0	5.98	JIS K 6251
Elongation	%	1100 ± 250	1140	JIS K 6251
Tear Strength	N/mm	13.7 ± 3.9	14	JIS K 6252



## SWELLING PROPERTIES

Specimen	Temperature	Test Water	Immersion time
Cured Products	25°C	Distilled water	2 days

ITEM	UNIT	SPEC.	RESULT	TEST METHOD
Weight Increase Rate	%	85~200	128	In house Test

Note : Expansion rate can vary in salt or contaminated water.

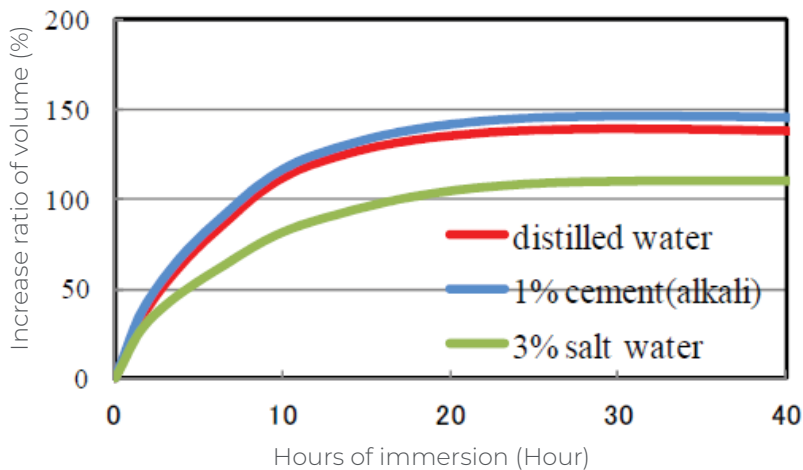


Figure 1 : Swelling properties in various solutions of Leakmaster LV-Z





## SWELLING PROPERTIES (continued)

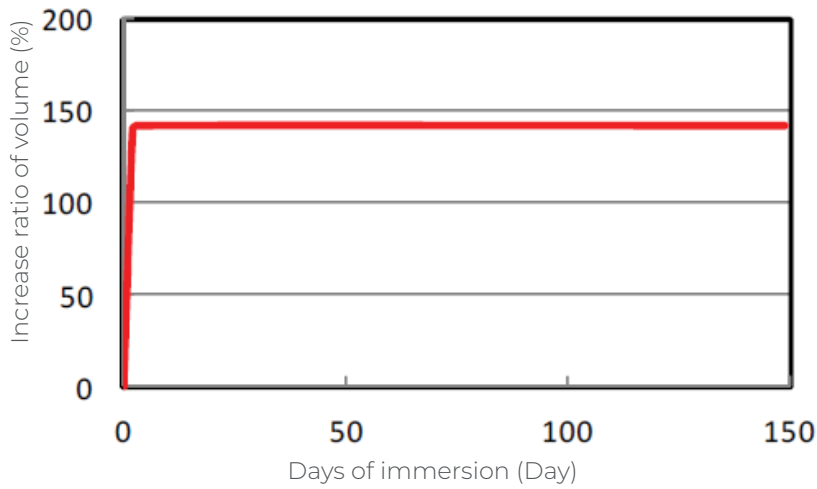
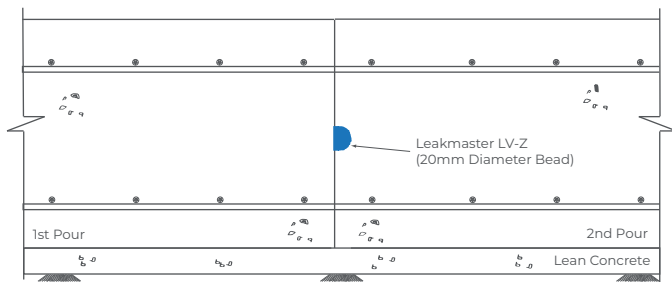


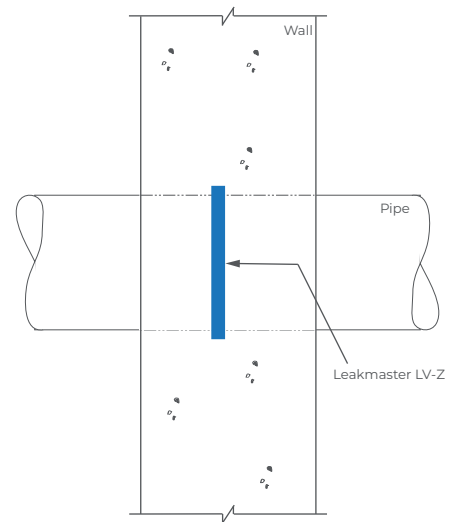
Figure 2 : Long term swelling characteristics of Leakmaster LV-Z in Distilled water



## TYPICAL APPLICATIONS



Application of Leakmaster LV-Z in Construction Joint of Wall or Slab



Application of Leakmaster LV-Z around pipe penetration through wall (cast-in-situ method). The same application can be applied for slab areas.



