SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product:	**GranuPotasse**
Product Use:	Fertiliser
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	Horticentre 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:	7 April 2021

Section 2. Hazards Identification

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

EPA Approval No: Fertiliser (subsidiary) – HSR002571

Pictograms

Irritant

Signal Word: **Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.3A	H315	Causes skin irritation.	Skin Irrit. 2
6.4A	H319	Causes serious eye irritation.	Eye Irrit. 2A

Prevention Code	Prevention Statement
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P280	Wear protective clothing as detailed in Section 8.

Response Code	Response Statement
P362	Take off contaminated clothing and wash before re-use.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P305 +	IF IN EYES: Rinse cautiously with water for several minutes. Remove

P351+P338	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 sulfate	>85	7778-80-5
Potassium hydrogen sulphate	<3	7646-93-7

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes — Immediately flush with large quantities of water for 15 minutes. Hold eyelids apart during irrigation to ensure thorough flushing of the entire area of the eye and lids. Obtain medical attention if irritation occurs.

If on Skin — Immediately flush with large quantities of water. Remove contaminated clothing under a safety shower. Continue rinsing. Obtain medical attention if irritation occurs.

If Swallowed — If victim is conscious, give 2 to 4 glasses of water and induce vomiting by touching finger to back of throat. 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 needed.

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: Not applicable.
Inhalation: Not applicable.
Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.

Section 5. Fire Fighting Measures

Hazard Type	Non-Flammable
Hazards from products	Heating or flames causes release of oxides of sulfur. Sulfur dioxide is highly irritating to the eyes, respiratory tract and moist skin. Avoid raising dust which is irritating to the eyes and respiratory tract.
Suitable Extinguishing media	Use media suitable for combustibles involved in the fire.
Precautions for firefighters and special protective clothing	Firefighters should wear self-contained breathing apparatus (SCBA) and full fire-fighting turnout gear. Keep containers/storage vessels in fire area cooled with water spray.

HAZCHEM CODE	None allocated

Section 6. Accidental Release Measures

Wear protective equipment as detailed in Section 8. Isolate the release area and deny entry to unnecessary, unprotected and untrained personnel.

Do not allow to enter waterways.

Small release: Confine and absorb small releases with sand, earth or other inert absorbents. Shovel up contained material and place in drums for disposal as a chemical waste or recycle as a fertilizer as the original product was intended.

Large release: Stop release if safe to do so. Dike spill area with earth, sand or other inert absorbents to prevent runoff into surface waterways (potential aquatic toxicity), storm drains and sewers. Recover as much of the spilled product as possible with shovel and brooms taking care not to create dust. Use material as originally intended or dispose of as a chemical waste. Treat remaining material as a small release (above).

Section 7. Handling and Storage

Precautions for Handling:

- Read label before use.
- Wash hands thoroughly after handling.
- Avoid contact with eyes.
- Use only in a well-ventilated area.
- Wash thoroughly after handling.
- Avoid prolonged or repeated breathing of dust.
- Avoid prolonged or repeated contact with the skin.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage:

- Store in well-ventilated areas.
- Do not store combustibles in the area of storage vessels.
- Keep away from any sources of heat or flame.
- Store totes and smaller containers out of direct sunlight at moderate temperatures.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		STEL	
Substance	**ppm**	**mg/m³**	**ppm**	**mg/m³**

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 2019 11TH EDITION.

Engineering Controls

Use adequate exhaust ventilation to prevent inhalation of product dust.
Keep eye wash/safety shower in areas where product is commonly handled.

Personal Protection Equipment

Eyes	In case of dust formation: Tightly fitting safety goggles.
Hands and Skin	Neoprene rubber gloves and apron should be worn to prevent repeated or prolonged contact with dust. Wash contaminated clothing prior to reuse.
Respiratory	Respiratory protection is based on potential for exposure to product dust.
Hygiene	Common good industrial hygiene practices should be followed, such as washing thoroughly after handling and before eating or drinking.

Section 9 Physical and Chemical Properties

Appearance	Granular crystals
Colour	Colourless to white
Odour	Odourless
Odour Threshold	Not available
pH	3.5 – 4 (1% solution)
Boiling Point	1689^0C
Melting Point	1067^0C
Freezing Point	Not available
Flash Point	Not available
Flammability	Non flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Relative Density	1.27 (bulk density) 1.4 (tapped density)
Solubilities	120 g/l @25°C
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available

Section 10. Stability and Reactivity

Stability of Substance	This material is thermally stable when stored and used as directed.
Hazardous Reactions	Substance has acid reaction.
Conditions to Avoid	Avoid raising dust. Keep away from naked flames/heat.
Incompatible Materials	None known.
Hazardous Decomposition Products	Oxides of sulfur.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Eye	Causes severe eye irritation.
Skin	Causes skin irritation.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell	Not applicable.

Mutagenicity	
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	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 Hydrogen sulphate:

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

Section 12. Ecotoxicological Information

This product is not hazardous to the environment.

Persistence and degradability	No data available.
Bioaccumulation	No data available.
Mobility in Soil	No data available.
Other adverse effects	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

Potassium Hydrogen sulphate:

	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

AGRECOVERY

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: 6.3A, 6.4A

HSWA & EPA Controls	Trigger Quantity
Certified Handler	Not required
Location Certificate	Not required
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	Not required
Emergency Response Plan	Not required
Secondary Containment	Not required
Restriction of Use	None

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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