

## SAFETY DATA SHEET

### Section 1. Identification of the material and the supplier

Product: **Solupotasse**  
 Product Use: Fertiliser  
 Restriction of Use: Refer to Section 15

New Zealand Supplier: Horticulture Ltd  
 Address: 10 Firth Street  
 Drury, 2113

Telephone: +64 9 294 8453  
 Fax Number: +64 9 294 7272

**Emergency Telephone: 0800 764 766 (National Poison Centre)**

Date of SDS Preparation: 21 November 2019

### Section 2. Hazards Identification

**This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017**

**EPA Approval No: Fertiliser (subsidiary) – HSR002571**

#### Pictograms



Corrosive

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
8.3A	H318	Causes serious eye damage.	Eye Corr. 1

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P101	If medical advice is needed, have product container or label at hand.
P310	Immediately call a POISON CENTER or doctor/physician.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

<b>Storage Code</b>	<b>Storage Statement</b>
None allocated	

<b>Disposal Code</b>	<b>Disposal Statement</b>
P501	Dispose of according to Local Regulations or Authorities

### Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
potassium sulfate	≥85	7778-80-5
Potassium hydrogensulphate	≤15	7646-93-7

### Section 4. First Aid Measures

Routes of Exposure:

**General:**

Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital.

If in Eyes	Rinse immediately with plenty of water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Do not apply neutralizing agents. Take victim to an ophthalmologist.
If on Skin	Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/ attention.
If Swallowed	Clean mouth with water and drink afterwards plenty of water. Never give anything to the mouth of an unconscious person. If vomiting occurs, place victim face downwards, with the head turned to the side and lower than the hips to prevent vomit entering the lungs. Immediately call a POISON CENTER or doctor/physician.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult.

**Most important symptoms and effects, both acute and delayed**

Symptoms:

<b>Ingestion:</b>	Not applicable.
<b>Inhalation:</b>	Not applicable.
<b>Skin:</b>	Not applicable.
<b>Eyes:</b>	Corrosion of the eye tissue. Inflammation/damage of the eye tissue.

### Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Non-Flammable
<b>Hazards from products</b>	On burning: release of toxic and corrosive gases/vapours (sulphur oxides).
<b>Suitable Extinguishing media</b>	Adapt extinguishing media to the environment.
<b>Precautions for firefighters and special protective</b>	Gloves. Safety glasses. Protective clothing. Dust cloud production: compressed air/oxygen apparatus. Heat/fire exposure: compressed air/oxygen apparatus. Dilute toxic gases with water spray.

<b>clothing</b>	
<b>HAZCHEM CODE</b>	<b>None allocated</b>

<b>Section 6. Accidental Release Measures</b>
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Wear protective equipment as detailed in Section 8. Prevent dust cloud formation, e.g. by wetting. No naked flames.

Contain released product, pump into suitable containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray.

Stop dust cloud by humidifying. Scoop solid spill into closing containers. Clean contaminated surfaces with an excess of water. Wash clothing and equipment after handling. Dispose of according to Local Regulations.

<b>Section 7. Handling and Storage</b>
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**Precautions for Handling:**

- Read label before use.
- Avoid raising dust.
- Keep away from naked flames/heat.
- Observe normal hygiene standards.
- Wear protective clothing as detailed in Section 8.

**Precautions for Storage:**

- Store away from incompatible materials described in Section 10 and heat sources.
- Keep container tightly closed.
- Store in a dry area.
- Store at room temperature.
- Keep container in a well-ventilated place.
- Suitable Packaging Material: Polyethylene.

<b>Section 8 Exposure Controls / Personal Protection</b>
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**WORKPLACE EXPOSURE STANDARDS (provided for guidance only)**

<b>Substance</b>	<b>TWA</b>		<b>STEL</b>	
	<b>ppm</b>	<b>mg/m<sup>3</sup></b>	<b>ppm</b>	<b>mg/m<sup>3</sup></b>

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

**DNEL values:**

**Workers:**

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects dermal	21.3 mg/kg bw/day	
	Long-term systemic effects inhalation	37.6 mg/m <sup>3</sup>	

**General Population:**

potassium sulfate

Effect level (DNEL/DMEL)	Type	Value	Remark
DNEL	Long-term systemic effects oral	12.8 mg/kg bw/day	
	Long-term systemic effects dermal	12.8 mg/kg bw/day	
	Long-term systemic effects inhalation	11.1 mg/m <sup>3</sup>	

## PNEC

### Potassium Sulfate:

Compartments	Value	Remark
Fresh water	0.68 mg/l	
Marine water	0.068 mg/l	
Aqua (intermittent releases)	6.8 mg/l	
STP	10 mg/l	

### Engineering Controls

Avoid raising dust. Keep away from naked flames/heat. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

### Personal Protection Equipment



<b>Eyes</b>	In case of dust formation: Tightly fitting safety goggles.
<b>Hands and Skin</b>	Rubber Gloves. Protective clothing.
<b>Respiratory</b>	Dust production: dust mask with filter type P1.

