CHEMICAL HOUSE®

CHEMISTRY HOUSE PTY LTD

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"from our house to yours" "

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SAFETY DATA SHEET

Ref:DAIS DUCKSAWAY SDS Page 1 of 7

SECTION 1 - IDENTIFICATION OF THE MATERIAL AND SUPPLIER

GHS IDENTIFIER

PRODUCT (MATERIAL) NAME



DUCKS AWAY

OTHER NAMES Algaecide & duck deterrent for swimming pools.

PROPER SHIPPING NAME Alkyl dimethyl benzyl ammonium chloride

RECOMMENDED USE Swimming pool algaecide.

SUPPLIER NAME/ADDRESS CHEMISTRY HOUSE PTY LTD 9 Production Avenue Molendinar 4214 Queensland

TELEPHONE NO. +61-(0) 7-5594-0344 Facsimile: +61-(0)7-5594-0236

EMERGENCY PHONE NUMBER 000 Hours: 0800-1700 Monday-Friday

SECTION 2 HAZARDS IDENTIFICATION

HAZARD CLASSIFICATION OF SUBSTANCE

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code

(ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

Environmentally Hazardous Substances meeting the descriptions of UN 3077 or 3082 are not subject to the provisions of the Australian Code for the Transport of Dangerous Goods by Road and Rail when transported by road or rail in packagings, IBC's, or any

other receptacle not exceeding 500 kg(L).

This material is hazardous according to Safe Work Australia;

HAZARDOUS SUBSTANCE.

POISON SCHEDULE HAZARD CATEGORY

5 CAUTION

Acute toxicity, Category 4

Serious eye damage/eye irritation Category 1

Acute aquatic toxicity, Category 1 Chronic aquatic toxicity, Category 1

PICTOGRAMS







SIGNAL WORD

DANGER

HAZARD STATEMENTS

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects.

PRECAUTIONARY STATEMENTS

GENERAL P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P103 Read label before use

PREVENTION P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

RESPONSEP301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated

clothing. Rinse skin with water/shower.

P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable

for breathing. Immediately call a POISON CENTER/doctor.

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 P405 Store locked up.

DISPOSAL P501 Dispose of contents/container in accordance with local /regional/national

/international regulations.

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>MIXTURE</u>			
Chemical identity of ingredients	CAS Number(s)	Proportion of ingredients	GHS Hazard
	for ingredients		Classification
Quaternary ammonium compounds	85409-22-9	>=10%Conc<25%:	H302; H314; H400;
benzyl-C12-14-alkyldimethyl			H410
,chlorides			
Alcohols Ethoxylate	68131-39-5	<5%	H315
If the sum of ingredients is less than 10	00%, the material cons	ists of further ingredients determ	ined not to be hazardous or

If the sum of ingredients is less than 100%, the material consists of further ingredients determined not to be hazardous or below their cut-off limits as listed in HCIS.

SECTION 4 FIRST AID MEASURES

For advice, contact a Poisons Information Centre (Phone Australia 13 1126, New Zealand 03 4747000) or a doctor at once.

Ingestion: If swallowed, do NOT induce vomiting. Seek immediate medical advice.

Eye contact:

If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre, or a doctor, or for at least

15 minutes, and seek medical advice.

Skin contact:\ If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with

running water.

Inhalation: \ If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

Medical attention or special

treatment required

ADVICE TO DOCTOR. Treat symptomatically

SECTION 5 FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA Water spray jet, Foam, Carbon Dioxide (CO₂), Dry Chemical Powder.

SPECIFIC HAZARDS DURING In case of fires, hazardous combustion gases are formed:

FIREFIGHTING Carbon monoxide (CO)
Nitrogen oxides (NOx)

Hydrogen chloride (HCl)

SPECIAL PROTECTIVE PRECAUTIONS AND OR EQUIPMENT FOR FIRE FIGHTERS

On burning will emit toxic fumes, including those of oxides of carbon, nitrogen and hydrogen chloride. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of

combustion.

If safe to do so, remove containers from path of fire. Keep containers cool with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

EMERGENCY PROCEDURES Clear area of all unprotected personnel. If contamination of sewers or waterways has

occurred advise local emergency services.

PERSONAL PRECAUTIONS
/PROTECTIVE EQUIPMENT
/METHODS AND MATERIALS FOR
/METHODS AND MATERIALS FOR

prevent skin and eye contact and breathing in 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. After cleaning, flush away any residual traces with water.

SECTION 7 HANDLING AND STORAGE

CONTAINMENT AND CLEANING UP:

This material is a Scheduled Poison S5 and must be stored, maintained and used in accordance with the relevant regulations.

