

Issue Date: 12/07/2017

MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product Name: Dam Clean

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

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 Bl	end					
	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.

 $\hbox{-} Ensure that medical personnel are aware of the material (s) involved and take precautions to protect themselves.$

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.

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 PointNo Data AvailableLower Explosion LimitNo Data AvailableUpper Explosion LimitNo Data Available

Auto Ignition Temperature No Data Available

Hazchem Code 1Y



Accidental Release measures.

Avoid materials and products which are incompatible with the product(see section 10). Avoid direct contact of the General Response Procedure

product with water. Do not touch damaged containers or spilled material unless wearing appropriate protective

clothing.

Collect the product with suitable means, shovel or sweep, avoiding dust formation. All receiving equipment should

clean, dry, vented, labelled and made of material is compatible with the product.Do NOT return spilled or Clean Up Procedures

contaminated material to inventory

Small spill: With clean shovel place material into clean, dry container and cover loosely; move containers from spil

- 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.

7. Handling & Storage.

Clean and dry process piping and equipment before using the product. Never return spillage to its original package Handling

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.

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for Storage

> 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.

8. Exposure Controls/personal protection.

No exposure standard has been established for this product by the Australian Safety and Compensation Council General

(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

Density2.01 - 2.16 RelativeSpecific HeatNo Data AvailableMolecular Weight314.06 g/molNet Propellant WeightNo Data Available

Octanol Water Coefficient Not applicable. Sodium percarbonate is a simple inorganic salt.

Particle SizeNo Data AvailablePartition CoefficientNo Data AvailableSaturated Vapour ConcentrationNo Data AvailableVapour TemperatureNo Data AvailableViscosityNo Data AvailableVolatile PercentNo Data AvailableVOC VolumeNo 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 No Data Available Characteristics

Flame Propagation or Burning **Rate of Solid Materials**

Non-Flammables That Could

Contribute Unusual Hazards to a Fire

Properties That May Initiate or Contribute to Fire Intensity

Reactions That Release Gases or No Data Available

Release of Invisible Flammable

Vapours and Gases

Vapours

No Data Available

No Data Available

No Data Available

No Data Available

10. Stability & Reactivity.

Reactivity: Oxidising agents, actual reactivity varies greatly with the identity of the organic compound. **General Information**

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 LCO, 1 hour, Rat: >4.58 mg/L/4h (OECD SIDS)

General: Irritating to mucous membrane, eyes and skin.

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

Eyelrritant 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)

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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