

Safety Data Sheet



Hazardous Substance, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: Yates Moss & Algae Killer Lawn & House Treatment Hose-On

Synonyms:

Yates Moss & Algae Killer House & Lawn Treatment

Product Code

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Bar Code

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Recommended use: For the control and prevention of moss, algae, lichen and liverworts on lawns, roofs, cobblestones, tiles and other hard surfaces.

Supplier: Yates, a division of
DuluxGroup (New Zealand) Pty Ltd
ABN: 55 133 404 118 / Co. 2355191
Street Address: 150 Hutt Park Road
Lower Hutt
New Zealand
Telephone: 0800 693 297

Emergency telephone number: Australia – 1800 033 111 New Zealand – 0800 734 607

2. HAZARDS IDENTIFICATION

This material is hazardous according to health criteria of EPA New Zealand

Hazardous Substance - HSNO Approval Number HSR000822

**Signal Word**

Danger

HSNO Hazard Classification

- 6.1D Substances that are acutely toxic.
- 6.5A Substances that are respiratory sensitisers
- 6.5B Substances that are contact sensitisers
- 6.9B Substances that are harmful to human target organs or systems (repeated exposure)
- 8.2C Substances that are corrosive to dermal tissue
- 8.3A Substances that are corrosive to ocular tissue
- 9.1A Substances that are very ecotoxic in the aquatic environment
- 9.3B Substances that are ecotoxic to terrestrial vertebrates

Hazard Statement(s)

- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H314 Causes severe skin burns and eye damage
- H317 May cause an allergic skin reaction

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H332	Harmful if inhaled
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H432	Toxic to terrestrial vertebrates

Prevention Precautionary Statement(s)

P102	Keep out of reach of children
P103	Read label before use
P260	Do not breathe mist, vapours or spray
P264	Wash hands, face and all exposed skin thoroughly after handling
P270	Do not eat, drink or smoke when using this product
P271	Use only outdoors or in a well-ventilated area
P272	Contaminated work clothing should not be allowed out of the workplace
P273	Avoid release to the environment
P280	Wear protective clothing, gloves, eye/face protection and suitable respirator as required
P285	In case of inadequate ventilation wear respiratory protection

Response Precautionary Statement(s)

P101	If medical advice is needed, have product container or label at hand
P301+310	IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician
P331	Do NOT induce vomiting
P302+352	IF ON SKIN: Wash with soap and water
P303+361+353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
P363	Wash contaminated clothing before reuse
P332+313	If skin irritation occurs: Get medical advice/attention
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P304+341	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P312	Call a POISON CENTRE or doctor/physician if you feel unwell
P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing
P310	Immediately call a POISON CENTRE or doctor/physician
P391	Collect spillage

Storage Precautionary Statement(s)

P405	Store locked up
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Disposal Precautionary Statement(s)

P501	Dispose of contents/container in accordance with local, regional, national and international regulations
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DANGEROUS GOODS CLASSIFICATION

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

Class: 8 Corrosive

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3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO.	PROPORTION
Benzalkonium chloride	8001-54-5	500 g/L
Ingredients determined to be non-hazardous	-	Balance
		<hr/> 100%

4. FIRST AID MEASURES

If poisoning occurs, contact a doctor or Poisons Information Centre (Phone Australia 131 126, New Zealand 0800 764 766).

Inhalation: Remove victim from exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. If breathing laboured and patient cyanotic (blue), ensure airways are clear and have a qualified person give oxygen through a facemask. If breathing has stopped apply artificial respiration at once. In the event of cardiac arrest, apply external cardiac massage. Seek immediate medical advice.

Skin contact: For gross contamination, immediately drench with water and remove clothing. Continue to flush skin and hair with plenty of water (and soap if material is insoluble). For skin burns, cover with a clean, dry dressing until medical help is available. If blistering occurs, do NOT break blisters. If swelling, redness, blistering, or irritation occurs seek medical assistance.

Eye contact: Immediately irrigate with copious quantities of water for 15 minutes. Eyelids to be held open. Remove clothing if contaminated and wash skin. Urgently seek medical assistance. Transport to hospital or medical centre.

Ingestion: Immediately rinse mouth with water. If swallowed, do NOT induce vomiting. Give a glass of water to drink. Never give anything by the mouth to an unconscious patient. If vomiting occurs give further water. Get to a doctor or hospital quickly.

PPE for First Aiders: Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

Notes to physician: Treat symptomatically. Can cause corneal burns.

