Pond Clean - Large
Safety Data Sheet

Issue Date: 12/07/2017

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product Name: Pond Clean - Large

Bacterial Cultures for Livestock Manure Pond Treatment

Synonyms: Sodium Percarbonate, Lactose Monohydrate, Sodium Carbonate, Sodium Bicarbonate, Citric Acid, Sodium Chloride (<1%). Carbonic acid disodium salt, compd. with hydrogen peroxide (H2O2) (2:3); Carbonic acid, disodium salt, compound with hydrogen peroxide (H2O2) (2:3); Disodium carbonate, compound with hydrogen peroxide (2:3); Sodium Carbonate Peroxide; Sodium Carbonate Peroxyhydrate; SPC

Common uses: Aerobic bacterial pre-treatment for use in Grease traps and Interceptors, Sewage Lift Stations, Sewer lines, WWTF's, POTW systems to reduce or eliminate odors (e.g. H2S, NH4, VFA's), prevent corrosive acid development and reduce FOG related backups and damage. Sodium Percarbonate dissolves into water rapidly to release oxygen and provides powerful cleaning, bleaching, stain removal and deodorizing capabilities. As a kind of new high effective bleaching raw material for detergent, Sodium Percarbonate also is one disinfecting agent.

Supplied by:

Supplier: Septic Science

Street Address: PO Box 5034
Eagleby Qld 4207

Telephone: 1300 991 918

Emergency Telephone number: Poisons Information Centre 13 11 26

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2. Composition Information

CHEMICAL NAME	CAS #	TSCA	TSCA 8 (d)	SARA 302	SARA 313	%
Sodium Per carbonate	**15660-89-4**	**YES**	**NO**	**NO**	**NO**	**50%**
Non-Pathogenic Proprietary Bacteria Blend	**N/A**	**YES**	**NO**	**NO**	**NO**	**50%**

Not classified as hazardous *according to the criteria of Safe Work Australia.*

Not classified as dangerous goods *according to the ADG Code.*

Chemical Entity	Formula	CAS Number	Proportion
Disodium carbonate, compound with hydrogen peroxide (2:3)	No Data Available	15630-89-4	88 %
Sodium Carbonate	No Data Available	497-19-8	8.67 %
Sodium Chloride	No Data Available	7647-14-5	2.19 %

3. Hazards identification.

Poisons Schedule (Aust)		6	
Hazard Classification		Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)	
Hazard Categories		Acute Toxicity (Oral) - Category 4 Serious Eye Damage/Irritation - Category 1 Oxidising Solids - Category 2	
Pictograms			
Signal Word		Danger	
Hazard Statements		**H272**	May intensify fire; oxidizer.
		H302	Harmful if swallowed.
		H318	Causes serious eye damage.
Precautionary Statements	Prevention	**P210**	Keep away from heat/sparks/open flames/hot surfaces. No smoking. Take
		P221	any precaution to avoid mixing with combustibles.
		P280	Wear protective gloves/protective clothing/eye protection/face protection.
	Response	**P305 + P351 + P338**	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 CENTER or doctor/physician.
	Disposal	**P501**	Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

HSNO Classifications	Physical Hazards	**5.1.1B**	Oxidising substances that are liquids or solids: medium hazard
	Health Hazards	**6.1D**	Substances that are acutely toxic - Harmful
		6.4A	Substances that are irritating to the eye
	Environmental Hazards	**9.1D**	Substances that are slightly harmful to the aquatic environment or are otherwise designed for biocidal action
		9.3C	Substances that are harmful to terrestrial vertebrates

4. First Aid measures.

Medical attention is required in case of exposure by inhalation, contact with skin or eyes, or if swallowed.

Exposure Route Inhalation

Description of necessary measures according to routes of exposure

Swallowed	If the subject is completely conscious, rinse mouth and administer fresh water. Don't induce vomiting. If the subject is unconscious, loosen collar and tight clothing, lay the victim on his/her left side, and give nothing by mouth. Keep warm with blanket. Don't induce vomiting.
Eye	Remove contact lenses. Flush eyes immediately with large quantities of running water, while keeping eyelids wide open (at least for 15-20 minutes). Get medical attention immediately.
Skin	Remove contaminated clothing, shoes, etc. immediately. Wash the affected skin with soap or mild detergent and large quantities of running water until no evidence of chemical remains. Get medical attention in case of persistent pain or redness.
Inhaled	Remove the subject from exposure immediately and perform artificial respiration, if needed. Get medical attention in case of respiratory symptoms.
Advice to Doctor	Treat symptomatically based on judgement of doctor and individual reactions of patient. - Give artificial respiration if victim is not breathing. - Administer oxygen if breathing is difficult. - Remove and isolate contaminated clothing and shoes. - Contaminated clothing may be a fire risk when dry. - Keep victim warm and quiet. - Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Medical Conditions Aggravated by Exposure	Persons with pre-existing skin, eye, or respiratory disease may be at increased risk from the irritant or allergic properties of this material.

