

Conforms: GHS (rev 4) (2011)

The Hazardous Substances and New Organisms (HSNO) Act 1996 and Amendments - New Zealand

Date of issue/ Date of revision : 09.02.2018

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SAFETY DATA SHEET

SIKAL

Section 1. Identification

Product name : SIKAL
Product type : liquid
Product code : P3402L

Uses

Area of application : Professional applications
Material uses : Fertilizers.

Supplier

Supplier's details : Yara Fertilizers (New Zealand) Limited

Address

Street : 43 Plassey Street
Postal code : 4130
City : Havelock North
Country : New Zealand

P.O. Box Address

P.O. Box : 8746
Postal code : 4157
City : Havelock North
Country : New Zealand

Telephone number : +64 6 877 6600
Fax no. : +64 6 877 6610
e-mail address of person responsible for this SDS : info.yara@xtra.co.nz
Emergency telephone number (with hours of operation) : +64 9929 1483 (7/24)

National advisory body/Poison Center

Name : New Zealand National Poisons Centre
Telephone number : 0800 POISON = 0800 764 766 (NZ only) / +64 3 479 7248 (outside NZ)
Hours of operation : 24h

Section 2. Hazards identification

Classification and labelling have been performed following the guidelines and recommendation of GHS and the intended use.

HSNO Classification : 8.1 - CORROSIVE TO METALS - Category A
8.2 - CORROSIVE TO DERMAL TISSUE - Category A
8.3 - CORROSIVE TO OCULAR TISSUE - Category A

GHS label elements**Hazard pictograms**

:

**Signal word**

:

Danger

Hazard statements

:

H290
H314May be corrosive to metals.
Causes severe skin burns and eye damage.**Precautionary statements****Prevention**

:

P260-b
P280-dDo not breathe gas or vapour.
Wear protective gloves/clothing and
eye/face protection.**Response**

:

P305
P351
P338
P310
P303
P361-aIF IN EYES:
Rinse cautiously with water for several
minutes.
Remove contact lenses, if present and easy
to do. Continue rinsing.
Immediately call a POISON CENTER or
doctor/physician.
IF ON SKIN (or hair):
Take off immediately all contaminated
clothing.

P353

Rinse skin with water.

Storage

:

P234

Keep only in original packaging.

**Other hazards which do not
result in classification**

:

None.

Section 3. Composition/information on ingredients**Substance/mixture**

:

Mixture

Ingredient name	CAS number	
Silicic acid, potassium salt	1312-76-1	>= 50 - < 65

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures**Description of necessary first aid measures****Eye contact**

:

Immediately flush eyes with plenty of water for at least 15
minutes, keeping eyelids open. Get medical attention

- immediately. Rinse with plenty of running water. Check for and remove any contact lenses. Chemical burns must be treated promptly by a physician.
- Inhalation** : Avoid inhalation of vapor, spray or mist. If inhaled, remove to fresh air. Get medical attention immediately. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Chemical burns must be treated promptly by a physician.
- Ingestion** : Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Get medical attention if you feel unwell. Get medical attention if adverse health effects persist or are severe.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Vapor may be irritating to eyes and respiratory system.
- Skin contact** : Causes severe burns.
- Ingestion** : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : May cause burns to mouth, throat and stomach.

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : Not available.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None identified.
- Specific hazards arising from the chemical** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Hazardous thermal decomposition products** : Avoid breathing dusts, vapors or fumes from burning materials.
In case of inhalation of decomposition products in a fire, symptoms may be delayed.
- Hazchem or Emergency Action Code** : Not available.
- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- Remark** : None.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

- Personal precautions, protective equipment and emergency procedures** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8). If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.
- Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. Absorb spillage to prevent material damage.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place

in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Absorb spillage to prevent material damage.

Section 7. Handling and storage

Precautions for safe handling

Precautions for safe handling : Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not ingest. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Do not breathe vapor or mist. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep away from acids.

Conditions for safe storage, including any incompatibilities : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits : None.

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. A washing facility or water for eye and skin cleaning purposes should be present.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Recommended: Tightly-fitting goggles
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
> 8 hours (breakthrough time): natural rubber (latex)
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product., Recommended:, Wear protective clothing.
- Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: inorganic gases/vapors filter (Type B)
- Personal protective equipment (Pictograms)** :

**Section 9. Physical and chemical properties****Appearance**

- Physical state** : liquid
- Color** : Colorless.
- Odor** : Odorless.
- Odor threshold** : Not determined.
- pH** : 14
- Melting/freezing point** : Not determined.
- Boiling/condensation point** : 100 °C
(212 °F)
- Sublimation temperature** : Not determined.
- Flash point** : Not determined.
- Fire point** : Not determined.
- Evaporation rate** : Not determined.
- Flammability (solid, gas)** : Non-flammable.
- Lower and upper explosive (flammable) limits** : **Lower:** Not determined.
Upper: Not determined.

Vapor pressure	: Not determined.
Density	: 1.595 g/cm ³ @ 20 °C (68 °F)
Relative density	: Not determined.
Solubility	: Miscible in water.
Partition coefficient: n-octanol/water	: Not determined.
Auto-ignition temperature	: Not determined.
Decomposition temperature	: Not determined.
Viscosity	: Dynamic: 40 mPa.s @ 20 °C (68 °F)
	: Kinematic: Not determined.
Explosive properties	: None.
Oxidizing properties	: Not determined.

Section 10. Stability and reactivity

Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: Avoid contamination by any source including metals, dust and organic materials.
Incompatible materials	: Reactive or incompatible with the following materials: acids metals
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Conclusion/Summary : No known significant effects or critical hazards.