PRECAUTIONS FOR SAFE HANDLING Handle and open container with care. Avoid skin and eye contact and breathing in

vapour, mists and aerosols. Observe the general rules of industrial fire protection Wash hands before breaks and at the end of workday. Use protective skin cream before handling the product. Take off immediately all contaminated clothing and wash it before

reuse.

CONDITIONS FOR SAFE STORAGE Store in a cool, dry, well ventilated place.

Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS Not determined for product.

However, for some ingredients the Derived No Effect Limit (DNEL) according to Regulation

EC # 1907/2006 are shown below:

Substance CAS	End Use	Exposure Route	Potential health	Value DNEL
			Effects	
85409-22-9	General population	Inhalation	Long-term systemic	1.64 mg/m^3
Alkyldimethylbenzyl			effects	
ammoniumchloride				
	General population	Dermal /	Løng-term systemic	3.4 mg/kg bw/day
			effects	
1			1 1	

ENGINEERING CONTROLS Ventilation: No special ventilation requirements are hormally necessary for this product.

However, make sure that the work environment remains clean and that vapours and mists are

ninimised.

INDIVIDUAL PROTECTION The selection of PPE is dependent on a detailed risk assessment.

MEASURES, SUCH AS
PERSONAL PROTECTIVE
EQUIPMENT (PPE

The risk assessment should consider the work situation, the physical form of the chemical, the

handling methods, and environmental factors.

OVERALLS, SAFETY\SHOES, CHEMICAL GOGGLES, GLOVES.







Wear overalls, chemical goggles and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If determined by a risk assessment an inhalation risk exists, wear a suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Blue, clear, mobile fluid. Characteristic odour.

<u>Flammability:</u> Product is not flammable.

Boiling Point: 100°C
Flash Point: unknown
Vapour Pressure: unknown
Volatiles: 88+/-0.5%w/w
Vapour Density unknown
Flammability Limits
Specific Gravity: 1.02

Solubility in water completely miscible

pH as supplied 4.0-8.0 pH 1% Aqueous Solution 7.0

SECTION 10 STABILITY AND REACTIVITY

Chemical Reactivity Stable under normal conditions of use.
Chemical stability Stable under normal conditions of use.

Conditions to avoid Do store in heated areas- keep below 35°C for good shelf life.

Incompatible materials Oxidising agents (Class 5), or foodstuffs.

Hazardous decomposition products The product will decompose in a fire giving off toxic gases, being oxides of carbon

(CO_X), nitrogen (NO_X) and hydrogen chloride.

Hazardous reactions None under normal conditions of use.

SECTION 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:

SYMPTOMS OF EXPOSURE

Swallowed: Harmful liable to cause nausea and vomiting. May cause tissue damage to mouth and gullet.

Eye: IRRITANT. May cause injury and impairment of vision.

Skin: Irritant. May be severe with sensitive individuals or after repeated contact. Prolonged or

repeated exposure may lead to dermatitis. No specific data available on skin adsorption. Not normally considered an inhalation hazard. Aspiration (breathing in) of liquid, spray

Inhalation: Not normally considered an inhalation hazard. Aspiration (breathing in) of mist liable to cause severe irritation and damage to respiratory tract.

ACUTE

DELAYED Repeated or prolonged exposure may cause allergic contact dermatitis.

Acute toxicity: ATE _{MIX} >= 3900mg/kg	Expected to be harmful, Cat 4
Skin corrosion/irritation:	Expected to be an irritant. Cat 1
Serious eye damage/irritation:	Expected to be an irritant Cat 1
Respiratory or skin sensitisation:	Not expected to be a sensitiser.
Germ cell mutagenicity:	no data available
Carcinogenicity:	IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Reproductive toxicity:	no dața available
Specific Target Organ Toxicity (STOT) – single exposure:	no data available
Specific Target Organ Toxicity (STOT) – repeated exposure:	no data available
Aspiration hazard:	Not expected to be a hazard.

SECTION 12 ECOLOGICAL INFORMATION

ECOTOXICITY

This product, while biodegradable at high dilution is toxic to marine and aquatic organisms. Ensure all spills are contained and recovered into suitable drums.

