OXYGEN BLEACH POWDER
Safety Data Sheet

1. IDENTIFICATION

Product name: OXYGEN BLEACH POWDER

Synonyms
SODIUM PERCARBONATE

Product Code
571

Recommended use: BLEACHING AGENT FOR DOMESTIC AND INDUSTRIAL USE.

Supplier Name	**CLEAN PLUS CHEMICALS PTY LTD**
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SDS Date	21 JANUARY 2021 Version 1.2

2. HAZARD IDENTIFICATION

Poisons Schedule (Aust) 6

Globally Harmonised System

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		**H302**	Harmful if swallowed.
		H318	Causes serious eye damage.
		H272	May intensify fire; oxidizer.
Precautionary Statements	Prevention	**P210**	Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
		P221	Take 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	Dangerous Goods according to the criteria of the Australian Code for the Transport of by Road & Rail (ADG Code)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

Chemical Entity	CAS Number	Proportion
Disodium carbonate, compound with hydrogen peroxide (2:3)	15630-89-4	88 %
Sodium Carbonate	497-19-8	8.67 %
Sodium Chloride	7647-14-5	2.19 %

4. FIRST AID MEASURES

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.

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 spill 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 localWaste 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.

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

7. HANDLING AND STORAGE

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.

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 AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Granular Solid,
Odour	Odourless
Colour	White orcolour
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

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

NoDataAvailable NoDataAvailable No Data Available

No Data Available

Reactions That Release Gases or Vapours No Data Available
Release of Invisible Flammable Vapours and Gases

No Data Available

10. STABILITY AND REACTIVITY

General Information Oxidising Solid.
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 percarbonate 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 al. 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 observed.
(d) Respiratory or skin sensitization: A valid GLP guideline study was conducted with guinea pigs in which sodium 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 any 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 available.

(g) Reproductive toxicity: In conclusion, the available information supports the view that sodium percarbonate and its 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 the 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 be 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: Notrelevant.

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 belching.	Harmful if swallowed. Severe irritation of the mouth, throat, esophagus and stomach. Bloating of stomach, 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

14. TRANSPORT INFORMATION

Land Transport (Australia)
ADG

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.

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

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

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

15. REGULATORY INFORMATION

General Information	No Data Available
Poisons Schedule (Aust)	6

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)	Not Determined
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

Additional Information
ABBREVIATIONS:

ADB - Air-Dry Basis.
BEI - Biological Exposure Indice(s)
CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.
CNS - Central Nervous System.
EINECS - European Inventory of Existing Commercial Substances. GHS – Globally Harmonized System
IARC - International Agency for Research on Cancer. M - moles per litre, a unit of concentration.
mg/m3 - Milligrams per cubic meter. NOS - Not Otherwise Specified.
NTP - National Toxicology Program.
OSHA - Occupational Safety and Health Administration.
pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm - Parts Per Million.
RTECS - Registry of Toxic Effects of Chemical Substances. TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Clean Plus Chemicals report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Clean Plus Chemicals report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This Safety Data Sheet document has been compiled by Clean Plus Chemicals. Further clarification regarding any aspect of this product should contact Clean Plus Chemicals directly. While Clean Plus Chemicals has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Clean Plus Chemicals accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.