Irritation/Corrosion

Conclusion/Summary

- | | |
|--------------------|---|
| Skin | : Corrosive to the skin. |
| Eyes | : Causes serious eye damage. |
| Respiratory | : May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. |

Sensitization

Conclusion/Summary

- Skin** : No data available for this end-point, hence this classification is not considered to be applicable.
- Respiratory** : No data available for this end-point, hence this classification is not considered to be applicable.

Mutagenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Carcinogenicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Reproductive toxicity

- Conclusion/Summary** : No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)**Aspiration hazard**

No known significant effects or critical hazards.

- Information on the likely routes of exposure** : Not available.

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : Vapor may be irritating to eyes and respiratory system.
- Skin contact** : Causes severe burns.
- Ingestion** : May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : May cause burns to mouth, throat and stomach.

Delayed and immediate effects and also chronic effects from short and long term exposure**Short term exposure**

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
Potential delayed effects : Not available.

Potential chronic health effects

- Carcinogenicity** : No known significant effects or critical hazards.
Mutagenicity : No known significant effects or critical hazards.
Fertility effects : No known significant effects or critical hazards.
Developmental effects : No known significant effects or critical hazards.
Effects on or via lactation : No known significant effects or critical hazards.
Other effects : No known significant effects or critical hazards.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
 pain
 watering
 redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
 pain or irritation
 redness
 blistering may occur
- Ingestion** : May cause burns to mouth, throat and stomach.

Numerical measures of toxicity

- Acute toxicity estimates**
 Not available.

Section 12. Ecological information**Toxicity**

- Conclusion/Summary** : No known significant effects or critical hazards.

Persistence/degradability

- Conclusion/Summary** : No known significant effects or critical hazards.

Bioaccumulative potential

- Conclusion/Summary** : No known significant effects or critical hazards.

Mobility in soil

- Soil/water partition** : Not available.


coefficient (KOC)	
Mobility	: Not available.
Other adverse effects	: No known significant effects or critical hazards.

Section 13. Disposal considerations


Product


Methods of disposal	: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
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Section 14. Transport information

Regulation: UN Class	
14.1 UN number	1719
14.2 UN proper shipping name	CAUSTIC ALKALI LIQUID, N.O.S. (Silicic acid, potassium salt,)
14.3 Transport hazard class(es)	8 
14.4 Packing group	II
14.5 Environmental hazards	No.
Additional information	
<u>Environmental hazards</u>	: No.

Regulation: IMDG	
14.1 UN number	1719
14.2 UN proper shipping name	CAUSTIC ALKALI LIQUID, N.O.S. (Silicic acid, potassium salt,)

14.3 Transport hazard class(es)	8 
14.4 Packing group	II
14.5 Environmental hazards	No.
Additional information	
Marine pollutant	: Not available.
IMDG Code Segregation group	: SG18
Emergency schedules (EmS)	: F-A, S-B

Regulation: IATA	
14.1 UN number	1719
14.2 UN proper shipping name	CAUSTIC ALKALI LIQUID, N.O.S. ()
14.3 Transport hazard class(es)	8 
14.4 Packing group	II
14.5 Environmental hazards	No.
Additional information	
Marine pollutant	: No.

14.6 Special precautions for user : Transport within user's premises: Ensure that persons transporting the product know what to do in the event of an accident or spillage.

IMSBC : Not applicable.

Transport in bulk according to Annex II of MARPOL and the IBC Code : Not available.

Section 15. Regulatory information

HSNO Approval Number : HSR002569.
HSNO Group Standard : Fertilisers (Corrosive)
HSNO Classification : 8.1 - CORROSIVE TO METALS - Category A8.2 -
CORROSIVE TO DERMAL TISSUE - Category A8.3 -
CORROSIVE TO OCULAR TISSUE - Category A

Country information : **SCHEDULE 1 (CONDITIONS OF GROUP STANDARD) of the Fertilisers (Corrosive) Group Standard 2006.**

Any location at which a substance is manufactured or stored in quantities that exceed those set out in the Standard's Table 2, must comply with the corresponding conditions as set out in the Standards' clauses 6 and 7.

Inventory list

Philippines inventory (PICCS): All components are listed or exempted.

New Zealand Inventory of Chemicals (NZIoC): All components are listed or exempted.

Korea inventory: All components are listed or exempted.

Japan inventory: All components are listed or exempted.

China inventory (IECSC): All components are listed or exempted.

Australia inventory (AICS): All components are listed or exempted.

Canada inventory: All components are listed or exempted.

Taiwan Chemical Substances Inventory (TCSI): All components are listed or exempted.

United States inventory (TSCA 8b): All components are listed or exempted.

EC INVENTORY (EINECS/ELINCS): All components are listed or exempted.

Canada: All components are listed or exempted.

Section 16. Other information

Key to abbreviations

- : ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
- : ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- : ATE = Acute Toxicity Estimate
- : BCF = Bioconcentration Factor
- : bw = Body weight
- : GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- : IATA = International Air Transport Association
- : IBC = Intermediate Bulk Container
- : IMDG = International Maritime Dangerous Goods
- : LogPow = logarithm of the octanol/water partition coefficient
- : MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- : NOHSC - National Occupational Health and Safety Commission
- : RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
- : SUSMP - Standard Uniform Schedule of Medicine and Poisons
- : UN = United Nations

Procedure used to derive the classification

Classification	Justification
8.1 - CORROSIVE TO METALS - Category A	Expert judgment
8.2 - CORROSIVE TO DERMAL TISSUE - Category A	On basis of test data
8.3 - CORROSIVE TO OCULAR TISSUE - Category A	On basis of test data

History

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Prepared by : Yara Chemical Compliance (YCC).

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