ALL DATA CITED REFERS TO THE ACTIVE INGREDIENT CONTENT ONLY

		• • .
Acute	tax:	01111

Fish Method: OECD Test	LC ₅₀ (Danio rerio (zebra fish)): 1 - 10 mg/l
Guideline 203	Exposure time: 96 h
Aquatic invertebrate	EC ₅₀ (Daphnia magna (Water flea)): 0,0058 mg/l
Method: US-EPA FIFRA	Exposure time: 48 h
72-2	Remarks: The values mentioned are those of the active
	ingredient.
Algae	EC50 (Selenastrum capricornutum (green algae)): 0,049 mg/l;
Method: OECD Test	Exposure time: 72 h
Guideline 201	Remarks: The values mentioned are those of the active
	ingredient.
Microorganisms –	Data not available

Chronic toxicity:

Fish –	Data not available
Aquatic invertebrate –	NOEC: 0,025 mg/l
Method: OECD Test	Exposure time: 21 d
Guideline 211	End point: Reproduction rate
Algae –	Data not available
Microorganisms –	EC50: 17 mg/l
	Method: OECD Test Guideline 209

PERSISTENCE AND DEGRADABILITY Biodegradation: 35 - 70 %

Method: OECD Test Guideline 302B

Biodegradation: > 80 %

Method: OECD Test Guideline 301A

Remarks: Readily biodegradable, according to appropriate OECD test.

MOBILITY Remarks: not tested.

Distribution among environmental

compartments

Chemical Oxygen Demand (COD) 400 mg/gDissolved organic carbon (DOC) 100 mg/g

ENVIRONMENTAL FATE (EXPOSURE)

BIOACCUMULATIVE POTENTIAL Remarks: not tested.

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL METHODS AND CONTAINERS Do not dump large quantities into biological treatment ponds\Laboratory data

indicates that if quaternary ammonium compounds are discharged steadily at low concentrations (< 15 mg/litre), it may be expected that these salts can be degraded in sewage treatment plants by acclimatized organisms.

Before discharging to sewer, contact local sewerage authority. Contact local Waste Disposal Authority regarding all major disposal problems. Rinse empty containers with clear water only, drain and re-seal before disposal or return.

SECTION 14 TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT

Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

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IBC's, or any other receptacle not exceeding 500 kg(L)



UN NUMBER

TRANSPORT HAZARD CLASS /S

& SUBSIDIARY RISK PACKING GROUP

UN PROPER SHIPPING NAME

TECHNICAL NAME

HAZCHEM OR

IERG NUMBER

EMERGENCY ACTION CODE

3082

9 Miscellaneous Dangerous Goods

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ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Alkyldimethylbenzylammoniumchloride

47

MARINE TRANSPORT

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



UN NUMBER 3082

9 MISCELLANEOUS DANGEROUS GOODS **TRANSPORT HAZARD CLASS:**

PACKING GROUP

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. PROPER SHIPPING NAME

TECHNICAL NAME Alkyldimethylbenzylammoniumchloride

•2Z HAZCHEM OR

EMERGENCY ACTION CODE

SPECIAL PRECAUTIONS FOR USER Not applicable

Chemistry House Pty Ltd ACN610 881 153 9 Production Ave Molendinar Qld 4214 Australia Review Date: 11 September 2018 Print Date: 24 September, 2019

IMDG EMS FIRE: F-A **IMDG EMS SPILL:** S-F

AIR TRANSPORT

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



UN NUMBER 3082

TRANSPORT HAZARD CLASS /S 9 Miscellaneous Dangerous Goods

& SUBSIDIARY RISK

PACKING GROUP III

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. UN PROPER SHIPPING NAME

TECHNICAL NAME Alkyldimethylbenzylammoniumchloride

HAZCHEM OR

EMERGENCY ACTION CODE

Special marking provision: environmentally hazardous **ENVIRONMENTAL HAZARDS:**

Shipment permitted

SECTION 15 REGULATORY INFORMATION

CLASSIFICATION: This material is hazardous according to Safe Work Australia;

HAZARDOUS SUBSTANCE.

CLASSIFICATION OF THE SUBSTANCE OR Acute toxicity, Category 4

MIXTURE: Serious eye damage/eye irritation\ Category 1

Acute aquatic toxicity, Category 1 Chronic aquatic toxicity, Category 1

H302 Harmful if swallowed. **HAZARD STATEMENT(S):**

H314 Causes severe skin burns and eye damage.

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long lasting effects

POISONS SCHEDULE (SUSMP): 5 CAUTION

All ingredients are on the Australian Inventory of Chemical Substances **AICS**

Additional information Additional national and/or international regulatory information.