## APPLICATION PROCEDURES

1. Break the moisture-proof aluminium foil on the top of the cartridge, and remove the metal cover seamer from the bottom.
2. Cut the nozzle diagonally at the required appropriate position to achieve desired amount.
3. Set the cartridge to caulking gun.
4. Apply **Leakmaster LV-Z** continuously without a break to the location to be sealed.
5. Application diameter of **Leakmaster LV-Z** to be at a size suitable to prevent water egress.

NOZZLE DIAMETER	LENGTH OF RUN (APPROXIMATELY)
3 mm	20 m
6 mm	10 m
8 mm	4-5 m
10 mm	3 m





## PACKAGING

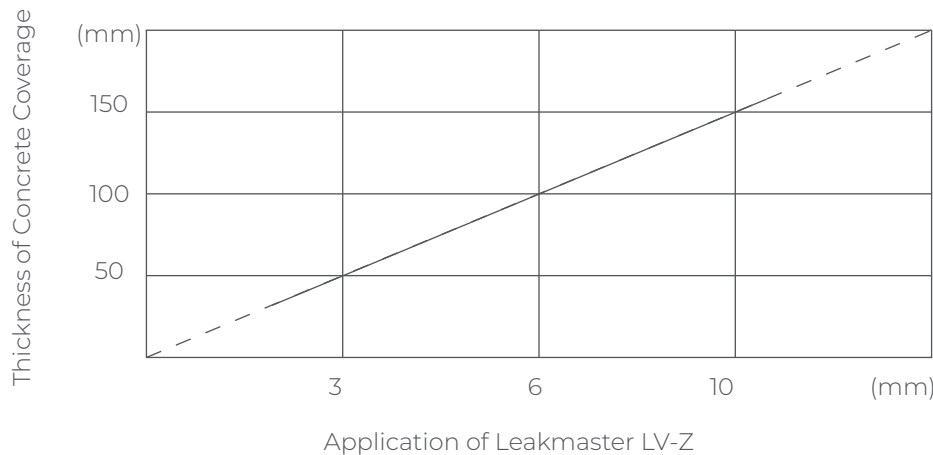
● Contents	320 ml / cartridge
● Unit	24 cartridges / carton - (6 cartridges x 4 boxes) / carton



## IMPORTANT PRECAUTIONS

1. Minimum cover to **Leakmaster LV-Z** installed application from any outside edge. Refer to Figure 1 below.
2. Do not apply as an external or surface position like a traditional sealant. Product must be fully encased by concrete.
3. Do not leave exposed to water for longer than 12 hours prior to second concrete pour being placed.
4. Allow to cure (harden) prior to pouring next concrete pour.
5. Use open cartridges within 24 hours after opening.
6. Store in a cool dark and dry place.
7. Shelf life of approximately 12 months from production date.

FIGURE 1:



## WRITTEN SPECIFICATION

Where shown on the drawings, the hydrophilic gun grade waterstop sealant shall be **Leakmaster LV-Z** as supplied by **CJSA**. The Hydrophilic gun grade waterstop sealant is to be polyurethane based and able to be adhered on to concrete, steel, ceramic and/or plastic surfaces. It must have a minimum expansion capability of two times by volume (200%) and be able to withstand a minimum of 2.0 bar (20 meters) of hydrostatic head pressure resistance and proof of this must be provided by an independent laboratory test report. The product must be installed in accordance to the supplier's installation guidelines and the Design Engineer's specification.



## HEALTH AND SAFETY INFORMATION

In confined spaces or in still air conditions, the use of a ventilation fan or suitable respirator should be used, and the advice and approval of the Site Safety Supervisor is essential. For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Safety Data Sheet (SDS), which is available upon request.





## DISCLAIMER

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information provided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of, or fitness for, particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and/or oral recommendations, or from any other advice offered by the Company. The Company also has no express or implied knowledge of any particular purpose for which the product is required and any such information given will not be taken into account in the supply of this product. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in our brochure may change at any time without notice. Any use of this product, **Leakmaster LV-Z**, in any application should be approved as suitable for use/application by the Design Engineer and Project Manager.

**Effective Date: 22 JANUARY 2020**

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