Section 01 - Identification

Product Identifier: Powdered Oxygen Detergent

Other Means of Identification: None

Product Use and Restrictions on Use: Powdered peroxide based detergent.

Initial Supplier Identifier: Advance Chemicals Ltd.
1500 Quebec Avenue
Saskatoon, SK. Canada
S7K 1V7

Prepared By: ClearTech Industries Inc. Technical Writer
Phone: 1 (800) 387-7503

24-Hour Emergency Phone: Phone: 1 (306) 664 – 2522

Section 02 - Hazard Identification

GHS-Classification
Acute Toxicity-Oral: Category 4
Eye Damage/Irritation: Category 1

Physical Hazards
Oxidizing Solid: Category 2

Danger

Hazard Statements
H272 – May intensify fire; oxidiser.
H302 – Harmful if swallowed.
H318 – Causes serious eye damage.

Pictograms

Precautionary Statements
P210 – Keep away from heat, sparks, open flames, and hot surfaces. — No smoking.
P220 – Keep/Store away from clothing, wooden floors, sunlight, moisture, and combustible materials.
P370 + P378 – In case of fire: Use extinguishing media appropriate for surrounding fire.
P264 – Wash hands thoroughly after handling.
P280 – Wear eye protection and face protection.
P270 – Do not eat, drink or smoke when using this product.
P301 + P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P501 – Dispose of contents/container in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

### Section 03 - Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS Number</th>
<th>Weight %</th>
<th>Unique Identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>497-19-8</td>
<td>65-80%</td>
<td></td>
</tr>
<tr>
<td>Sodium Percarbonate</td>
<td>15630-89-4</td>
<td>20-35%</td>
<td></td>
</tr>
</tbody>
</table>

### Section 04 - First Aid Measures

**Inhalation**
If symptoms are experienced, remove victim to fresh air. Give artificial respiration only if breathing has stopped. If breathing is difficult, give oxygen. Seek medical attention.

**Skin Contact / Absorption**
Remove contaminated clothing. Wash affected area with soap and water. Seek medical attention if irritation occurs or persists.

**Eye Contact**
Flush immediately with water for at least 30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. If a contact lens is present, remove only if easy to do so. Seek immediate medical attention.

**Ingestion**
Do NOT induce vomiting. Never give anything by mouth to an unconscious or convulsing person. Seek immediate medical attention. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. If the subject is completely conscious give 2-4 glasses of water to dilute the chemical.

**Additional Information**
Treatment based on sound judgment of physician and individual reactions of patient. Medical conditions that may be aggravated by exposure to this product include diseases of the skin, eyes or respiratory tract.

### Section 05 - Fire Fighting Measures

**Suitable Extinguishing Media**
Flood with water for extinguishing agent.

**Unsuitable Extinguishing Media**
Do not use dry chemicals or foams.

**Specific Hazards Arising From the Chemical**
Under fire conditions, carbon oxides and sodium oxides may form.

**Special Protective Equipment and Precautions for Fire-Fighters**
Wear NIOSH-approved self-contained breathing apparatus and protective clothing.

**Further Information**
Not Available

### Section 06 - Accidental Release Measures

**Personal Precautions / Protective Equipment / Emergency Procedures**
Wear appropriate personal protective equipment. Ventilate area as product is a strong oxidizer. Only enter area with PPE. Stop or reduce leak if safe to do so. Flush with water to remove any residue.

**Environmental Precautions**
Prevent material from entering sewers.
Methods and Materials for Containment and Cleaning Up
Do not use combustible materials such as sawdust as an absorbent. Pick up solids and put in an appropriate sealed container for later disposal. Avoid dry sweeping and any dust formation. Do not use compressed air to clean surfaces. Vacuuming or wet sweeping is preferred. Do not return spilled or contaminated material to inventory.

Section 07 - Handling and Storage

Precautions for Safe Handling
Use proper equipment for lifting and transporting all containers. Use sensible industrial hygiene and housekeeping practices. Wash thoroughly after handling. Avoid all situations that could lead to harmful exposure.