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5. Fire Fighting measures.

General Measures	Intervention only by capable personnel who are trained and aware of the hazards of the product. Evacuate all nonessential personnel. If safe to do so, remove unaffected product to a safe area.
Flammability Conditions	Product is an Oxidizing Solid. Oxygen released on exothermic decomposition may support combustion.
Extinguishing Media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Fire and Explosion Hazard	Oxidising material. Contact with combustible materials my cause fire. It may decompose explosively when heated or involved in a fire. May explode from heat or contamination. Containers may explode when heated. Run off may create fire or explosion hazard. Can be released in case of fire: Carbon monoxide and carbon dioxide, Sodium oxide.
Hazardous Products of Combustion	Fire may produce irritating, corrosive and/or toxic gases. Decomposition releases steam/heat.
Special Fire Fighting Instructions	Do NOT allow fire fighting water to reach waterways, drains or sewers. Store fire fighting water for treatment. Dam fire control water for later disposal.
Personal Protective Equipment	Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves) or chemical splash suit.
Flash Point	No Data Available
Lower Explosion Limit	No Data Available
Upper Explosion Limit	No Data Available
Auto Ignition Temperature	No Data Available
Hazchem Code	1Y

6. Accidental Release measures.

General Response Procedure	Avoid materials and products which are incompatible with the product(see section 10). Avoid direct contact of the product with water. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Clean Up Procedures	Collect the product with suitable means, shovel or sweep, avoiding dust formation. All receiving equipment should be clean, dry, vented, labelled and made of material is compatible with the product.Do NOT return spilled or contaminated material to inventory. - Small spill : With clean shovel place material into clean, dry container and cover loosely; move containers from spil area. - Large spill: Dike far ahead of liquid spill for later disposal. Following product recovery, flush area with water
Containment	Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.
Decontamination	Clean the area with large quantities of water. For disposal methods, refer to section 13.
Environmental Precautionary Measures	Ventilate for proper method. Make an embankment for further processing. Prevent entry into waterways, sewers, basements or confined areas. If product does enter a waterway, advise the Environmental Protection Authority or your local Waste Management.
Evacuation Criteria	Evacuate all unnecessary personnel.
Personal Precautionary Measures	Do NOT touch damaged containers or spilled material unless wearing appropriate protective clothing as listed in section 8.

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7. Handling & Storage.

Handling	Clean and dry process piping and equipment before using the product. Never return spillage to its original package or for reuse. Keep away from incompatible products. Do not use vacuum cleaner for cleaning up. Avoid contact and avoid breathing the material. Emergency showers and eye wash should be readily accessible. Remove all sources of ignition. Containers and equipment used to handle the product should be used exclusively for that product. Avoid any contact with water or humidity. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition -No smoking. Keep away from combustible material.
Storage	Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in section 10. Protect from direct sunlight. Keep away from heat sources. Keep away from reactive products. Store in vented containers. This product has a UN classification of 3378 and a Dangerous Goods Class 5.1 (Oxidiser) according to The Australian Code for the Transport of Dangerous Goods By Road and Rail.
Container	Do not leave container open. Avoid formation of dust and aerosols. Container type/packaging must comply with all applicable local legislation. Store in original packaging as approved by manufacturer.

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8. Exposure Controls/personal protection.

General	No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified is 10mg/m3 (for inspirable dust) and 3mg/m3 (for respirable dust).
Exposure Limits	No Data Available
Biological Limits	No information available on biological limit values for this product.

