

## 1. IDENTIFICATION

<b>Supplier:</b>	Know-How Concrete Technologies
<b>ABN:</b>	15 086 008 068
<b>Address:</b>	Unit 1-708 Boundary Road, Coopers Plains, QLD, 4108, Australia
<b>Telephone:</b>	(07) 3274 1000
<b>National Poisons Information Centre (For Emergency):</b>	
<b>Centre (For Emergency):</b>	(+61) 131 126 (24 hours)
<b>Fax:</b>	(07) 3274 1006
<b>Web Page:</b>	<a href="http://www.knowhowconcrete.com.au">www.knowhowconcrete.com.au</a>
<b>Product Name:</b>	<b>DeepSeal Lithium</b>
<b>Proper Shipping Name:</b>	Corrosive Liquid, Basic Organic, N.O.S (contains potassium methylsiliconate)
<b>Product Use:</b>	Inorganic binder for concrete treatment
<b>Other Names:</b>	Lithium Silicate
<b>Chemical Family:</b>	Silicate
<b>Recommended Use:</b>	Lithium Silicate binder for consolidation and conservation of porous natural and artificial stone.

## 2. HAZARDS IDENTIFICATION

<b>Health Hazard Classification:</b>	This product is classified as a <b>hazardous substance</b> according to the criteria of the National Occupational Health and Safety Commission Australia (SafeWork Australia) and in accordance with the GHS, and as <b>dangerous good</b> according to the Australian Dangerous Goods (ADG) Code.	
<b>Emergency Overview:</b>	Alkaline; may be harmful by ingestion and in contact with skin and eyes.	
<b>Risk Phrases:</b>	May cause skin irritation May cause damage to eyes	
<b>Safety Phrases:</b>	R36 Irritating to eyes S2 Keep out of reach of children S25 Avoid contact with eyes S26 In case of contact with eyes, rinse immediately with plenty of water, seek medical advice	
<b>Dangerous Goods Classification:</b>	Dangerous Goods Class 8, Packing Group II	
<b>Physical:</b>	Not Applicable	
<b>Health:</b>	Serious eye damage/eye irritation	Category 1A
	Skin corrosion/irritation	Category 1
<b>Environmental:</b>	Not Applicable	
<b>Signal word:</b>	Danger	
<b>Hazardous Statement:</b>	H318: Causes serious eye irritation H314: Causes severe skin burns and eye damage	
<b>Prevention:</b>	P260: Do not breathe mist/spray. P264: Wash skin thoroughly after handling. P280: Wear eye protection / face protection.	
<b>Response:</b>	P301+P330+P331: IF SWALLOWED: rinse mouth. Do NOT induce vomiting P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. P310: Immediately call a POISON CENTRE or doctor/physician P321: Specific treatment (see ... on this label). P363: Wash contaminated clothing before reuse.	
<b>Storage:</b>	P405: Store locked up	
<b>Disposal:</b>	P501: Dispose of contents/container in accordance with Jurisdictional Regulations.	

**2. HAZARDS IDENTIFICATION (Continued)**

**Pictogram:**



**Pictogram Description:**

Corrosion

**3. COMPOSITION: Information on Ingredients**

Chemical Ingredient	CAS No.	Proportion (%v/v)
Lithium Silicate	12627-14-4	< 25% w/w
Potassium Methylsiliconate	31795-24-1	< 25% w/w
Other Ingredients (Non-Hazardous)	Proprietary	10 - < 30% w/w
Water	7732-18-5	To 100% w/w
Total		100% w/w

**4. FIRST AID MEASURES**

**Scheduled Poisons**

Poisons Information Centre in each Australian State Capital city can provide additional assistance for scheduled poisons. (Phone Australia 13 11 26) or a doctor (at once).

**First Aid Facilities**

Eye wash fountains and general washing facility should be easily accessible in the immediate work area.

**Ingestion (Swallowed)**

If swallowed, immediately rinse out mouth with water. DO NOT induce vomiting. Keep at rest. Give glass of water to drink. Never give anything by mouth to an unconscious patient. If vomiting occurs naturally have the victim lean forward to reduce the risk of aspiration into the lungs. Seek immediate medical attention, get to doctor or hospital quickly.

**Eye Contact**

If in eyes, hold eyelids apart and Flush eyes continuously with running water until advised to stop by the poisons information centre or doctor, or for at least 15 minutes. If irritation develops seek medical attention.

**Skin Contact**

For gross contamination immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of running water. Immediately remove contaminated clothing, including shoes, and launder before reuse. If irritation develops seek medical attention.

**Inhalation**

Not expected to be an inhalation hazard. Remove victim from exposure – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**Medical Attention**

No specific antidote, treat symptomatically. Poisons Information Centre in each Australian State Capital city can provide additional assistance for scheduled poisons.

