SAFETY DATA SHEET

Revision date: 09-Apr-2024



Revision Number 2

Section 1: Identification			
Product identifier			
Product Name	DC Biogard-130		
Product Code(s)	00000053739		
Other means of identification			
UN number or ID number	1719		
Recommended use of the chemical	and restrictions on use		
Recommended use	Algaecide for Process Water.		
Uses advised against	No information available.		
Details of manufacturer or importer			
Supplier Ixom Operations Pty Ltd ABN: 51 600 546 512 Level 8, 1 Nicholson Street Melbourne 3000 Australia Telephone Number: +61 3 9906 3000			
Emergency telephone number			
Emergency telephone number	1 800 033 111 (ALL HOURS)		
Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.			
Section 2: Hazard identification	ation		
Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.			
GHS Classification Skin corrosion/irritation		Category 1 Sub-category B	
Serious eye damage/eye irritation		Category 1	
Acute aquatic toxicity		Category 1	
Chronic aquatic toxicity		Category 1	
Label elements Corrosion Environment			



Signal word DANGER

Hazard statements

H314 - Causes severe skin burns and eye damage H410 - Very toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/clothing and eye/face protection. Avoid release to the environment. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician. IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician. Wash contaminated clothing before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Collect spillage. **Precautionary Statements - Storage** Store locked up. **Precautionary Statements - Disposal** Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Other hazards which do not result in classification

May be harmful if swallowed.

Section 3: Composition and information on ingredients

Chemical name	CAS No.	Weight-%
(C12-C16) Alkyl dimethyl benzyl ammonium chloride	68424-85-1	10-<30%
Quaternary ammonium compound	-	<10%
Non hazardous component(s)	-	to 100%

Section 4: First aid measures

Description of first aid measures

General advice	For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New Zealand 0800 764 766) or a doctor. Show this safety data sheet to the doctor in attendance.
Inhalation	Remove to fresh air. (Call a physician if symptoms occur).
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin

	with water/shower. Immediately call a POISON CENTER or doctor/physician.		
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get immediate medical attention.		
Most important symptoms and effects, both acute and delayed			
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning.		
Effects of Exposure	No information available.		
Indication of any immediate medical attention and special treatment needed			
Note to physicians	Treat symptomatically. Can cause corneal burns.		
Section 5: Firefighting measures			

Suitable Extinguishing Media		
Suitable extinguishing media	Dry chemical, CO2, water spray or regular foam.	
Unsuitable extinguishing media	No information available.	
Specific hazards arising from the c	hemical	
Specific hazards arising from the chemical	Corrosive hazard. Wear protective gloves/clothing and eye/face protection. Environmentally hazardous. Non-combustible.	
Special protective actions for fire-fighters		
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	
Hazchem code	2R	
Section 6: Accidental release measures		
Personal precautions, protective equipment and emergency procedures		
Personal precautions	Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. Ensure adequate ventilation. Evacuate personnel to safe areas. Stop leak if you can do it without risk. Do not touch or walk through spilled material. Use personal protective equipment as required. Wash thoroughly after handling.	

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so.
Methods for cleaning up	Use a non-combustible material like vermiculite, sand or earth to soak up the product and

place into a container for later disposal.

Section 7: Handling and storage

Precautions for safe handling

Advice on safe handling	Avoid contact with skin, eyes or clothing. Do not breathe vapor or mist. KEEP OUT OF REACH OF CHILDREN AND PETS. Use personal protection equipment. Wash thoroughly after handling.		
Conditions for safe storage, including any incompatibilities			
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store away from foodstuffs. Keep container closed when not in use.		
	This material is a Scheduled Poison and must be stored, maintained and used in accordance with the relevant regulations.		
Incompatible materials	Strong acids.		

Section 8: Exposure controls and personal protection

Control parameters

Exposure Limits

No value assigned for this specific material by Safe Work Australia.

Appropriate engineering controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



Thermal hazards

No information available.

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state Appearance Color Odor Odor threshold	Liquid No information available Colourless to Pale Straw Not specified No information available	
Property	Values	Remarks • Method
pH	No data available	None known
pH (as aqueous solution)	No data available	None known
Melting point / freezing point	No data available	None known
Boiling point / boiling range	No data available	None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	1.015	None known
Water solubility	Miscible in water	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known

Other information

Section 10: Stability and reactivity

Reactivity

Reactivity

No information available.

Chemical stability

Stability

Stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

Explosion data

Sensitivity to mechanical impact None. Sensitivity to static discharge None.

Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

Conditions to avoid

Conditions to avoid Do not contaminate food or feed stuffs. Contact with foodstuffs.

Incompatible materials

Incompatible materials Strong acids.

Hazardous decomposition products

Hazardous decomposition products Carbon oxides. Nitrogen oxides.