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5. FIRE-FIGHTING MEASURES

Hazchem Code: 2X

Suitable extinguishing media: If material is involved in a fire use water fog (or if unavailable fine water spray), foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Non-combustible material. Corrosive substance.

Fire fighting further advice: Not combustible, however following evaporation of aqueous component residual material can burn if ignited. On burning may emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILLS

Wear protective equipment to prevent skin and eye contamination. Wipe up with absorbent (clean rag or paper towels). Allow absorbent to dry before disposing with normal household garbage.

LARGE SPILLS

Clear area of all unprotected personnel. Prevent further leakage or spillage if safe to do so. Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contamination and the inhalation of vapours. Work up wind or increase ventilation. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers or drums for disposal. If contamination of crops or waterways has occurred advise emergency services or State Department of Agriculture.

Dangerous Goods – Initial Emergency Response Guide No: 37

7. HANDLING AND STORAGE

Handling: Avoid skin and eye contact and inhalation of vapour, mist or aerosols.

Storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Store away from foodstuffs. Keep containers closed when not in use - check regularly for leaks.

This material is classified as a Dangerous Good Class 8 Corrosive as per the criteria of the Australian Dangerous Goods Code and must be stored in accordance with the relevant regulations.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

National occupational exposure limits: No value assigned for this specific material by Safe Work Australia or Department of Labour New Zealand.

Biological Limit Values: As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

Engineering measures: Use only in well ventilated areas. Use with local exhaust ventilation or while wearing appropriate respirator. Keep containers closed when not in use.

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Personal protection equipment: OVERALLS, SAFETY SHOES, CHEMICAL GOGGLES, GLOVES, RESPIRATOR.

MANUFACTURING, PACKAGING AND TRANSPORT:

Wear overalls, chemical goggles and impervious gloves. Use with adequate ventilation. If inhalation risk exists wear organic vapour/particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Available information suggests that gloves made from nitrile rubber should be suitable for intermittent contact. However, due to variations in glove construction and local conditions, the user should make a final assessment. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

RECOMMENDATIONS FOR CONSUMER USE:

Wear safety glasses and gloves. Avoid inhaling vapour. Wash hands after use.

Hygiene measures: Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid skin and eye contact and inhalation of vapour, mist or aerosols. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour / Odour: Clear to straw-coloured liquid with an amine odour.

Solubility:	Soluble in water.
Specific Gravity (20 °C):	1.01
Relative Vapour Density (air=1):	>1
Vapour Pressure (20 °C):	N Av
Flash Point (°C):	N App
Flammability Limits (%):	N App
Autoignition Temperature (°C):	N App
Decomposition Point (°C):	N Av
Melting Point/Range (°C):	N Av
Boiling Point/Range (°C):	Approx. 100
pH:	7.0
Viscosity (20 °C):	N Av
Total VOC (g/Litre):	N Av

(Typical values only - consult specification sheet)

N Av = Not available

N App = Not applicable

10. STABILITY AND REACTIVITY

Reactivity: No reactivity hazards are known for the material.

Chemical stability: This material is thermally stable when stored and used as directed.

Hazardous reactions: No known hazardous reactions.

Conditions to avoid: Elevated temperatures and sources of ignition.

Incompatible materials: Oxidising agents.

Hazardous decomposition products: Oxides of carbon and nitrogen, smoke and other toxic fumes.

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11. TOXICOLOGICAL INFORMATION

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Acute Effects

Inhalation: Material may be an irritant to mucous membranes and respiratory tract. Inhalation of vapour can result in headaches, dizziness and possible nausea. A respiratory sensitiser. Can cause possible allergic reactions.

Skin contact: Contact with skin will result in severe irritation. Corrosive to skin - may cause skin burns. A skin sensitiser. Repeated or prolonged skin contact may lead to allergic contact dermatitis.

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, abdominal pain and chemical burns to the gastrointestinal tract.

Eye contact: A severe eye irritant. Corrosive to eyes: contact can cause corneal burns. Contamination of eyes can result in permanent injury.

Acute toxicity

Inhalation: This material has been classified as a Category 6.1D Hazard.
Acute toxicity estimate (based on ingredients): 10 - 20 mg/L

Skin contact: This material has been classified as a Category 6.1D Hazard.
Acute toxicity estimate (based on ingredients): 1,000 - 2,000 mg/Kg

For the active constituent;
BENZALKONIUM CHLORIDE
Dermal LD50 (rat): 1,420 mg/kg

Ingestion: This material has been classified as a Category 6.1D Hazard.
Acute toxicity estimate (based on ingredients): 300 - 2,000 mg/Kg

For the active constituent;
BENZALKONIUM CHLORIDE
Oral LD50 (mouse): 150 mg/kg

Corrosion/Irritancy: Eye: this material has been classified as a Category 8.3A Hazard (irreversible effects to eyes).