**5. FIRE FIGHTING MEASURES****Hazardous from combustion products**

Product itself is not combustible, but under fire conditions, this product may emit Carbon Monoxide (CO) and Carbon Dioxide (CO<sub>2</sub>) and other possibly toxic gases and vapours.

**Suitable Extinguishing Media**

Define extinguishing measures according to neighbouring conditions.

**Precautions for Fire Fighting**

Liquid –Tight Chemical Protective Suit with Breathing Apparatus. Prevent by any means available, spillage from entering drains or water course.

**Hazchem Code**

2X

**Flash Point**

Not Applicable

**Flammability**

Product is non-flammable according to Australian code for Transport of Dangerous Goods. No special measures for fire and explosion protection. No dangerous decomposition products known.

**6. ACCIDENTAL RELEASE MEASURES****Spills:****Personal Precautions**

In case of spill, particular danger of slipping on leaked/spilled product. Isolate hazard area and deny entry. Wear personal protective equipment as described in Section 8 of this safety data sheet.

**Environmental Precautions**

Do not allow to enter drainage system, surface or ground water. In the event of product entering waters or drainage system, or polluting soil or plants contact the Environmental Protection Authority of your local Waste Management Authority.

**Methods of cleaning up/of removing**

Spilt material should be absorbed into dry, inert material (e.g. sand, vermiculite, diatomite, acid binders, universal binders, sawdust etc.) which then can be put into appropriately labelled drums. The wasted material can be disposed of by incineration (preferable high temperature) by an approved agent according to State, Territory and/or Local Government regulations.

**7. HANDLING AND STORAGE****Handling**

Avoid all personal contact, including skin and eye contact and contamination of clothing. Wear protective clothing when risk of exposure occurs. Avoid contact with incompatible materials. When handling, DO NOT eat, drink or smoke. Keep containers closed at all times. Avoid physical damage to containers. Always wash hands with soap and water after handling. Work clothes should be laundered separately. Launder contaminated clothing before re-use.

**Information about Fire and Explosion Protection:**

No specific measures required.

**Conditions for safe storage**

Store away from incompatible substances including acids and light alloys. Keep containers closed at all times.

**Storage Class**

Corrosive storage.

**Requirements for storerooms & Receptacles**

Do not use light alloy receptacles.

**Unsuitable Materials for Receptacles**

Aluminium, zinc, glass or ceramic.

**Suitable Materials for Receptacles & Pipes**

Steel or Stainless steel. Use polyolefin receptacles

**Further Information about storage conditions**

Protect from frost.

**8. EXPOSURE CONTROLS : PERSONAL PROTECTION**

**Exposure Limits**

National Occupational Exposure Limits, as published by SafeWork Australia:

**Time-weighted Average (TWA):** None established for product.

**Short Term Exposure Limit (STEL):** None established for product. The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

**Engineering Controls:** Product is recommended to be applied using a spray apparatus. In outdoor application no special ventilation or breathing equipment is required. If applied indoors, extra mechanical ventilation may be required to facilitate more comfortable breathing.

**Personal Protective Equipment**

**General Protective & Hygiene Measures:** The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

**Respiratory Protection:** Not Required

**Eye Protection:** The use of face shield protection is recommended to avoid airborne particles contacting eyes and skin during spraying. Otherwise, the use of chemical goggles or safety glasses with side shield protection is recommended.

**Hand Protection:** Alkaline resistant gloves (e.g. Butyl, Natural Rubber Latex with small amount of Polychloroprene Latex, Polychloroprene, Nitrile, PolyVinyl Chloride or PVC, Polyvinyl Alcohol and PVAL gloves complying with AS 2161) are recommended. Penetration time of glove material: Value for the permeation: Level ≥6.

**Clothing:** Suitable protective clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Property	Typical Value
<b>Physical Description/Properties</b>	
Appearance	Low Viscosity liquid
Colour	Colourless, transparent
Odour	Odourless.
pH	Ca.12.3.
Vapour Pressure	Not available
Vapour Density	Not available
Boiling Point/Range	>100°C @ 760 mm Hg.
Auto Ignition Temperature	Product is not self-igniting
Freezing/Melting Point	Ca 0°C.
Solubility in Water	Fully miscible
Specific Gravity	Ca.1.07.
Flashpoint	Not Applicable.
Flammability Limits	Not Applicable.
<b>Other Properties</b>	
Evaporation Rate	Not Available
Viscosity	Low
Stability	Stable under normal conditions

The values listed are indicative of the products physical and chemical properties. For a full product specification, please consult the Product Data Sheet.