SECTION 16 OTHER INFORMATION

CONTACT PERSON/POINT FOR EMERGENCIES ONLY CONTACT : Australia : 000 POISONS INFORMATION CENTRE 131126 : Australia

: New Zealand 0800 764 766

Date of preparation or last revision of the SDS 11 September 2018 Prepared by SDS Manager

Additional information

Key/legend to abbreviations and acronyms used in the SDS.

Australian Code for the Transport of Dangerous Goods by Road and Rail ADG

ACGIH American Conference of Governmental Industrial Hygienists

ASCC Australian Safety and Compensation Council

ATE Acute Toxicity Estimates

BEI® Biological exposure indices (BEI) are values used for guidance to assess biological monitoring results. With respect

to chemical exposure, biological monitoring is the measurement of the concentration of a chemical marker in a

human biological media that indicates exposure. They are not developed for use as legal standards.

Carcinogen Category Established human carcinogen Number Probably human carcinogen

Substances suspected of having carcinogenic potential

Code AICS Australian Inventory of Chemical Substances Chemical Abstracts Service Registry Number CAS number **EPG** Emergency Procedure Guide (superseded by IERG) Hazchem Code Emergency action code of numbers and letters that provide information to emergency services especially

firefighters

HCIS The Hazardous Chemical Information System (HCIS) is a database of information on chemicals that have been

classified in accordance with the Globally Harmonized System of Classification and Labelling of Chemicals

(GHS).

HCIS replaces the previous Hazardous Substance Information System (HSIS).

HSIS is a database of information on substances classified in accordance with Australia's previous hazardous

substance classification system, the Approved Criteria for Classifying Hazardous Substances

[NOHSC:1008(2004)].

IARC International Agency for Research on Cancer IATA International Air Transport Association

IERG HB 76-2004 Dangerous goods - Initial Emergency Response Guide

IMDG International Maritime Dangerous Goods. A uniform code for transport of dangerous goods at sea.

LEL lower flammable (explosive) limits in air;

LD50 Lethal Dose sufficient to kill 50% of test population

NIOSH National Institute for Occupational Safety and Health The United States federal agency responsible for conducting

research and making recommendations for the prevention of work-related injury and illness.

NOAEL No Observed Adverse Effect Level
NOEL No Observable Effect Level

NOHSC National Occupational Health and Safety Commission

NTP National Toxicology Program (USA)

PEL Permissible Exposure Limit

RTECS Registry of Toxic Effects of Chemical Substances (Symyx Technologies')

TCLO Toxic Concentration Low

TDLO Toxic Dose Low: lowest dosage per unit of bodyweight (typically stated in milligrams per kilogram) of a substance

known to have produced signs of toxicity in a particular animal species.

TLV Threshold Limit Value (ACGIH): The time weighted average used to describe exposure which is harmless to most

of the population when exposed 8 hours per day, 40 hours per week.

TWA (Time Weighted Average): The average airborne concentration of a particular substance when calculated over a

normal eight-hour working day, for a five-day week.

These exposure standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity. Independent statutory agency with primary responsibility to improve occupational health and safety and workers'

compensation arrangements across Australia.

STEL (Short Term Exposure Limit); The average airborne concentration over a 1/5 minute period which should not be

exceeded at any time during a normal eight-hour workday.

SUSDP Standard for the Uniform Scheduling of Drugs & Poisons
SUSMP Standard for the Uniform Scheduling of Medicines & Poisons

UEL upper flammable (explosive) limits in air;

UN Number United Nations Number

VOC Volatile Organic Content - defined as: 'any chemical compound based on carbon chains or rings with a vapour

pressure greater than 0.1mm of mercury (Hg) or 0.0135Kpa at 25°C. This definition excludes reactive diluents, which are designed to be chemically bound into the cured film. It also includes all constituents >0.5% by volume of

formulation, which are organic compounds with a boiling point < 250°C.'

Literature references.

SAFEWORK

Sources for data. Safety Data Sheets from Suppliers

Hazardous Chemical Information System (HCIS) - ASCC Australia (on-line) GHS (Globally Harmonised System of Substance Classification & Labelling)

REACH (European Chemical Substance Information System)

ADG Code Ed 7.4 SUSMP Nº 21

DISCLAIMER:

This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since CHEMISTRY HOUSE Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material. If clarification or further information is needed, the user should contact CHEMISTRY HOUSE Pty Ltd at the contact details on page 1. CHEMISTRY HOUSE Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request. CHEMISTRY HOUSE Pty Ltd however makes no warranty whatsoever, expressed, implied or of merchantability regarding the accuracy of such data or the results to be obtained from the use thereof and assumes no responsibility for injury to buyer or third persons or for any damage to property, Buyer assumes all risks.