Conditions for Safe Storage
Store in a cool, dry, well ventilated area, away from heat and ignition sources. Place away from incompatible materials. Store in vented containers. Do not exceed sealed containers to temperatures above 40°C. Do not store on wooden floors or wooden pallets. Protect against moisture. Damp material may decompose exothermically and may cause combustion of organic material. Oxygen release due to exothermic decomposition may support combustion. Prolonged storage may result in lumping or caking. Keep away from direct sunlight. Protect against physical damage. Store in accordance with good industrial practices.

Incompatibilities
Strong reducing agents, strong acids, organic materials, powdered metals.

Section 08 - Exposure Controls and Personal Protection

Exposure Limit(s)

<table>
<thead>
<tr>
<th>Component</th>
<th>Regulation</th>
<th>Type of Listing</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Percarbonate</td>
<td>ACGIH</td>
<td>TLV</td>
<td>10 mg/m³ (Inhalable)</td>
</tr>
<tr>
<td>Sodium Carbonate</td>
<td>Not Established</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Engineering Control(s)

Ventilation Requirements
Mechanical ventilation (dilution or local exhaust), process or personnel enclosure and control of process conditions must be provided in accordance with all fire codes and regulatory requirements. Supply sufficient replacement air to make up for air removed by exhaust systems.

Other
Emergency shower and eyewash must be available and tested in accordance with regulations and be in close proximity.

Protective Equipment

Eyes/Face
Face shield and safety glasses should be worn at all times when product is handled. Contact lenses should not be worn; they may contribute to severe eye injury.

Hand Protection
Impervious gloves of chemically resistant material (rubber or PVC) should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Skin and Body Protection
Body suite, aprons, and/or coveralls of chemical resistant material should be worn at all times. Wash contaminated clothing and dry thoroughly before reuse.

Impervious boots of chemically resistant material should be worn at all times. No special footwear is required other than what is mandated at place of work.

Respiratory Protection
If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. Do not use chemical cartridge respirators with oxidisable sorbents (charcoal). A NIOSH/MSHA approved dust mask for concentrations of nuisance dust up to 50mg/m³. An air-supplied respirator if concentrations are higher or unknown.

Thermal Hazards
Not Available
## Section 09 - Physical and Chemical Properties

### Appearance

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical State</td>
<td>Solid, granular</td>
</tr>
<tr>
<td>Colour</td>
<td>White</td>
</tr>
<tr>
<td>Odour</td>
<td>Odourless</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

### Property

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>10-11</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial Boiling Point and Boiling Range</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Evaporation Rate</td>
<td>Not Available</td>
</tr>
<tr>
<td>Flammability</td>
<td>Non-Flammable</td>
</tr>
<tr>
<td>Upper Flammable Limit</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Lower Flammable Limit</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapour Pressure (mm Hg, 20°C)</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Vapour Density (Air=1)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Relative Density</td>
<td>Not Available</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>Not Available</td>
</tr>
<tr>
<td>Partition Coefficient: n-octanol/water</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Not Available</td>
</tr>
<tr>
<td>Specific Gravity (Water=1)</td>
<td>1.1-1.4</td>
</tr>
<tr>
<td>% Volatiles by Volume</td>
<td>0</td>
</tr>
<tr>
<td>Formula</td>
<td>Mixture</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not Available</td>
</tr>
</tbody>
</table>
Section 10 - Stability and Reactivity

Reactivity
Not Available

Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
Decomposes slowly: oxidation resulting in increased fire or explosion risk. This reaction is accelerated on exposure to water (moisture) and temperature rise.

Conditions to Avoid
Heat, open flames, all ignition sources, moisture [except for emergencies and clean up as described in the SDS], conditions that generate dust.

Incompatible Materials
Strong reducing agents, strong acids, organic materials, powdered metals.

