

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Sporekill**
Other means of Identification: Water Treatment Chemical
Product Use: The user should seek the advice of the county agricultural representative or a professional agricultural consultant.
Restriction of Use: Refer to Section 15

New Zealand Supplier: **Inta-Ag Ltd**
Address: 45 Kitchener Road
Pukekohe
Auckland, 2120

Telephone: +64 9 2370430

Emergency No: 0508673800
0800 764 766 (National Poison Centre)

Date of SDS Preparation: 27 March 2023

Section 2. Hazards Identification

This substance is hazardous according to the Hazardous Substances (Classification) Notice 2017 **EPA Approval No: Water Treatment Chemicals (Corrosive) – HSR002681**

Pictograms



Toxic/Allergic Corrosive Ecotoxic

Signal Word: **DANGER**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.1D (oral)	H302	Harmful if swallowed.	Acute Tox. 4
6.5B	H317	May cause an allergic skin reaction.	Skin Sens. 1
8.2B	H314	Causes severe skin burns and eye damage.	Skin Corr. 1B
8.3A	H318	Causes serious eye damage.	Eye Corr. 1
9.1B	H411	Toxic to aquatic life with long lasting effects.	Aquatic Chronic 2
9.3C	H433	Harmful to terrestrial vertebrates.	-

Prevention Code	Prevention Statement
P102	Keep out of reach of children.
P103	Read label before use.
P260	Do not breathe fumes, vapours or spray.

P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
P273	Avoid release to the environment.
P280	Wear protective clothing.

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.
P330	Rinse mouth.
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.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
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.
P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.

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
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Ingredients	Wt%	CAS NUMBER.
N,N-Didecyl-N,N-dimethyl ammonium chloride (DDAC)	10-15	7173-51-5
Additives and Water	To bal	

Section 4.	First Aid Measures
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Routes of Exposure:

If in Eyes	Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention.
If on Skin	Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation occurs: get medical advice/attention.
If Swallowed	If swallowed, DO NOT induces vomiting. Rinse mouth thoroughly with water. Immediately give 3-4 glasses of milk (if unavailable, give water). Never give anything to an unconscious person. Make every effort to prevent vomit from entering the lungs by careful placement of the patient. If vomiting does occur, keep on giving fluids. Get medical attention. Possible mucosal damage may contra-indicate the use of gastric lavage.
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:

- Ingestion:** Ingestion may result in ulceration and burns to the mouth/throat/nose, vomiting/nausea/abdominal pain, dizziness, and headache.
- Skin:** Prolonged skin contact, especially with the concentrate, will cause severe irritation/burning, rash, itching, and blistering.
- Eye:** Risk of serious damage to eyes. Exposure can lead to irritation/burning, eye pain, conjunctivitis, swelling of eye and swelling of eyelid.
- Inhalation:** Breathing in high concentrations of vapours or aerosols of this material may cause respiratory irritation/burning, irritation to mouth/throat/nose, coughing/choking, chest pain, disorientation, dizziness, shortness of breath.

Section 5. Fire Fighting Measures

Hazard Type	Non Flammable
Hazards from combustion products	If involved in a fire, it will emit oxides of carbon, oxides of nitrogen, ammonia and hydrocarbons.
Suitable Extinguishing media	Small: Dry chemical, CO ₂ , water spray or alcohol-resistant foam. Large: Apply water in large quantities (flooding). Keep unopened containers exposed to the fire cool with spraying water on it.
Precautions for firefighters and special protective clothing	Fire fighters should wear full protective gear including self-contained breathing apparatus, especially in confined spaces. Prevent fire water from entering drains or water bodies.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear adequate personal protective equipment as detailed in Section 8. Avoid breathing vapours or mist. Floors may become very slippery.

PREVENT spilled concentrated product from entering drains or sewer systems. Dike and bund area with sand or earth to prevent contamination of drains or sewers.

Simplest method of disposal involves dilution to low concentrations in order to allow the biocide to degrade naturally (only if permitted by regulatory authorities). At levels below 10 parts per million (active), no detrimental effects on functioning waste treatment systems have been noted.

Dispose of waste according to the applicable local and national regulations.

Section 7. Handling and Storage

Precautions for Handling:

- Keep out of reach of children.
- Read label before use.
- Do not breathe fumes, vapours or spray.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.

- Store locked, closed in original containers, in a dry, well ventilated area out of direct sunlight.
- Keep container tightly sealed and do not store with seed, fertilisers or foodstuffs.

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 2017 9TH EDITION.

Engineering Controls

Handle in well ventilated areas, generally natural ventilation is adequate. If mists or vapours are generated local exhaust ventilation may be required in confined spaces. Facilities should be equipped with an eyewash facility and a safety shower.

Personal Protection Equipment



Eyes	Wear chemical safety goggles and face shield when contact is possible.
Skin	Wear PVC/rubber gloves, washable hat and buttoned-up cotton overalls.
Respiratory	If inhalation of vapour/mist is likely to occur, wear an approved respirator mask, especially in case of insufficient ventilation.

