Safety Data Sheet

Hazardous Chemical, Dangerous Goods

1. MATERIAL AND SUPPLY COMPANY IDENTIFICATION

Product name: REGEN - CyaNo

Synonyms
Sodium carbonate peroxyhydrate

Recommended use: Water treatment.

Supplier: Parklink Ltd
Company No.:
Street Address: 43 Niven Street, Onekawa
New Zealand
Telephone: 06 843 2913
Facsimile:
Email: admin@parklink.co.nz

Emergency Telephone number: **0800 POISON (0800 764 766)**

2. HAZARDS IDENTIFICATION

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

HSNO Approval Code: HSR002683

Signal Word
Danger

Hazard Classifications
Oxidising Liquids – Category 2
Acute Toxicity (Oral) – Category 4
Eye Irritation – Category 2A

Hazard Statements

H272	May intensify fire; oxidiser.
H302	Harmful if swallowed.
H319	Causes serious eye irritation.

Prevention Precautionary Statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220	Keep away from clothing and other combustible materials.
P280	Wear protective gloves, clothing and eye/face protection.
P264	Wash hands, face and all exposed skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Response Precautionary Statements

P370+P378	In case of fire: Use coarse water spray, fine water spray, normal foam or dry agent (carbon dioxide, dry chemical powder) to extinguish.
P301+P312	IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
P330	Rinse mouth.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical attention.

Storage Precautionary Statement

None allocated

Disposal Precautionary Statement

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

DANGEROUS GOOD CLASSIFICATION

Classified as a Dangerous Good according to NZS 5433:2012 Transport of Dangerous Goods on Land.

Dangerous Goods Class: 5.1

3. COMPOSITION INFORMATION

CHEMICAL ENTITY	CAS NO	PROPORTION
Sodium percarbonate	15630-89-4	90-100 % (w/w)

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 person to fresh air. 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. Seek medical attention if symptoms persist.

Skin Contact: If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Get medical attention if irritation develops and persists.

Eye contact: If in eyes, hold eyelids apart and flush the eyes continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor; or for at least 15 minutes. Get medical attention if irritation develops and persists.

Ingestion: 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 person. If vomiting occurs give further water. Immediately get medical attention if symptoms occur.

PPE for First Aiders: Avoid contact with skin, eyes and clothing. Wear personal protective clothing (see section 8).

Notes to physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Hazchem Code: 1Y

Suitable extinguishing media: Non-combustible, however if material is involved in a fire, use coarse water spray, fine water spray, normal foam or dry agent (carbon dioxide, dry chemical powder).

Specific hazards: Oxidising substance. Non-combustible, however will support combustion of other materials.

Firefighting further advice: Firefighters should wear self- contained breathing apparatus and full firefighting protective clothing. Keep containers cool with water spray. Heating can cause expansion or decomposition of the material, which can lead to the containers exploding. If safe to do so, remove containers from the path of fire.

6. ACCIDENTAL RELEASE MEASURES

Emergency procedures: Shut off all possible sources of ignition. Clear area of all unprotected personnel. Do not allow container or product to get into drains, sewers, streams or ponds. If contamination of sewers or waterways has occurred advise local emergency services.

Methods and materials for containment and cleaning up: Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal. DO NOT return spilled material to original container for re-use. DO NOT use combustible material.

7. HANDLING AND STORAGE

Handling: Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust. Avoid handling which leads to dust formation. Keep out of reach of children. When using do not eat, drink or smoke. Wash hands thoroughly after handling.

Conditions for safe storage: Store in a cool, dry, well-ventilated place and out of direct sunlight. Keep at a temperature below 40ºC. Protect from moisture. Store away from foodstuffs. Store away from incompatible materials described in Section 10. Store away from sources of heat and/or ignition. Keep container standing upright and closed when not in use - check regularly for spills.

General hygiene: Avoid contact with eyes. Do not eat, drink or smoke when using this product. Wash hands and face before breaks and immediately after handling the product.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National occupational exposure limits:

No value assigned for this specific material by the New Zealand Workplace Health & Safety Authority. However, Workplace Exposure Standard(s) for particulate(s):

Particulates not otherwise classified: 8hr WES-TWA 10 mg/m^3 (inhalable dust) or 3 mg/m^3 (respirable dust).

As published by WorkSafe New Zealand.

WES-TWA (Workplace Exposure Standard - Time-weighted average). The average airborne concentration of a substance calculated over an eight-hour working day.

WES-Ceiling (Workplace Exposure Standard - Ceiling). A concentration that should not be exceeded at any time during any part of the working day.

WES-STEL (Workplace Exposure Standard - Short-term exposure limit). The 15-minute time weighted average exposure standard. Applies to any 15-minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Exposures at concentrations between the WES-TWA and the WES-STEL should be less than 15 minutes, should occur no more than four times per day, and there should be at least 60 minutes between successive exposures in this range.

These Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept too 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.

If the directions for use on the product label are followed, exposure of individuals using the product should not exceed the above standard. The standard was created for workers who are routinely, potentially exposed during product manufacture.