**10. STABILITY AND REACTIVITY**

<b>Chemical stability</b>	Stable at normal temperatures and pressure.
<b>Thermal Decomposition</b>	No decomposition is used according to specifications.
<b>Dangerous Reactions</b>	Strong exothermic reaction with acids. May react with light alloys to form hydrogen.
<b>Conditions to Avoid</b>	Avoid contact with incompatible materials.
<b>Materials to Avoid</b>	Acids, light alloys.
<b>Hazardous Decomposition Products</b>	No dangerous decomposition products known

**11. ECOLOGICAL INFORMATION**

<b>Aquatic Toxicity</b>	No harmful effects are expected for aquatic organisms after neutralisation or the buffer capacity of the sewage treatment plant or the water compartment is not exceeded.
<b>Fish Toxicity</b>	None available for product
<b>Algae Toxicity</b>	None available for product
<b>Invertebrates Toxicity</b>	None available for product
<b>Toxicity to Microorganisms</b>	None available for product
<b>OECD Biological Degradation</b>	Not expected to be biologically degraded
<b>Information about Elimination (Persistence &amp; Degradability)</b>	None available for product
<b>Eco toxic Effects</b>	None available for product
<b>General</b>	DO NOT DISCHARGE INTO DRAINS, WATERWAYS, SEWER OR ENVIROMENT. Product is slightly hazardous for water. Product is fully miscible with water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system. Inform local authorities if this occurs.

**12. TOXICOLOGICAL INFORMATION**

<b>Health Effects - Acute</b>	
<b>Ingestion (Swallowed)</b>	Alkaline product. May be irritant and cause burning in throat and mouth. Seek medical attention.
<b>Eye</b>	Causes severe and serious eye damage.
<b>Skin</b>	Causes severe skin burns.
<b>Inhalation</b>	May be irritant.
<b>Carcinogenicity</b>	Not expected to be carcinogenic.
<b>Mutagenicity</b>	Not expected to be mutagenic.
<b>Reproductive &amp; Developmental Toxicity</b>	No reproductive hazards are expected.
<b>Sensitisation</b>	No sensitising effects known
<b>Acute Toxicity Data (Oral)</b>	No data for product. On basis of ingredients, calculated Acute Toxicity for product LD <sub>50</sub> (Oral, rat) >2000mg/kg
<b>Acute Toxicity Data (Dermal)</b>	No data for product
<b>Acute Toxicity Data (Inhalation)</b>	No data for product
<b>Chronic Toxicity Data</b>	No data for product

**13. DISPOSAL CONSIDERATIONS**

**Product**

Recommended that it can be disposed of with rubble after solidification following consultation with the waste disposal facility operator according to State, Territory and/or Local Government regulations, pertinent authorities and adhering to the necessary technical regulations.

**Uncleaned Packaging**

Recommended to be disposed of according to official regulations. Recommended cleansing agents is water, if necessary with cleansing agents.

# MATERIAL SAFETY DATA SHEET

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Safety Data Sheet

## 14. TRANSPORTATION INFORMATION

### General

This material is a Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail

Road and Rail Transport	
UN No.	3267
Proper Shipping Name	Corrosive Liquid, Basic, Organic, N.O.S (contains potassium methylsiliconate).
DG Class	8
Sub. Risk	None
Pack Group	II
Hazchem Code	2X
IERG	37

## 15. REGULATORY INFORMATION

**SUSMP** Poisons Schedule number S5 allocated

**AICS** All ingredients present on ACIS

## 16. OTHER INFORMATION

### Acronyms and Comments

**ADG Code** Australian Code for the Transport of Dangerous Goods by Road and Rail.

**AICS** Australian Inventory of Chemical Substances.

**CAS Number** Chemical abstracts Service Registry Number.

**HAZCHEM** An emergency action code of numbers and letters which gives information to emergency services.

**IERG** Dangerous Goods Initial Emergency Response Guide (HB 76:2010 Standards Australia)

**Safe Work Australia** Safe Work Australia was formerly the Australian Safety and Compensation Council, which included the National Occupational Health and Safety Commission (NOHSC)

**SDS** Safety Data Sheet

**STEL** Exposed standard –short term exposure limit, a 15 minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL. According to current knowledge this concentration should neither impair the health of, nor cause undue discomfort to, nearly all workers.

**SUSMP** Standard for the Uniform Scheduling of Medicines and Poisons.

**TWA** Exposed standard – time –weighted average, the average airborne concentration of a particular substance when calculated over a normal eight hour working day, for a five-day working week.

**UN Number** United Nations Number

**Issue Date** 18 August 2016

**Supersedes Issue Date** March 2012

**Revision Information** New format

**Contact Point** Regulatory Affairs Manager

**Contact Number** (07) 3274 1000

**Note** Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

**Disclaimer** This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of this product, and in particular how to safely handle and use this product in the workplace. Since Know-How Concrete Technologies cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace. This SDS does not represent a guarantee for the properties of the product(s) described in terms of the legal warranty regulations. If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.