

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Potassium Chloride Horticultural Grade**
 Synonyms: Silvine, sylvite, muriate of potash (MOP), potash, Ferti-K, STD MOP, GMOP
 Product Use: Fertilizer Formulation additive, Food additives, Catalysts Auxiliary
 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: 1 April 2019

Section 2. Hazards Identification

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

EPA Approval No: HSR003261

Pictograms



Irritant

Ecotoxic

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1E (oral)	H303	May be harmful if swallowed.	Acute Tox. 5
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A
9.3B	H432	Toxic to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.

P273	Avoid release to the environment.
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.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P391	Collect spillage.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3. Composition / Information on Ingredients

Ingredients	Wt%	CAS NUMBER.
Potassium Chloride	>95%	7447-40-7

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists call doctor/physician.
If on Skin	Take off contaminated clothing and wash before re-use. Wash skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention.
If Swallowed	Wash out mouth with 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. Call a POISON CENTER or doctor/physician if you feel unwell.
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:

Ingestion:	May be harmful if swallowed.
Inhalation:	Not applicable.
Skin:	Causes mild skin irritation.
Eyes:	Causes severe eye irritation.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from decomposition products	In case of fire, the following can be released: Hydrogen chloride (HCl) Chlorine

	Toxic metal oxide smoke
Suitable Extinguishing media	Extinguishing media suitable to the burning media in the surrounding should be applied.
Precautions for firefighters and special protective clothing	Wear full protective equipment and mouth respiratory protective device.
HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Should restrict access to non-emergency personnel to the area of failure until the completion of the disposal of the product. Wear appropriate personal protective equipment. Avoid formation of dust. Use respiratory protective device against the effects of fumes/dust/aerosol.

Do not allow to enter sewers/ surface or ground water. Pick up mechanically. Dispose of according to Local Regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Wash hands thoroughly after handling.
- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of dust.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Keep out of reach of children.
- Store away from oxidizing agents.
- Store away from water.
- Store in dry conditions.
- Protect from humidity and water.
- Protect from heat and direct sunlight.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³
Dusts	10 mg/m ³ (inhalable)			

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.

Engineering Controls

Ensure adequate ventilation is available.

Personal Protection Equipment



Eyes	Wear safety glasses.
Hands and Skin	Wear protective gloves, and light weight protective clothing.
Respiratory	Use suitable respiratory protective device in case of insufficient ventilation.
General	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. Do not eat or drink while working.

Section 9 Physical and Chemical Properties

Appearance	Solid
Colour	White
Odour	Odourless
Odour Threshold	Not available
pH	Neutral
Boiling Point	1500°C(sublimation)
Melting/Freezing Point	772°C
Freezing Point	Not available
Flash Point	Not available
Flammability	Product is not flammable. (based on molecular structure)
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not determined.
Vapour Density	Not determined.
Density	1,987 g/cm ³
Solubilities	Miscibility with water at 20°C: = 330g/l
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Size	Not available

Section 10. Stability and Reactivity

Stability of Substance	Stable under the conditions of storage and handling as intended. Product is hygroscopic.
Hazardous Reactions	BrF ₃ , KMnO ₄ + sulphuric acid.
Conditions to Avoid	To avoid thermal decomposition do not overheat. Water
Incompatible Materials	Oxidizing agents.
Hazardous Decomposition Products	Formation of toxic gases is possible during heating or in case of fire. Hydrogen chloride (HCl) Chlorine Toxic metal oxide smoke

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe eye irritation.
Skin	Causes mild skin irritation.

Chronic Effects:

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

Based on available data, : Oral LD50 3020 mg/kg (rat)

Section 12. Ecotoxicological Information

HSNO Classes: 9.3B = Toxic to terrestrial vertebrates.

Persistence and degradability	The substance is inorganic; therefore no biodegradation tests are applicable.
Bioaccumulation	Does not accumulate in organisms. Does not accumulate in organisms. This substance is highly water soluble and dissociating.
Mobility in Soil	Low potential for adsorption (based on substance properties). This substance is highly water soluble and dissociating.
Other adverse effects	Product should not get in higher quantities into waste water because it may act as a plant nutrient and cause eutrophication.

Do not allow to enter waterways.

Section 13. Disposal Considerations

Disposal Method:

Collect spilt substance into appropriate sealable containers. Ensure the containers are labelled with "Hazardous Waste" along with appropriate pictograms, hazard statements and the contact details of the business. Send for disposal to an appropriate disposal company

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: HSR003261

HSNO Classification: 6.1E(oral), 6.3B, 6.4A, 9.3B

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required

Tracking Trigger Quantities	Not required
Signage Trigger Quantities	1000kg (9.3B)
Emergency Response Plan	Not required
Secondary Containment	Not required
Restriction of Use – Regulation 77A	No person may use this substance as a pesticide, or veterinary medicine; however, this substance may be used in the formulation of a pesticide or veterinary medicine.

Section 16 Other Information

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	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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