

## SAFETY DATA SHEET

According to  
HSNO Hazardous Substances (Safety Data Sheets) Notice 2017

<b>Section 1.</b>	<b>Identification of the material and the supplier</b>
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Product:	<b>Regulate</b>
Product Use:	Plant Growth Regulator
Restriction of Use:	Refer to Section 15
New Zealand Supplier:	<b>Agrisource 2000 Ltd</b>
Address:	45 Kitchener Road Pukekohe, Auckland
Telephone:	+64 9 237 0422
<b>Emergency No:</b>	<b>0800 764 766 (National Poison Centre)</b>
Date of SDS Preparation:	16 September 2022

<b>Section 2.</b>	<b>Hazards Identification</b>
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This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

**EPA Approval No: HSR000758**

**Pictograms**



Signal Word: **Danger**

GHS Classification and Category	Hazard Code	Hazard Statement
Acute dermal toxicity Cat. 3	H311	Toxic in contact with skin.
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Specific target organ toxicity – repeated exposure Cat. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Corrosive to metals Cat. 1	H290	May be corrosive to metals.
Hazardous to terrestrial vertebrates	H432	Hazardous to terrestrial vertebrates.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P234	Keep only in original container.
P260	Do not breathe dust, fumes, gas, mist, vapours or spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

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.
P314	Get medical advice/attention if you feel unwell.
P322	Specific measures (see ... <reference to supplemental first aid instruction> on this label).
P330	Rinse mouth.
P361	Remove/Take off immediately all contaminated clothing.
P363	Wash contaminated clothing before reuse.
P390	Absorb spillage to prevent material damage.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.

Storage Code	Storage Statement
P405	Store locked up.
P406	Store in corrosive resistant container with a resistant inner liner.

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

### Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS NUMBER.
Chlormequat Chloride	64-66%	999-81-5
Other ingredients not contributing to the hazards classification	>20%	NA

### 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: Get medical advice.
If on Skin	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing, footwear. Wash affected areas with soap and water. If a large area is affected seek medical aid. Persons assisting the patient should protect themselves from contamination.
If Swallowed	DO NOT attempt to give anything by mouth to a semi-conscious or unconscious person. DO NOT induce vomiting. Contact National Poisons Centre (0800 764 766) for advice
If Inhaled	Remove patient to fresh air. Keep patient at rest. Begin artificial respiration if patient is not breathing and seek medical advice.

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

Symptoms:	Toxic in contact with skin. Harmful if swallowed. May cause damage to organs through prolonged or repeated exposure. Ingestion of large amounts may affect the central nervous system (e.g. Dizziness, headache).
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## Section 5. Fire Fighting Measures

<b>Hazard Type</b>	Non Flammable
<b>Hazards from combustion products</b>	In a fire, hydrochloric acid, chloride, nitrogen oxides and carbon monoxide may be formed.
<b>Suitable Extinguishing media</b>	Water spray, extinguishing powder, foam, carbon dioxide.
<b>Precautions for firefighters and special protective clothing</b>	Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke or gases.
<b>HAZCHEM CODE</b>	<b>2X</b>

## Section 6. Accidental Release Measures

Avoid contact with skin and eyes. Do not inhale spray. Wear Full Personal Protective Equipment (PPE). Chemical resistant coveralls, chemical resistant gloves, chemical resistant footwear plus socks, chemical resistant headgear and chemical resistant eyewear.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

In the case of spillage, contain spilled material. Keep out animals and unprotected persons. Keep material out of streams and sewers. Soak up with absorbent material and put into containers for disposal. To decontaminate spill area, tools and equipment, wash with water. Dispose of wastes in accordance with the requirements of Local Authorities.

Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

## Section 7. Handling and Storage

### Precautions for Handling:

- Read label before use.
- Obtain special instructions before use.
- Do not handle until all safety precautions have been read and understood.
- Do not breathe fumes, gas, mist, vapours or spray.
- Wash hands thoroughly after handling and before meals.
- Do not eat or drink while using.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.
- Use personal protective equipment as required.

### Precautions for Storage:

- Keep out of reach of children.
- Store away from incompatible materials listed in Section 10.
- Store locked up.
- Store in corrosive resistant container with a resistant inner liner. HDPE Plastic drum. Labelled Toxic-Corrosive - Ecotoxic
- Store in original container tightly closed and in a locked, dry, cool, well ventilated area, away from feed, seeds and foodstuffs.
- Store in accordance with the New Zealand Standard for the Management of Agrichemicals (NZS8409).

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

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

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 2020 12<sup>TH</sup> EDITION.

**Engineering Controls**

Ensure ventilation is adequate, generally natural ventilation is adequate

**Personal Protection Equipment**

<b>Eyes</b>	Wear chemical resistant goggles or face shield.
<b>Skin and body</b>	Chemical resistant coveralls, chemical resistant footwear plus socks, chemical resistant headgear for overhead exposures.
<b>Hands</b>	Chemical resistant gloves.
<b>General</b>	Avoid inhaling aerosols and vapours. Avoid contact with eyes and skin. Store work clothes and street clothes separately. Wash hand before breaks and at the end of work. Change contaminated protective clothing. Keep away from food, drinks and tobacco.