Engineering Measures	A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Provide natural or explosion-proof ventilation adequate to ensure concentrations are kept below exposure limits. Check legal suitability of exposure level.
Personal Protection Equipment	RESPIRATOR: Use only respiratory protection that conforms to international/national standards - Use breathing masks with dust filter P2 (AS1715/1716). EYES: Use tightly fitting, chemical resistant safety goggles (AS1336/1337). HANDS: Use suitable gloves of PVC, neoprene or natural rubber having a penetration time of 4-8 hours - Do not leather or cotton gloves when handling a wet product (AS2161). CLOTHING: For brief contact, few precautions other than clean body-covering clothing should be needed. When prolonged or frequently repeated contact could occur, use protective, full body clothing, such as PVC or rubber, impervious to this material and safety footwear (AS3765/2210).
Special Hazards Precaustions	Consult a health and safety expert for the selection of personal protective equipment suitable for the working conditions.
Work Hygienic Practices	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

9. Physical & Chemical Properties.

Physical State	Solid
Appearance	Granular Solid,
Odour	Odourless
Colour	White or colour
pH	10.0 + 1.0
Vapour Pressure	<10-3 Pa (@ 25 °C)
Relative Vapour Density	No Data Available
Boiling Point	No Data Available
Melting Point	No Data Available
Freezing Point	No Data Available
Solubility	140g/L 24°C
Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	0.80-1.0 g/cm3
Corrosion Rate	No Data Available
Decomposition Temperature	Self-accelerating decomposition with oxygen release starting from 50 °C
Density	2.01 - 2.16 Relative
Specific Heat	No Data Available
Molecular Weight	314.06 g/mol
Net Propellant Weight	No Data Available
Octanol Water Coefficient	Not applicable. Sodium percarbonate is a simple inorganic salt.
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Concentration	No Data Available
Vapour Temperature	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available

Additional Characteristics	Oxidising properties: Oxidising solid of class 5.1 (UN Recommendations)
Potential for Dust Explosion	No Data Available
Fast or Intensely Burning Characteristics	No Data Available
Flame Propagation or Burning Rate of Solid Materials	No Data Available
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No Data Available
Properties That May Initiate or Contribute to Fire Intensity	No Data Available
Reactions That Release Gases or Vapours	No Data Available
Release of Invisible Flammable Vapours and Gases	No Data Available

10. Stability & Reactivity.

General Information	Reactivity: Oxidising agents, actual reactivity varies greatly with the identity of the organic compound.
Chemical Stability	Stable under normal temperature conditions and recommended use.
Conditions to Avoid	Avoid moisture. Avoid temperatures above 60 °C, direct sunlight and contact with sources of heat.
Materials to Avoid	Water, Acids, Bases, Salts of heavy metals, Reducing agents, Organic materials, Flammable substances. The substance can react dangerously with reducing agents, flammable substances.
Hazardous Decomposition Products	Can be released in case of fire: Carbon monoxide and carbon dioxide, Sodium oxide.
Hazardous Polymerisation	No Data Available

11. Toxicological Information.

General Information

Oral route LD50 Rat (combined sexes): 1034 mg/Kg (OECD SIDS)
Dermal route LDLo Rabbit: >2000 mg/Kg (OECD SIDS)
Inhalation LC0, 1 hour, Rat: >4.58 mg/L/4h (OECD SIDS)

General: Irritating to mucous membrane, eyes and skin.

Irritation:
Eyes, severe damage: Rabbit
Skin, slightly irritating: Rabbit

Sensitization:
No sensitization was noted when administered as a 75% w/v mixture during induction and as a 25% w/v mixture at challenge
Comments: Toxic effect linked with irritant properties

