

Safety Data Sheet

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

Section 1. Identification of the material and the supplier

Product Name	Mepipal
Product Use	Plant Growth Regulator
Restriction of Use	Refer to Section 15
New Zealand Supplier	Agrisource (2000) Limited
Address	45 Kitchener Road, Pukekohe, Auckland
Telephone	+64 9 237 0422
Emergency No:	0800 764 766 (National Poison Centre)
Date of SDS Preparation	9 June 2026

Section 2. Hazards Identification

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

EPA Approval No HSR101134

Pictograms



Signal Word Danger

GHS Classification and Category	Hazard Code	Hazard Statement
Acute Oral Tox. 4	H302	Harmful if swallowed.
STOT Rep. Exp. 2	H373	May cause damage to organs through prolonged or repeated exposure.
Skin Corr. 1C	H314	Causes severe skin burns and eye damage.
Eye Damage 1	H318	Causes serious eye damage.
Aquatic Chronic 3	H412	Harmful to aquatic life with long lasting effects.
-	H422	Toxic to the soil environment.
-	H432	Toxic to terrestrial vertebrates.

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read carefully and follow all instructions.
P260	Do not breathe 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.
P310	Immediately call a POISON CENTER or doctor/physician.
P363	Wash contaminated clothing before reuse.
P391	Collect spillage.
P301 + P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301 + P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position 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.

Storage Code	Storage Statement
P405	Store locked up.

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

Section 3. Composition / Information on Hazardous Ingredients

Ingredients	Wt%	CAS Number
Chlorethephon	155 g/L	16772-87-0
Mepiquat-chloride	305 g/L	24307-26-4
Other components	To 1L	-

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. Immediately call a POISON CENTER or doctor/physician.

If on Skin Take off contaminated clothing and wash before reuse. Wash with plenty of water. Immediately call a POISON CENTER or doctor/physician.

If Swallowed	Rinse mouth immediately and drink 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. Contact the National Poisons Centre or seek medical attention immediately.
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. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms	Harmful if swallowed. Causes severe skin burns. Causes serious eye damage. May cause damage to organs (oral) through prolonged or repeated exposure.
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Section 5. Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from products	Carbon monoxide, Hydrogen chloride, Carbon dioxide, Nitrogen oxides, Phosphorus oxides.
Suitable Extinguishing media	Water spray, foam, dry powder, carbon dioxide.
Precautions for firefighters and special protective clothing	Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapors generated.
HAZCHEM Code	2X

Section 6. Accidental Release Measures

For emergency responders	Wear PPE as detailed in Section 8. Evacuate all unnecessary personnel.
Environmental precautions	Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater.
Methods and material for containment and cleaning up	Absorb with absorbent material and place into a container for disposal. Dispose as per Section 13.

Section 7.

Handling and Storage

Precautions for Handling

- Read label before use.
- Do not breathe mist, vapours or spray.
- Avoid contact with skin and eyes.
- Ensure adequate ventilation.
- Keep away from: sparks, open flame and direct sunlight.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing as detailed in Section 8.

Precautions for Storage

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store locked up in original packaging.
- Keep tightly closed in a dry, cool and well-ventilated place.
- Keep away from direct sunlight.

Section 8.

Exposure Controls/Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA	STEL
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 FEB 2025 15TH EDITION.

Engineering Controls

Ensure local ventilation is adequate and where a respirator if ventilation is inadequate.

Personal Protection Equipment



Eyes

When handling wear eye protection.

Skin & Body

Wear protective chemical resistant gloves. Wear appropriate chemical resistant clothing to prevent skin contact depending on the extent of exposure. During most normal work situations where exposure to the material cannot be avoided for a limited time span, waterproof pants and apron of chemical resistant material or coveralls of polyethylene (PE) will be sufficient. Coveralls of PE must be discarded after use if contaminated. In cases of appreciable or prolonged exposure, coveralls of barrier laminate may be required.

Respiratory

Wear respiratory protection if ventilation is inadequate. Use particle filter with medium efficiency for solid and liquid particles.

General

Take off contaminated clothing. Wash hands before breaks and after work. When using do not eat or drink.

Section 9. Physical and Chemical Properties

Appearance	Liquid
Colour	Colourless
Odour	Characteristic
Odour Threshold	Not available.
pH	0.5 – 1.5
Boiling Point	Not available.
Melting Point	Not available.
Freezing Point	Not available.
Flash Point	Not available.
Flammability	Not available.
Upper and Lower Explosive Limits	Not available.
Vapour Pressure	Not available.
Vapour Density	Not available.
Specific Gravity or density	1.098 g/mL
Solubility	Not available.
Partition Coefficient:	Not available.
Auto-ignition Temperature	Not available.
Decomposition Temperature	Not available.
Kinematic Viscosity	Not available.
Oxidation properties	Not available.