**Section 9 Physical and Chemical Properties**

<b>Appearance</b>	Liquid
<b>Colour</b>	Light yellow
<b>Odour</b>	Amine like
<b>Odour Threshold</b>	Not available
<b>pH</b>	5.0 – 7.0
<b>Boiling Point</b>	~100°C
<b>Melting Point</b>	Not available
<b>Freezing Point</b>	Not available
<b>Flash Point</b>	Not available
<b>Flammability</b>	Not flammable
<b>Upper and Lower Explosive Limits</b>	Not available
<b>Vapour Pressure</b>	Not available
<b>Vapour Density</b>	Not available
<b>Specific Gravity or density</b>	Approx. 1.13 -1.16 g/ml @ 20°C
<b>Solubility</b>	Completely miscible with water
<b>Partition Coefficient:</b>	Log Pow = -1.6 (pH)
<b>Auto-ignition Temperature</b>	Not available
<b>Decomposition Temperature</b>	Not available
<b>Kinematic Viscosity</b>	Not available
<b>Oxidation properties</b>	Incompatible with oxidizing agents, acids, and bases.

## Section 10. Stability and Reactivity

<b>Stability of Substance</b>	This product is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	None expected.
<b>Conditions to Avoid</b>	Avoid sources of ignition and extreme heat
<b>Incompatible Materials</b>	Aluminium and its alloys
<b>Hazardous Decomposition Products</b>	In a fire hydrochloric acid, chloride, nitrogen oxides and carbon monoxide may be formed

## Section 11 Toxicological Information

**Acute Effects:** Chlormequat chloride

Acute toxicity – Oral : LD50 807mg/kg (rat)  
Acute toxicity - Dermal : LD50 232mg/kg (rabbit)  
Acute toxicity – Inhalation: LC50(4 hr) >5.2mg/L

**Mixture:**

<b>Swallowed</b>	Harmful if swallowed.
<b>Dermal</b>	Toxic in contact with skin
<b>Inhalation</b>	Not classified
<b>Eye</b>	Non-irritant (rabbit)
<b>Skin</b>	Non-irritant (rabbit)
<b>Sensitisation</b>	Non-sensitising (Guinea Pig)

**Chronic Effects:**

<b>Carcinogenicity</b>	Not classified
<b>Reproductive Toxicity</b>	Not classified
<b>Germ Cell Mutagenicity</b>	Not classified
<b>Aspiration</b>	Not classified
<b>STOT/SE</b>	Not classified
<b>STOT/RE</b>	May cause damage to organs through prolonged or repeated exposure.

## Section 12. Ecotoxicological Information

Hazardous to terrestrial vertebrates

<b>Product:</b>	
<b>Persistence and degradability</b>	Readily biodegradable in soil, according to appropriate OECD Test. DT50 = 8-10 day
<b>Bioaccumulation</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other adverse effects</b>	No data available

<b>Fish toxicity:</b>	LC50 (96 h): 652mg/l rainbow trout
<b>Acute toxicity</b>	EC50 (48 h) 16.7 mg/l for chlormequat chloride
<b>Daphnia toxicity:</b>	Chronic NOEC (21d) 5.0 mg/L for chlormequat chloride
<b>Bird toxicity:</b>	LD50: pheasant 261mg/kg for chlormequat chloride
<b>Bee toxicity:</b>	Not toxic to Bees

Do not allow to enter waterways.

## Section 13. Disposal Considerations

### Disposal Method:

Ideally, the product should be used for its intended purpose.  
If there is a need to dispose of the product, follow the recommendations in NZS 8409.

**Container Disposal:** Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.



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

## Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ; NZS 5433:2012



### Road, Rail, Sea and Air Transport

<b>UN No</b>	1760
<b>Class - Primary</b>	8
<b>Packing Group</b>	III
<b>Proper Shipping Name</b>	CORROSIVE LIQUID, N.O.S. - (chlormequat chloride, 72%)
<b>Marine Pollutant</b>	NO
<b>Special Provisions</b>	-

## Section 15 Regulatory Information

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: HSR000758

<b>HSW (HS) Regulations 2017</b>	<b>Trigger Quantity</b>
Location Certificate	1000L (6.1C)
Signage Trigger Quantities (Schedule 3)	1000L
Emergency Response Plan (Schedule 5)	100L
Secondary Containment (Schedule 16)	100L
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
<b>HSNO Additional Controls (Restrictions of use)</b>	
77A	
<b>Hazardous Property Controls Notice 2017</b>	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 1	Preliminary provisions
HPC Notice Part 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for ecotoxic substances

HPC Notice Part 4 Subpart B	Use of ecotoxic substances in any place. <b>Variation:</b> Clause 52 of the Hazardous Property Controls Notice applies to this substance as if it is an agrichemical that is in the hazard class hazardous to the aquatic environment.
HPC Notice Part 4 Subpart C	Qualifications required for application of ecotoxic pesticides.
<b>ACVM Act and Regulations</b>	
See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a> for registration Conditions	<b>P9464</b>

<b>Section 16</b>	<b>Other Information</b>
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### Glossary

Cat	Category
EC <sub>50</sub>	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
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 2020 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

This document has been prepared by TCC (NZ) Ltd and serves as the suppliers Safety Data Sheet ('SDS'). It is based on information concerning the product which has been provided to TCC (NZ) Ltd or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer. While TCC (NZ) have taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, TCC (NZ) Ltd accept no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS

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Please contact the Agrisource 2000 Ltd, if further information is required.

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