Section 9 Physical and Chemical Properties

Appearance	Homogenous, clear, colourless, foaming liquid.
Odour	Slight bitter smell. Bitter taste.
Odour Threshold	Not available
pH	5-8
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	ASTM D93 = 92,0 °C (Pensky Martens Closed Cup)
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	~1 kg/l (0.90 - 1.02 kg/l) at 20 °C (IP 365)
Water Solubility	Freely soluble
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Viscosity	70,4 at 25 °C (Brookfield viscosity, speed 100, spindle 2)
Particle Characteristics	Not available
Volatility	Non-volatile matter, (% m/m) = 14,66

Surface Tension	36.1 Mn/m
Miscibility	Standard water, acetone and ethanol at 300C- no solid material separation; no separation into layers.
Foam Persistence	(200 ml/100 l) in 100 ml emulsion: Hard water 1 min = 104 ml; Hard water 5 min = 88 ml
Compatability	Not compatible with concentrated anionic compounds.
Corrosion(Metals)	NON-CORROSIVE TO METALS Aluminium, copper, carbon steel and brass = >0.08 mm/year. (ASTM G31-72)

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Excessive heat and fire.
Incompatible Materials	Avoid strong oxidising and strong reducing agents as well as anionic detergents.
Hazardous Decomposition Products	The substance decomposes on burning producing toxic fumes of nitrogen oxides and chloride.

Section 11 Toxicological Information

Acute Effects:

Swallowed	May be harmful if swallowed. Ingestion may result in ulceration and burns to the mouth/throat/nose, vomiting/nausea/abdominal pain, dizziness, and headache.
Dermal	Not applicable.
Inhalation	Breathing in high concentrations of vapours or aerosols of this material may cause respiratory irritation/burning, irritation to mouth/throat/nose, coughing/choking, chest pain, disorientation, dizziness, shortness of breath.
Eye	Causes serious eye damage. Exposure can lead to irritation/burning, eye pain, conjunctivitis, swelling of eye and swelling of eyelid.
Skin	Causes severe skin burns and eye damage. May cause an allergic skin reaction. Prolonged skin contact, especially with the concentrate, will cause severe irritation/burning, rash, itching, and blistering.

Acute Toxicity -

Chemical Name	LC50 (inhalation)	LD50 (oral)	LD50 (dermal)
Product	LC50 (Rat) = 0.25mg/l	LD50 (Rat) = >4000mg/kg	LD50(Rabbit) = >2000mg/kg
N,N-Didecyl-N,N-dimethyl ammonium chloride		84 mg/kg (rat)	

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. Ecotoxicological Information

HSNO Classes: 9.1B = Toxic to aquatic life with long lasting effects.
9.3C = Harmful to terrestrial vertebrates.

Ecotoxicity:

Aquatic Organisms Fish - Acute LC₅₀ (96hr) 1.16 mg/l (*Oncorhynchus mykiss*)
Fish - Chronic 21 day NOEC 0.032 mg/l (*Brachydanio rerio*)
Aquatic invertebrates - Acute LC₅₀ (96hr) 0.094 mg/l (*Daphnia magna*)
Aquatic invertebrates - Chronic 21 day NOEC 0.01 mg/l (*Daphnia magna*)
Algae EC₅₀ 0.026 mg/l (*Selenastrum capricornutum*)
Algae 48 hour NOAEC 0.014 mg/l (*Selenastrum capricornutum*)

Bees: Not toxic to bees.
Acute contact (product) LD₅₀ > 100 g a.i./bee (*Apis mellifera*)

Birds: Not hazardous to birds.
LC₅₀ Oral > 5620 ppm (bobwhite quail)
NOEC 1780 1780 ppm (bobwhite quail)

Persistence and degradability	This product is readily biodegradable.
Bioaccumulation	Bioaccumulation is not expected to be significant.
Mobility in Soil	No long-term influence on nitrogen or carbon transformation in soils.
Other adverse effects	Low potential for bio-concentration.

Section 13. Disposal Considerations

Disposal Method:

On site disposal of the concentrated product is not acceptable. Ideally, the product should be used for its intended purpose. If there is a need to dispose of the product, approach local authorities.

Invert empty container over mix or spray tank and allow draining for at least 30 seconds until flow has slowed to a drip. Triple rinse the empty container with clean water equal to a minimum of 30 % of the volume of the container. Add rinsing to the contents of the spray tank. Offer container for recycling or puncture and dispose of at authorised landfill. Do not use container for any other purpose.

DIP disposal : According to local legislative requirements

Precautions or methods to avoid: Do not allow to enter waterways.

Section 14 Transport Information

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

Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIROMENTALLY HAZARDOUS SUBSTANC, -

Air Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIROMENTALLY HAZARDOUS SUBSTANC, LIQUID, N.O.S.

Marine Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIROMENTALLY HAZARDOUS SUBSTANC, LIQUID, N.O.S.

Limited Quantities Statement:

If the product's individual container is below 5L/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 Hazardous Substances (Classification) Notice 2017

EPA Approval Code: Fertilisers (subsidiary) – HSR002571

HSNO Classification: 6.1D(oral), 6.5B, 8.2B, 8.3A, 9.1B, 9.3C

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity
Certified Handler	Not required
Location Certificate	250L (8.2B)
Tracking Trigger Quantities	Not required
Signage Trigger Quantities	250L (8.2B)
Emergency Response Plan	1000L (8.2B, 6.5B,9.1B)
Secondary Containment	1000L (8.2B, 6.5B,9.1B)
Restriction of Use	Only use for the intended purpose.

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. HSNO Approved Code of Practice: 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

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

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Please contact the New Zealand distributor, Hortigro, if further information is required.

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