

Safety Data Sheet

according to WHS Regulations

Printing date 23.09.2021

Revision: 23.09.2021

1 Identification

Product Name: Si Phi

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Fertiliser.

Details of Manufacturer or Importer:

Nutrifield Pty Ltd
52 Technology Drive
Sunshine West, VIC 3020

Phone Number: +61 (3) 9315 5800

Emergency telephone number: National Poisons Information Centre: 13 11 26

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Corrosion

Skin Corrosion/Irritation 1A H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



STOT SE 3

H335 May cause respiratory irritation.

Signal Word Danger

Hazard Statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

Precautionary Statements

P260 Do not breathe dusts or mists.

P264 Wash thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.

P321 Specific treatment (see on this label).

P363 Wash contaminated clothing before reuse.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national regulations.

(Contd. on page 2)

Safety Data Sheet

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Revision: 23.09.2021

Product Name: Si Phi

(Contd. of page 1)

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Hazardous Components:**

CAS: 1312-76-1	Silicic acid, potassium salt ⚠ Skin Corrosion/Irritation 1A, H314; ⚠ STOT SE 3, H335	20-25%
CAS: 13977-65-6	Phosphonic acid, potassium salt (1:1) ⚠ Serious Eye Damage/Irritation 2, H319	10-15%
CAS: 1310-58-3	Potassium hydroxide ⚠ Skin Corrosion/Irritation 1A, H314; ⚠ Acute Toxicity (Oral) 4, H302	<10%

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.**Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention immediately.

Eye Contact:

In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention immediately.

Ingestion:

If swallowed, do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention immediately.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: Causes severe skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: May cause burns to the throat and oesophagus. May cause gastrointestinal irritation.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.**Specific Hazards Arising from the Chemical:**

No hazardous decomposition products known.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Minimise run-off from fire fighting measures entering drains or water courses.

HAZCHEM Code: 2R

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots.

Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

(Contd. on page 3)

Safety Data Sheet

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Printing date 23.09.2021

Revision: 23.09.2021

Product Name: Si Phi

(Contd. of page 2)

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use.

8 Exposure Controls and Personal Protection

Exposure Standards:**CAS: 1310-58-3 Potassium hydroxide**WES Peak limitation: 2 mg/m³

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved vapour respirator (Type K) under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

Impermeable, chemical resistant gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Liquid
Colour:	Colourless
Odour:	Neutral
Odour Threshold:	No information available
pH-Value:	12.59
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	No information available
Flammability:	Not flammable
Ignition Temperature	No information available

(Contd. on page 4)

Safety Data Sheet

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Printing date 23.09.2021

Revision: 23.09.2021

Product Name: Si Phi

(Contd. of page 3)

Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	No information available
Density:	No information available
Relative Density:	1.26
Vapour Density:	No information available
Evaporation Rate:	No information available
Solubility in Water:	Completely soluble
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No known hazardous reactions.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: No further relevant information available.

Incompatible Materials: No further relevant information available.

Hazardous Decomposition Products: No hazardous decomposition products known.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:

CAS: 1310-58-3 Potassium hydroxide

Oral	LD50	273 mg/kg (rat)
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Acute Health Effects

Inhalation: May cause respiratory irritation.

Skin: Causes severe skin burns.

Eye: Causes serious eye damage.

Ingestion: May cause burns to the throat and oesophagus. May cause gastrointestinal irritation.

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Single Exposure: May cause respiratory irritation.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

(Contd. on page 5)

Safety Data Sheet

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Printing date 23.09.2021

Revision: 23.09.2021

Product Name: Si Phi

(Contd. of page 4)

Existing Conditions Aggravated by Exposure: No information available

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

May be harmful to aquatic life.

CAS: 1310-58-3 Potassium hydroxide

EC50/15 minutes	22 mg/l (bacterial)
LC50/96 h	45.4 mg/l (rainbow trout)
LC50/48 h	40 mg/l (daphnia)

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number ADG, IMDG, IATA	UN1719
Proper Shipping Name ADG, IMDG, IATA	CAUSTIC ALKALI LIQUID, N.O.S. (POTASSIUM HYDROXIDE)
Dangerous Goods Class ADG Class:	8 Corrosive substances.
Subsidiary Risk:	
Packing Group: ADG, IMDG, IATA	II
Marine pollutant:	
EMS Number:	F-A,S-B
Hazchem Code:	2R
Special Provisions:	274
Limited Quantities:	1L
Packagings & IBCs - Packing Instruction:	P001, IBC03
Portable Tanks & Bulk Containers - Instructions:	T11
Portable Tanks & Bulk Containers - Special Provisions:	TP2, TP27

(Contd. on page 6)

Safety Data Sheet

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Revision: 23.09.2021

Product Name: Si Phi

(Contd. of page 5)

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All ingredients are listed.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 20.09.2021**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au
Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation – Category 1

Serious Eye Damage/Irritation 2: Serious eye damage/eye irritation – Category 2

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”

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