

## PRODUCT INFORMATION

### SILIPPELL SP2

Page 1 of 2

Manufacturer's code: RPSP2

Updated: 01/01/2024

**Product Name:** SILIPPELL SP2

**Description:**

SILIPPELL SP2 is an innovative water repellent concrete admixture. This admixture is enhanced with advanced silicone nanotechnology. When SILIPPELL SP2 is incorporated into concrete, the permeability to water and the occurrence of unsightly efflorescence is virtually eliminated. The use of SILIPPELL SP2 enhances the intrinsic quality of concrete masonry by reducing the damage caused by weather related water uptake and consequent efflorescence.

**Recommended Uses:**

SILIPPELL SP2 is designed to be a water-repellent admixture for use in the manufacture of wet-cast concrete products including ready-mix concrete, pre-cast concrete, mortar, renders and other cementitious products. Some of the features of SILIPPELL SP2 include:

- Reduces water absorption and efflorescence.
- Bonded to the substrate and cannot be washed out.
- Leaves no oily residue on the concrete substrate.
- Easy to use in any existing concrete process.
- The degree of water resistance can be easily varied by changing the dosage rate.

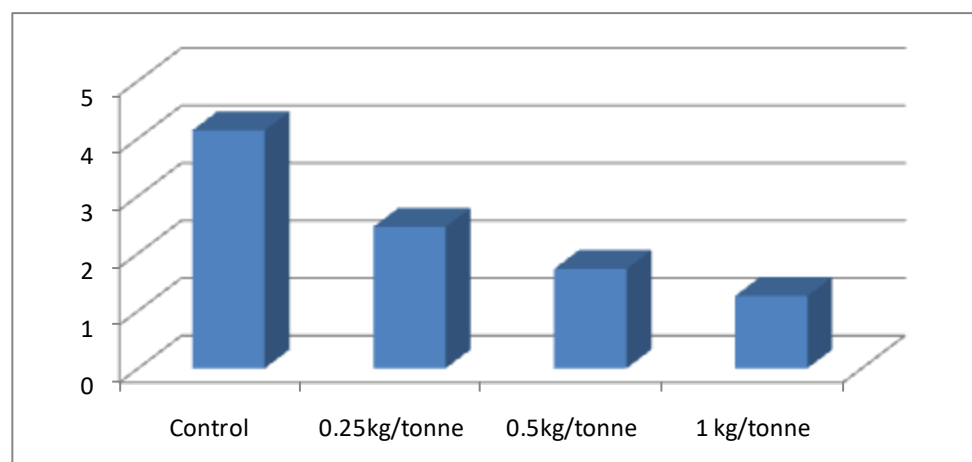
As concrete masonry varies, it is recommended that a test should be carried out prior to application to find out the suitability of this product for the purpose.

**Use Instructions:**

1. Dosage

The dosage rate depends on the specific mix design and the level of water repellency required. Dosage varies from 0.1 to 1 kg of SILIPPELL SP2 per 1000kg of dry concrete mix. A typical dosage rate of 0.50 kg of SILIPPELL SP2 per 1000kg of total dry mix mass will achieve significant results of water resistant and efflorescence control. However, dosage rate should be tested according to the specification of individual application.

Capillary water absorptions of a typical 25MPa concrete mix containing various dosage of SILIPPELL SP2 are shown below:



## 2. Addition

SILIPPELL SP2 can be added into the concrete mix as part of the gauging water during the mixing process. SILIPPELL SP2 should be pre-diluted with water before adding into the concrete mix. SILIPPELL SP2 can be added directly into the concrete mix at final step of concrete blending. Enough mixing should be applied after SILIPPELL SP2 is added.

If a typical concrete mix has 1000kg of dry ingredients, the procedure to incorporate 0.50 kg of SILIPPELL SP2 into the 1000kg of dry mix is as follows:

- 1) Mix all the concrete dry ingredients in a batch mixer.
- 2) Add approximately half of gauging water required for the above concrete mix.
- 3) Stir or mix SILIPPELL SP2 before use.
- 4) Pre-dilute 0.50 kg of SILIPPELL SP2 with 5 kg of clean water.
- 5) disperse the pre-diluted SILIPPELL SP2 into the concrete mix while blending.
- 6) Blend the concrete mix thoroughly and process following steps as usual.
- 7) Add more water to get desired consistency of concrete mix if required.

Please note: concrete product made from the above mix should be cured in a proper curing room. No further water can be applied to the concrete to assist concrete curing after using SILIPPELL SP2.

If your process is different to above, please contact the manufacturer for assistance.

<b>Typical Data:</b>	Appearance:	Milky blue liquid with slight odour
	Active contents:	>40%
	Specific Gravity:	approx. 0.95 gm/ml
	pH value:	7-8
	Solubility in water:	Miscible
	VOC content:	Nil
<b>Important Note:</b>	As condition varies, it is recommended that a pilot trial should be conducted prior to using SILIPPELL SP2 to determine the suitability of this product for the purpose.	
<b>Handling &amp; Storage:</b>	SILIPPELL SP2 is a non-hazardous material. However, good industrial hygiene procedures should be followed when handling. The product should be stored in closed containers in a cool dry place away from any fire sources. The product has a shelf life of 12 months in a sealed container stored at temperatures in the range of 5 °C to 25°C.	
<b>Packaging:</b>	SILIPPELL SP2 is available in 20 and 200 plastic drums or 1,000 litre plastic bulky bins. Other size containers may be available on request.	

### **Disclaimer:**

The information given in this data sheet is based on many years of experience and is correct to the best of our knowledge. As the storage, handling and application of this material are beyond our control; we can only be responsible for the quality of our product at the time of dispatch. We reserve the right to alter certain product parameters within the spectrum of properties in order to keep abreast of technical advances. It is the responsibility of the end user to determine the suitability of this material for any particular application.