1. IDENTIFICATION

Product name: **OXYGEN BLEACH POWDER**

**Synonyms**
SODIUM PERCARBONATE

**Product Code**
571

**Recommended use:** BLEACHING AGENT FOR DOMESTIC AND INDUSTRIAL USE.

**Supplier Name**
UDS PTY LTD T/AS UNIVERSAL DRY CLEANING SOLUTIONS

**Address**
3 Spireton Place  PENDLE HILL  NSW  2145

**Telephone**
02 9688 2022

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02 9688 2044

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1800 201 700

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**Web Site**
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**SDS Date**
22 September 2016 Version 1.1

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**
Not Determined

**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.
OXYGEN BLEACH POWDER

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)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients

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

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.
**OXYGEN BLEACH POWDER**

<table>
<thead>
<tr>
<th>Extinguishing Media</th>
<th>Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire and Explosion Hazard</td>
<td>Oxidising material. Contact with combustible materials may 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.</td>
</tr>
<tr>
<td>Hazardous Products of Combustion</td>
<td>Fire may produce irritating, corrosive and/or toxic gases. Decomposition releases steam/heat.</td>
</tr>
</tbody>
</table>
OXYGEN BLEACH POWDER

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, label 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 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 AND 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.

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
OXYGEN BLEACH POWDER

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 use 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 Precautions
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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Granular Solid,</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Colour</td>
<td>White or colour</td>
</tr>
<tr>
<td>pH</td>
<td>10.0 + 1.0</td>
</tr>
<tr>
<td>Vapour Pressure</td>
<td>&lt;10^-3 Pa (@ 25 °C)</td>
</tr>
<tr>
<td>Relative Vapour Density</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Melting Point</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Freezing Point</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Solubility</td>
<td>140g/L 24°C</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Auto Ignition Temp</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Bulk Density</td>
<td>0.80 - 1.0 g/cm³</td>
</tr>
<tr>
<td>Corrosion Rate</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Self-accelerating decomposition with oxygen release starting from 50 °C</td>
</tr>
<tr>
<td>Density</td>
<td>2.01 - 2.16 Relative</td>
</tr>
<tr>
<td>Specific Heat</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>314.06 g/mol</td>
</tr>
<tr>
<td>Net Propellant Weight</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Octanol Water Coefficient</td>
<td>Not applicable. Sodium percarbonate is a simple inorganic salt.</td>
</tr>
<tr>
<td>Particle Size</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Partition Coefficient</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Saturated Vapour Concentration</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Vapour Temperature</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Property</td>
<td>Value</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Volatile Percent</td>
<td>No Data Available</td>
</tr>
<tr>
<td>VOC Volume</td>
<td>No Data Available</td>
</tr>
<tr>
<td>Additional Characteristics</td>
<td>Oxidising properties: Oxidising solid of class 5.1 (UN Recommendations)</td>
</tr>
<tr>
<td>Potential for Dust Explosion</td>
<td>No Data Available</td>
</tr>
</tbody>
</table>
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
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: Not relevant.

Eye Irritant
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.

Skin Irritant
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
OXYGEN BLEACH POWDER

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.

Land Transport (Australia)
ADG
OXYGEN BLEACH POWDER

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: 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

National/Regional Inventories
OXYGEN BLEACH POWDER

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 UDS Pty Ltd 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 UDS Pty Ltd 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 UDS Pty Ltd. Further clarification regarding any aspect of this product should contact UDS Pty Ltd directly. While UDS Pty Ltd 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, UDS Pty Ltd 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.