

SAFETY DATA SHEET



Section 1: Identification of the Substance/Mixture and of the Supplier

Product Name: Quaternary Ammonium Chloride
Proper Shipping Name Toxic liquid, corrosive, inorganic, n.o.s
Recommended use: Moss, Mould & Lichen Remover
Restriction of use: Refer to Section 15
Company Details Marketing Chemicals Ltd
Address: 7 Rymer Place, Mangere Bridge
Auckland. New Zealand
Telephone: +64 9 634 3862 [8.00 am to 4.30pm – Monday to Friday]
Fax: +64 9 634 3864
Emergency Telephone: +64 274 340990(24 hours)
National Poison Centre(24 hours): 0800 POISON [764 766]
Date of preparation 3 September 2024 v2

Section 2: Hazard Identification

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

EPA Approval No: Cleaning Products (Corrosive) - HSR0002526

Pictograms



Signal Word: **DANGER**

GHS Category	Hazard Code	Hazard Statement
Acute oral toxicity Cat. 4	H302	Harmful if swallowed.
Acute dermal toxicity Cat. 4	H312	Harmful in contact with skin.
Skin corrosion Cat. 1B	H314	Causes severe skin burns and eye damage.
Serious eye damage Cat. 1	H318	Causes serious eye damage.
Hazardous to the aquatic environment acute Cat. 1	H400	Very toxic to aquatic life.
Hazardous to the aquatic environment chronic Cat. 1	H410	Very toxic to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
-----------------	----------------------

P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes or vapours.
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 SDS 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.
P362+P364	Take off contaminated clothing and wash before reuse.

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 Ingredients

Name	% by Wt.	CAS Number
Quaternary Ammonium Chloride	25.0 – 60.0	63449-41-2
Non hazardous materials	Up to 100	

Section 4: First Aid Measures

Eyes: If medical advice is needed, have product container or label at hand. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin: Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.

Inhalation: If breathing is difficult, remove to fresh air and keep at rest in a position, comfortable for breathing. If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

Most important symptoms and effects, both acute and delayed
Symptoms:

Ingestion	Harmful if swallowed.
Inhalation	Not applicable
Skin	Harmful in contact with skin. Causes severe skin burns.
Eyes	Causes serious eye damage.

For Further Information Telephone (24 Hours) The National Poison Centre: 0800 Poison [764 766]

Section 5: Fire Fighting Measures

Hazard Type	Non Flammable.
Hazards from products	Toxic fumes, hydrogen chloride
Suitable Extinguishing media	Water spray or fog, Dry Chemical Powder, Foam or Carbon Dioxide
Precautions for firefighters and special protective clothing	Wear full protective gear.

Section 6: Accidental Release Measures

Wear protective clothing as detailed in Section 8. Evacuate all unnecessary personnel. Stop the leak, if possible.

Do not allow to enter waterways.

If product is released or spilled: Neutralise with dilute alkali (soda ash or slaked lime) & then flush away with copious amounts of running water.

Section 7: Handling And Storage

Handling:

- Read label before use.
- Do not breathe fumes or vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Avoid release to the environment.
- Wear protective clothing.

Storage:

- Store locked up in the original container.
- Keep out of reach of children
- Protect from physical damage.
- Clean up all spills immediately to prevent secondary accidents.
- Store away from incompatible materials listed in Section 10.

Section 8: Exposure Controls/Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

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 2023 14TH EDITION.

Personal Protection Equipment



Engineering Controls:

General (mechanical) room ventilation is considered satisfactory in enclosed spaces.

Eye / Face Protection:

Safety Glasses/Full face masks

Body Protection:

PVC-coated gloves. Avoid skin contact. If skin contact or contamination of clothing is likely, protective clothing should be worn.

Respiratory Protection: Avoid exposure to spray mist. Suitable respiratory protection should be worn.

Section 9: Physical And Chemical Properties

Appearance	Liquid
Colour	Clear
Odour	Not available
Odour Threshold	Not available
pH	Not available
Boiling Point	100°C
Melting Point	Not available
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
Specific Gravity	1.00
Solubility in Water	Completely
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not applicable
Evaporation Rate	Not available

Section 10: Stability And Reactivity

Stability of the Substance: Stable under general conditions

Conditions to avoid: Heat

Materials to avoid: Oxidising agents

Hazardous Decomposition Products: None known

Conditions Contributing to Hazardous Polymerization None known.

Section 11: Toxicological Information

Acute Effects:

Swallowed	Harmful if swallowed. ENDPOINT: LD50 ;VALUE: 150 mg/kg
Dermal	Harmful in contact with skin. SPECIES: Rat ;ENDPOINT: LD50;VALUE: 1420 mg/kg
Inhalation	Respiratory sensitizers SPECIES: RESULT: In acute cases pulmonary oedema resulting from aspiration, dyspnea and cyanosis due to paralysis of the respiratory muscles, bronchoconstriction, cough can occur.

Eye	Causes serious damage to eyes. RESULT: Eye exposure may result in mild discomfort (0.1% solution) to very serious corneal damage (10% solution) depending on the agent and the concentration. High concentrations of benzalkonium chloride can cause ocular toxicity in human eyes.
Skin	Causes severe skin burns and eye damage.

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.

Section 12: Ecological Information

Very toxic to aquatic life with long lasting effects.

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

Ecological Toxicity: SPECIES: Scenedesmus pannonicus (Green algae)
TYPE OF EXPOSURE: Static; DURATION: 72 hr; ENDPOINT: EC50
VALUE: 80 ug/L (= 0.08 mg/l)
Biocumulative: No
Rapidly Degradable: Yes

Section 13: Disposal Considerations

Disposal Method: Empty packaging completely prior to disposal. Do not pierce or burn, even after use. Place any recovered product into an appropriate waste container for disposal through appropriate waste company or specialized landfill in accordance with local regulations.

Precautions: Ensure waste container containing recovered product or contaminated spill media is labelled "Hazardous Waste – Corrosive". Do not allow to enter waterways if possible.

Section 14: Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2020 and SNZ HB 5433:2021



Road, Rail, Sea and Air Transport

UN No	3266
Class - Primary	8
Packing Group	II
Proper Shipping Name	CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 1L/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 classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2020

EPA Approval Code: Cleaning Products (Corrosive) - HSR0002526

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	250 L
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	100 L
Emergency Response Plan	100 L
Secondary Containment	100 L
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.
HSW	Health and Safety at Work.
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 2023 14th edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433:2020

5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

Marketing Chemicals Ltd has taken care in compiling this information. No liability is accepted directly or indirectly from its application as conditions of use are outside the Company's control. End users are obliged to conform to relevant Local Government regulations.

For General Information : Marketing Chemicals Ltd,

Phone: +64 (09) 634 3862 / +64 (0)27 4340990

Fax : +64 (09) 634 3864

Issue Date: 3 September 2024 Review Date: 3 September 2029