Section 11: Toxicological information

Information on likely routes of exposure

Product Information	No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:
Inhalation	May cause irritation.
Eye contact	Causes serious eye damage.
Skin contact	Causes severe burns.
Ingestion	Can burn mouth, throat, and stomach.
Symptoms	Irritation/Corrosion. May cause redness and tearing of the eyes. Erythema (skin redness). Burning.

Acute toxicity .

Numerical measures of toxicity - Product Information No information available

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
(C12-C16) Alkyl dimethyl benzyl	= 426 mg/kg (Rat)	-	-
ammonium chloride			

See section 16 for terms and abbreviations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation	Causes severe burns. Classification is based on mixture calculation methods based on component data.
Serious eye damage/eye irritation	Causes serious eye damage. Classification is based on mixture calculation methods based on component data.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.

Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.

Section 12: Ecological information					
Ecotoxicity					
Aquatic ecotoxicity	Keep out of waterways. Very toxic to aquatic life with long lasting effects.				
Townstrial contouisity	There is no data for this product				
Terrestrial ecotoxicity	There is no data for this product.				
Persistence and degradability					
Persistence and degradability	No information available.				
Bioaccumulative potential					
Bioaccumulation	There is no data for this product.				
Component Information					
	I name Partition coefficient				
Chemica					
Chemica (C12-C16) Alkyl dimethyl bo					
Chemica (C12-C16) Alkyl dimethyl bo Mobility	enzyl ammonium chloride 2.75				
Chemica (C12-C16) Alkyl dimethyl bo Mobility Mobility	enzyl ammonium chloride 2.75				
Chemica (C12-C16) Alkyl dimethyl bo Mobility Mobility Other adverse effects	enzyl ammonium chloride 2.75 No information available. No information available.				
Chemica (C12-C16) Alkyl dimethyl bo Mobility Mobility Other adverse effects Other adverse effects	enzyl ammonium chloride 2.75 No information available. No information available.				
Chemica (C12-C16) Alkyl dimethyl be Mobility Other adverse effects Other adverse effects Section 13: Disposal cons	enzyl ammonium chloride 2.75 No information available. No information available.				

See section 8 for more information

Section 14: Transport information

ADG	Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.			
UN number or ID number Proper shipping name Transport hazard class(es) Packing group Hazchem code	1719 CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE) 8 II 2R			
IATA	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 UN proper shipping name Transport hazard class(es) Packing group	1719 CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE) 8 II			
IMDG	Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.			
UN number UN proper shipping name Transport hazard class(es) Packing group IMDG EMS Fire IMDG EMS Spill Marine pollutant	1719 CAUSTIC ALKALI LIQUID, N.O.S. (CONTAINS ALKYLDIMETHYLBENZYL AMMONIUM CHLORIDE) 8 II F-A S-B P			

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Section 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations

<u>Australia</u>

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS). Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP) **Poison Schedule Number** 6

Australian Industrial Chemicals Introduction Scheme (AICIS)

Contact supplier for inventory compliance status

	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
(C12-C16) Alkyl dimethyl benzyl ammonium chloride - 68424-85-1	Present	-

Illicit Drug Precursors/Reagents

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

International Inventories

AIIC	All the constituents of this material are listed on the Australian Inventory of Industrial
	Chemicals.
NZIOC	Contact supplier for inventory compliance status.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.

Legend:

AIIC- Australian Inventory of Industrial Chemicals

NZIOC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

Section 16: Other information			
Reason(s) For Issue:	5 Yearly Revised Primary SDS		
Prepared By	This Safety Data Sheet has been prepared by Ixom Operations Pty Ltd (Toxicology and SDS Services).		
Revision date:	09-Apr-2024		
Revision Note:			

The symbol (*) in the margin of this SDS indicates that this line has been revised.

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend

SVHC: Substances of Very High Concern for Authorization: PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances STOT: Specific Target Organ Toxicity ATE: Acute Toxicity Estimate LC50: 50% Lethal Concentration LD50: 50% Lethal Dose

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
С	Carcinogen		

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR) U.S. Environmental Protection Agency ChemView Database European Food Safety Authority (EFSA) Environmental Protection Agency Acute Exposure Guideline Level(s) (AEGL(s)) U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act U.S. Environmental Protection Agency High Production Volume Chemicals Food Research Journal Hazardous Substance Database International Uniform Chemical Information Database (IUCLID) National Institute of Technology and Evaluation (NITE) Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS) Australian Industrial Chemicals Introduction Scheme (AICIS) NIOSH (National Institute for Occupational Safety and Health) National Library of Medicine's ChemID Plus (NLM CIP) National Library of Medicine's PubMed database (NLM PUBMED) U.S. National Toxicology Program (NTP) New Zealand's Chemical Classification and Information Database (CCID) Organization for Economic Co-operation and Development Environment, Health, and Safety Publications Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

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 Ixom Operations 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 their Ixom representative or Ixom Operations Pty Ltd at the contact details on page 1.

Ixom Operations 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.

End of Safety Data Sheet