Skin: this material has been classified as a Category 8.2C Hazard (corrosive to skin).

Sensitisation: Inhalation: this material has been classified as a Category 6.5A Hazard (respiratory sensitiser).

Skin: this material has been classified as a Category 6.5B Hazard (skin sensitiser).

Aspiration hazard: This material has been classified as non-hazardous.

Specific target organ toxicity (single exposure): This material has been classified as non-hazardous.

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Chronic Toxicity

Mutagenicity: This material has been classified as non-hazardous.

Carcinogenicity: This material has been classified as non-hazardous.

Reproductive toxicity (including via lactation): This material has been classified as non-hazardous.

Specific target organ toxicity (repeat exposure): This material has been classified as a Category 6.9B Hazard. Exposure via the dermal route of exposure may result in effects on the blood.

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways.

Acute aquatic hazard: This material has been classified as a Category Acute 9.1A Hazard. Acute toxicity estimate (based on ingredients): <1 mg/L

*For the active constituent;
BENZALKONIUM CHLORIDE
96hr LC50 (Fathead minnow): 0.28 mg/L
48hr EC50 (Daphnia magna): 0.0059 mg/L
Very toxic to aquatic organisms.*

Long-term aquatic hazard: No information is available to complete an assessment.

Ecotoxicity: Toxic to terrestrial species.

Persistence and degradability: No information available.

Bioaccumulative potential: No information available.

Mobility: No information available.

13. DISPOSAL CONSIDERATIONS

Persons conducting disposal, recycling or reclamation activities should ensure that appropriate personal protection equipment is used, see "Section 8. Exposure Controls and Personal Protection" of this SDS.

If possible material and its container should be recycled. If material or container cannot be recycled, dispose in accordance with local, regional, national and international Regulations.

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14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the "Australian Code for the Transport of Dangerous Goods by Road & Rail" and the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN No: 1760
Dangerous Goods Class: 8
Packing Group: II
Hazchem Code: 2X
Emergency Response Guide No: 37

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (CONTAINS BENZALKONIUM CHLORIDE)

Segregation Dangerous Goods: Not to be loaded with explosives (Class 1), dangerous when wet substances (Class 4.3), oxidising agents (Class 5.1), organic peroxides (Class 5.2), radioactive substances (Class 7) or food and food packaging in any quantity, however exemptions may apply. Note that concentrated strong alkalis are incompatible with concentrated strong acids.

MARINE TRANSPORT

Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea.

This material is classified as a Marine Pollutant (P) according to the International Maritime Dangerous Goods Code.

UN No: 1760
Dangerous Goods Class: 8
Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (CONTAINS BENZALKONIUM CHLORIDE)

AIR TRANSPORT

Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air.

UN No: 1760
Dangerous Goods Class: 8
Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, N.O.S. (CONTAINS BENZALKONIUM CHLORIDE)

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15. REGULATORY INFORMATION

This material is not subject to the following international agreements:

Montreal Protocol (Ozone depleting substances)
The Stockholm Convention (Persistent Organic Pollutants)
The Rotterdam Convention (Prior Informed Consent)

This material is subject to the following international agreements:

Basel Convention (Hazardous Waste)

- Wastes from the production, formulation and use of biocides and phytopharmaceuticals
- International Convention for the Prevention of Pollution from Ships (MARPOL)
- Annex III - Harmful Substances carried in Packaged Form

This material/constituent(s) is covered by the following requirements:

- The Standard for the *Uniform Scheduling of Medicines and Poisons (SUSMP)* established under the *Therapeutic Goods Act (Commonwealth)*.
- All the constituents of this material are listed on the *Australian Inventory of Chemical Substances (AICS)*.
- The *Agricultural and Veterinary Chemicals Act (Commonwealth)* and/or applicable Commonwealth, State or Territory control-of-use legislation.

16. OTHER INFORMATION

Literary reference

This Safety Data Sheet has been prepared by Chemical Data Services Pty Ltd (chemdata.com.au) on behalf of its client.

Reason(s) For Issue: First Issue.

Safety Data Sheets are updated frequently. Please ensure that you have a current copy.

This SDS summarises at the date of issue our best knowledge of the health and safety hazard information of the product, and in particular how to safely handle and use the product in the workplace. Since DuluxGroup (Australia) Pty Ltd and DuluxGroup (New Zealand) Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company.

Our responsibility for product as sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request.