## Section 9 Physical and Chemical Properties

<b>Appearance</b>	Crystalline Powder
<b>Colour</b>	Colourless to white
<b>Odour</b>	Odourless
<b>Odour Threshold</b>	Not available
<b>pH</b>	Not available
<b>Boiling Point</b>	1689 <sup>o</sup> C
<b>Melting Point</b>	1067 <sup>o</sup> C
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Non flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Bulk Density</b>	Not available
<b>Solubilities</b>	Water soluble
<b>Partition Coefficient:</b>	Not available
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Particle Size</b>	135 µm

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This material is thermally stable when stored and used as directed.
<b>Hazardous Reactions</b>	Substance has acid reaction.
<b>Conditions to Avoid</b>	Avoid raising dust. Keep away from naked flames/heat.
<b>Incompatible Materials</b>	In molten state: reacts violently with (some) metals.
<b>Hazardous Decomposition Products</b>	On burning: release of toxic and corrosive gases/vapours (sulphur oxides).

**Section 11 Toxicological Information****Acute Effects:**

<b>Swallowed</b>	Not applicable.
<b>Dermal</b>	Not applicable.
<b>Inhalation</b>	Not applicable.
<b>Eye</b>	Causes severe eye damage.
<b>Skin</b>	Not applicable.

**Chronic Effects:**

<b>Carcinogenicity</b>	Not applicable.
<b>Reproductive Toxicity</b>	Not applicable.
<b>Germ Cell Mutagenicity</b>	Not applicable.
<b>Aspiration</b>	Not applicable.
<b>STOT/SE</b>	Not applicable.
<b>STOT/RE</b>	Not applicable.

**Components:****Potassium Sulfate:**

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50	OECD 425	> 2000 mg/kg bw		Rat (male/female)	Read-across	
Dermal	LD50	OECD 402	> 2000 mg/kg bw		Rat (male/female)	Experimental value	
Inhalation	LC50		> 1.2 mg/l	4 h	Rat	Read-across	

**Potassium Hydrogensulphate:**

Route of exposure	Parameter	Method	Value	Exposure time	Species	Value determination	Remark
Oral	LD50		2340 mg/kg		Rat		

**Corrosive:****Solupotasse:**

Route of exposure	Result	Method	Exposure time	Time point	Species	Value determination	Remark
Eye	Serious eye damage	OECD 437				Experimental value	
Skin	Not irritating	EU Method B.46				Experimental value	

**Section 12. Ecotoxicological Information**

This product is not hazardous to the environment.

<b>Persistence and degradability</b>	No data available.
<b>Bioaccumulation</b>	No data available.
<b>Mobility in Soil</b>	No data available.
<b>Other adverse effects</b>	No data available.

**Components:****Potassium Sulfate:**

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50	EPA 600/4-90/027	680 mg/l	96 h	Pimephales promelas	Static system	Fresh water	Experimental value

Acute toxicity crustacea	LC50	EPA 600/4-90/027	720 mg/l	48 h	Daphnia magna	Static system	Fresh water	Experimental value
Toxicity algae and other aquatic plants	EC50	Other	2700 mg/l	18 day(s)	Chlorella vulgaris	Static system	Fresh water	Read-across
Toxicity aquatic micro-organisms	EC50		> 100 mg/l		Activated sludge			Weight of evidence
	NOEC		100 mg/l		Activated sludge			Weight of evidence

### Potassium Hydrogensulphate:

	Parameter	Method	Value	Duration	Species	Test design	Fresh/salt water	Value determination
Acute toxicity fishes	LC50		3500 mg/l		Leuciscus idus			

### Section 13. Disposal Considerations



#### Disposal Method:

Triple rinse and dispose according to Local Regulations.

**Precautions or methods to avoid:** Avoid release to the environment.

### Section 14 Transport Information

**This product is NOT classified as a Dangerous Good for transport in NZ ; NZS 5433:2012**

### Section 15 Regulatory Information

EPA Approval Code: Fertiliser (subsidiary) – HSR002571

HSNO Classification: 8.3A

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg (8.3A)
Emergency Response Plan	10 000kg (8.3A)
Secondary Containment	10 000kg (8.3A)
Restriction of Use	None

### Section 16 Other Information

#### Glossary

EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC <sub>50</sub>	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD <sub>50</sub>	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible authority.
UEL	Upper Explosive Level
WES	Workplace Exposure Limit

#### References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

#### Disclaimer

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Please contact the New Zealand distributor, if further information is required.

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