Biological Limit Values: As per the WorkSafe New Zealand the ingredients in this material do not have a Biological Limit Allocated.

Engineering Measures: If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. Ventilation must be adequate to maintain air concentrations below Exposure Standards. Use only in well-ventilated areas. Avoid generating and inhaling dusts. Use with local exhaust ventilation or while wearing dust mask.

Personal Protection Equipment: Rubber gloves, safety glasses or goggles, suitable protective clothing (i.e., overalls or full-length sleeves and trousers). Use a dust mask or respirator and enclosed goggles if generating dust.

Personal protective equipment (PPE) must be suitable for the nature of the work and any hazard associated with the work as identified by the risk assessment conducted.

Use with adequate ventilation. If inhalation risk exists, wear particulate respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

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 contact with clothing. Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	Solid
Colour:	White
Odour:	Odourless

Solubility:	Soluble in water
Specific Gravity:	2.15 – 2.17
Density:	10.5 (10.1 g/L)
Vapour Pressure (20 °C):	Negligible
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not applicable
Melting Point/Range (°C):	Not available
pH:	10 - 11 (3% solution)
Total VOC (g/Litre):	Not available
Decomposition Point (ºC):	>55

10. STABILITY AND REACTIVITY

Reactivity: Reacts with acids. Hygroscopic: absorbs moisture or water from surrounding air.

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

Conditions to avoid: Avoid dust generation. Avoid exposure to heat, sources of ignition and open flame.

Incompatible materials: Acids, bases, combustible materials, organic materials, reducing agents, moisture, flammable materials, permanganates and powdered metals.

Hazardous decomposition products: Oxygen, which will support combustion, steam, oxides of carbon and hydrogen peroxide.

Hazardous reactions: Can react with acids or water releasing hydrogen peroxide. Self-heating at temperatures above 50ºC.

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 cause irritation to mucous membranes and respiratory tract.

Skin contact: Contact with skin may result in redness and irritation.

Ingestion: Harmful if swallowed. Swallowing can result in nausea, vomiting and irritation of the gastrointestinal tract.

Eye contact: Causes serious eye irritation. Exposure to the dust may cause discomfort due to particulate nature.

Acute Toxicity

Oral LD50 (rat) = 1,034mg/kg

Inhalation: No information available

Skin contact: Causes serious eye irritation. Classification is based on a mixture of calculation methods based on component data.

Ingestion:

Corrosion/Irritancy: Eye: this material has been classified as a 6.4A - Substances that are irritating to the eye. Skin: this material has been classified as not corrosive or irritating to skin.

Sensitisation: Inhalation: this material has been classified as not a respiratory sensitiser. Skin: this material has been classified as not a skin sensitiser.

Aspiration hazard: No information available

Specific target organ toxicity (single exposure): No information available

Chronic Toxicity
Mutagenicity: No information available

Carcinogenicity: Not listed as carcinogenic according to the International Agency for Research on Cancer (IARC).

Reproductive toxicity (including via lactation): No information available

Specific target organ toxicity (repeat exposure): No information available

12. ECOLOGICAL INFORMATION

Avoid contaminating waterways. Harmful to terrestrial vertebrates.

Acute aquatic hazard: No information available

Long-term aquatic hazards: No information available

Ecotoxicity in the soil environment: No information available

Ecotoxicity to terrestrial vertebrates: This material has been classified as - harmful to terrestrial vertebrates.

Ecotoxicity to terrestrial invertebrates: No information available

Ecotoxicity: No information available

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.

Treat the chemical using a method that changes the characteristics or composition of the chemical so that the chemical is no longer a hazardous chemical; or export the chemical from New Zealand as waste. 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.

14. TRANSPORT INFORMATION

ROAD AND RAIL TRANSPORT
Classified as Dangerous Goods by the criteria of the "New Zealand NZS5433: Transport of Dangerous Goods on Land".

UN No: 3378
Dangerous Goods Class: 5.1 Oxidising Agent **Hazchem** 1Y
Packing Group: III **Emergency Response Guide No:** NA

Proper Shipping Name: SODIUM CARBONATE PEROXYHYDRATE

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

UN No:	3378
Dangerous Goods Class:	5.1 Oxidising Agent
Packing Group:	III
Proper Shipping Name:	SODIUM CARBONATE PEROXYHYDRATE

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:	3378
Dangerous Goods Class:	5.1 Oxidising Agent
Packing Group:	III
Proper Shipping Name:	SODIUM CARBONATE PEROXYHYDRATE

15. REGULATORY INFORMATION

All components of this product are listed on or exempt from the New Zealand Inventory of Chemical (NZIoC).

HSNO Approval Code: HSR002683

16. OTHER INFORMATION

Reason for issue: New product

This information was prepared in good faith from the best information available at the time of issue. It is based on the present level of research and to this extent we believe it is accurate. However, no guarantee of accuracy is made or implied and since conditions of use are beyond our control, all information relevant to usage is offered without warranty. The manufacturer will not be held responsible for any unauthorised use of this information or for any modified or altered versions.

If you are an employer, it is your duty to tell your employees, and any others that may be affected, of any hazards described in this sheet and of any precautions that should be taken.

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