Section 10. Stability and Reactivity

Stability of Substance	Stable under normal storage conditions in original container for at least two years.
Possibility of hazardous reactions	None known.
Conditions to Avoid	Store away from incompatible substances.
Incompatible Materials	Strong acids, strong bases, strong oxidizing agents.
Hazardous Decomposition Products	No known hazardous decomposition products.

Section 11. Toxicological Information

Acute Effects

Oral	Harmful if swallowed. Acute oral LD50 for rats 500-2000 mg/kg
Dermal	Not applicable. Acute dermal LD50 for rats >4000
Inhalation	Not applicable. Inhalation LC50 (4 h) for rats >5.2 mg/L air
Eye	Causes serious eye damage.
Skin	Causes skin burns.

Chronic Effects

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Causes damage to organs (oral) through repeated or prolonged exposure.

Section 12. Ecotoxicological Information


General	Harmful to aquatic life with long lasting effects. Toxic to the soil environment. Toxic to terrestrial vertebrates.	
Persistence and degradability	Biodegradable. Half-life 10 days	
Bioaccumulation	No data available	
Mobility in Soil	No data available	
Ecotoxicity	Fish	LC50 (rainbow trout) (96hr) 4300 mg/L (mepiquat chloride) LC50 (rainbow trout) (96hr) 720 mg/L (ethephon)
	Daphnia	EC50 (48hr) 68.5 mg/L (mepiquat chloride) EC50 (48hr) 577 mg/L (ethephon) Harmful to fish and other aquatic organisms
	Birds	LD50 (bobtail quail) >2000 mg/kg (mepiquat chloride) LD50 (bobtail quail) 1072 mg/kg (ethephon)
	Bees	Non-toxic to bees
Waterways	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. Unwanted product and spill residues should be disposed of via a licensed waste contractor or at an approved landfill site.
Container Disposal	Triple rinse container and add rinsate to spray tank. Dispose of cleaned container at your local AGRECOVERY container collection site.
Recycling	
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 5433:2020

Pictograms	 Road, Rail, Sea and Air Transport
UN No	3265
Class - Primary	8
Packing Group	III
Proper Shipping Name	CORROSIVE LIQUID, ACIDIC ORGANIC, N.O.S. (chlorethephon)
Marine Pollutant	No
Special Provisions	If the product's individual container is below 5 L/kg, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15. Regulatory Information

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

EPA Approval No HSR101134

HSW (HS) Regulations 2017	Trigger Quantity
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Location Certificate -

Signage Trigger Quantities (Schedule 3) 1000 L

Emergency Response Plan (Schedule 5) 1000 L

Secondary Containment (Schedule 5) 1000 L

Tracking (Schedule 26) Not required.

Certified Handlers Not required.

HSNO Additional Controls (Restrictions of use)

77A The substance must not be applied onto or into water.	Where 'water' means water in all its physical forms, whether flowing or not, and whether over or under ground, but does not include water in any form while in a pipe, tank or cistern or water used in the dilution of the substance prior to application or water used to rinse the container after use
77A The maximum level of an impurity in the technical grade active material for this substance is set.	The following limits are set for the toxicologically-relevant impurities in chlorethephon used to manufacture this substance: 1) MEPHA (Mono 2-chloroethyl ester, 2-chloroethyl phosphonic acid): 20 g/kg 2) 1,2-Dichloroethane: 0.5 g/kg
77A A restriction has been placed on the application method for this substance.	Ground-based methods of applying pesticides include, but are not limited to, application by ground boom, airblast or knapsack, and do not include aerial application methods.

Hazardous Property Controls Notice 2017

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 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances

ACVM Act and Regulations

Registration Number P009812

See www.foodsafety.govt.nz for registration Conditions

Glossary

Cat	Category
EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC50	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD50	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

EPA Hazardous Substances (Safety Data Sheets) Notice 2017
Workplace Exposure Standards and Biological Exposure Indices FEB 2025 15th edition.
Assigning a hazardous substance to a HSNO Approval (Aug 2013).
Transport of Dangerous goods on land NZS 5433:2020
HSW (Hazardous Substances) Regulations 2017

Disclaimer

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The information herein is given in good faith, but no warranty, express or implied is made.

Please contact the Agrisource (2000) Limited, if further information is required.

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9 June 2026

Review Date

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