	(a) Acute toxicity: It can be concluded that the existing animal data on acute toxicity show that sodium percarbon exhibits local irritation effects in the gastrointestinal and respiratory tracts and on the skin. Systemic effects are not to be expected. Sodium percarbonate should be classified for acute oral toxicity, Category 4 based on the criteria of the CLP Regulation (EC) No 1272/2008. (b) Skin corrosion/irritation: A human patch test performed with sodium percarbonate (York et a 1996) and a valid and reliable skin irritation test performed with rabbits Glaza 1990c) shows that sodium percarbonate is not irritating to the skin. (c) Serious eye damage/irritation: In test (BASF test) on rabbit eye corrosion, eye corrosion was observ (d) Respiratory or skin sensitization: A valid GLP guideline study was conducted with guinea pigs in which sod percarbonate was not a skin sensitizer. (e) Germ cell mutagenicity: Data on the mutagenicity of sodium percarbonate are not available but it is likely that test results for sodium percarbonate will be similar to those of hydrogen peroxide due to the release of hydrogen peroxide in aqueous media. The available studies on hydrogen peroxide, most of them, in particular the in vivo studies, were performed according to OECD guidelines and GLP, are not in support of significant genotoxicity/mutagenicity under in vivo conditions. Therefore sodium percarbonate is also unlikely to have any in vivo genotoxic potential. (f) Carcinogenicity: Carcinogenicity studies with animals and sodium percarbonate are not availab (g) Reproductive toxicity: In conclusion, the available information supports the view that sodium percarbonate and dissociation products hydrogen peroxide and sodium carbonate do not act as reproductive toxicants or may reach the developing foetus under the conditions of human exposure. It can thus be concluded that the substances should not be considered as reproductive or developmental toxicants. (h) STOT-single exposure: The respiratory irritation can be explained by the elevated particle concentration in breathing air and the formation of hydrogen peroxide and sodium carbonate from the dissociation of sodium percarbonate in the upper respiratory tract. The RD50 was approximately 700 mg/m3. (i) STOT-repeated exposure: As it is expected that repeated dose toxicity of sodium percarbonate will mainly mediated by hydrogen peroxide, no observed adverse effect levels can be defined on the basis of its hydrogen peroxide content. Based on the 90-day drinking water study according to OECD guidelines and GLP with hydrogen peroxide and catalase deficient mice, the predicted NOAEL of sodium percarbonate would be 308 ppm (81 to 115 mg/kg bw/day for males and females, respectively) (j) Aspiration hazard: Not releva
EyeIrritant	Severe eye irritation, watering and redness, can cause burns to the eye. Risk of serious or permanent eye lesions. In case of repeated contact: risk of dermatitis.
Ingestion	Harmful if swallowed. Severe irritation of the mouth, throat, esophagus and stomach. Bloating of stomach, belching. Nausea, vomiting and diarrhea.
Inhalation	Slight nose and throat irritation. At high concentrations, cough. In case of repeated or prolonged exposure: risk of sore throat, nose bleeds, chronic bronchitis.
SkinIrritant	May cause skin irritation when exposed for long periods of time. Slight irritation. In case of repeated contact: risk of dermatitis.
Carcinogenicity	No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Mutagenicity	No component of this product presents at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
Carcinogen Category	No Data Available

12. Ecological Information.

Ecotoxicity	Fish: 96hr-LC50 = 70.7mg/L (Pimephales promelas) Fish:96hr-NOEC = 1mg/L (Pimephales promelas) Invertebrates: 48hr-EC = 4.9mg/L (Daphnia magna) Invertebrates: 48d-NOEC = 2.0mg/L (Daphnia magna) Algae: 72hr-EC50 = 7.7mg/L (Crupina vulgaris) Algae: 72hr-NOEC = 0.3mg/L (Crupina vulgaris)
Persistence/Degradability	Sodium percarbonate dissociates in water into hydrogen peroxide and sodium carbonate. Hydrogen peroxide is rapidly degraded in a biological waste water treatment plant. (OECD SIDS).
Mobility	Volatilisation of hydrogen peroxide from surface waters and moist soil is expected to be very low, while it is expected to be highly mobile in soil. (OECD SIDS)
Environmental Fate	Do NOT let product reach waterways, drains and sewers.
Bioaccumulation Potential	Both sodium carbonate and hydrogen peroxide (log Kow < -1) are inorganic chemicals which do not bioaccumulate. (OECD SIDS).
Environmental Impact	No Data Available

13. Disposal considerations.

General Information	Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.
Special Precautions for Land Fill	Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

14. Transport Information. (Not regulated for transport)

Land Transport (Australia)
ADG Code

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Land Transport (Malaysia)
ADR

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Land Transport (New Zealand)
NZS5433

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
EPG	31 Oxidizing Substances
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Land Transport (United States of America)
US DOT

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
ERG	140 Oxidizers
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

Sea Transport
IMDG Code

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available
EMS	F-A,S
Marine Pollutant	No

Air Transport
IATA DGR

Proper Shipping Name	SODIUM CARBONATE PEROXYHYDRATE
Class	5.1 Oxidising Substances
Subsidiary Risk(s)	No Data Available
UN Number	3378
Hazchem	1Y
Pack Group	II
Special Provision	No Data Available

National Transport Commission (Australia)
Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification	Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15. Regulatory Information.

General Information	No Data Available
Poisons Schedule (Aust)	6

Environmental Protection Authority (New Zealand)
Hazardous Substances and New Organisms Amendment Act 2015

Approval Code	HSR001351

National/Regional Inventories

Australia (AICS)	Listed
Canada (DSL)	Listed
Canada (NDSL)	Not Determined
China (IECSC)	Listed
Europe (EINECS)	Listed
Europe (REACh)	Not Determined
Japan (ENCS/METI)	Listed
Korea (KECI)	Listed
Malaysia (EHS Register)	Not Determined
New Zealand (NZIoC)	Listed
Philippines (PICCS)	Not Determined
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Not Determined
USA (TSCA)	Listed

16. Other Information.

This material must not be used for direct contact with food:

Wash hands thoroughly after handling.

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