Hazardous Decomposition Products
Under fire conditions, carbon oxide and sodium oxides may form. When heated to decomposition, sodium percarbonate emits acrid smoke and irritating vapours.

Section 11 - Toxicological Information

Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD$_{50}$</th>
<th>Dermal LD$_{50}$</th>
<th>Inhalation LC$_{50}$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powdered Oxygen Detergent</td>
<td>1,962 mg/kg</td>
<td>2,000 mg/kg</td>
<td>0.52 mg/L</td>
</tr>
</tbody>
</table>

Chronic Toxicity – Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Powdered Oxygen Detergent</td>
<td>None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, or OSHA, as a carcinogen</td>
</tr>
</tbody>
</table>

Skin Corrosion/Irritation
Mild skin irritant.

Ingestion
Harmful if swallowed. Severe irritation of the mouth, esophagus and stomach. Causes bloating of stomach, belching, nausea, and vomiting.

Inhalation
Short-term exposure: Nose and throat irritation, cough. Repeated or prolonged exposure: risk of throat, nose bleeds, chronic bronchitis.

Serious Eye Damage/Irritation
Causes severe eye irritation. May cause eye burns. Risk of serious or permanent eye lesions.

Respiratory or Skin Sensitization
Sensitivity reactions may occur from prolonged and repeated exposure.

Germ Cell Mutagenicity
Not classified for mutagenic or genotoxic toxicity.

Reproductive Toxicity
Not classified for reprotoxic or developmental toxicity.

STOT-Single Exposure
Not Available

STOT-Repeated Exposure
May cause central nervous system (CNS) depression. CNS depression is characterized by headache, dizziness, drowsiness, nausea, vomiting and incoordination. Severe overexposure may lead to coma and possible death due to respiratory failure. Excessive contact may produce “soda ulcers” on hands and perforation of the nasal septum.

Aspiration Hazard
Prolonged and repeated exposure may cause coughing and sneezing, nosebleeds, sore throat and chronic bronchitis.

Synergistic Materials
Not Available.
Section 12 – Ecological Information

**Ecotoxicity**

<table>
<thead>
<tr>
<th>Component</th>
<th>Toxicity to Algae</th>
<th>Toxicity to Fish</th>
<th>Toxicity to Daphnia and Other Aquatic Invertebrates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Carbonate</td>
<td>EC50(Diatom, 96hr): 242 mg/L</td>
<td>LC50(Lepomis macrochirus, 24hr): 167 mg/L</td>
<td>LC50(Daphnia magna, 24hr): 196 mg/L</td>
</tr>
<tr>
<td>Sodium Percarbonate</td>
<td>EC50(Algae, 240hr): 100-200mg/L</td>
<td>LC50(Pimephales promelas, 96hr): 70.7mg/L</td>
<td>EC50(Daphnia magna, 48hr): 2mg/L</td>
</tr>
</tbody>
</table>

**Biodegradability**

When sodium percarbonate is dissolved in water, it dissociates to sodium carbonate and hydrogen peroxide. Sodium and carbonate cannot be biodegraded and standard ready tests are not applicable to inorganic substances like hydrogen peroxide.

**Bioaccumulation**

Sodium carbonate presents low potential for bioaccumulation.

**Mobility**

Not Available

**Other Adverse Effects**

Not Available

Section 13 – Disposal Considerations

**Waste From Residues/Unused Products**

Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

**Contaminated Packaging**

Dispose in accordance with all federal, provincial, and/or local regulations including the Canadian Environmental Protection Act.

Section 14 – Transport Information

**UN Number**

UN1479

**UN Proper Shipping Name**

OXIDIZING SOLID, N.O.S. (Sodium percarbonate)

**Transport Hazard Class(es)**

5.1

**Packaging Group**

III

**Environmental Hazards**

Not listed as a marine pollutant under Canadian TDG Regulations, schedule III.

**Special Precautions**

Combination packagings: not more than 1 kg per inner packaging for solids. A package shall not weigh more than 30 kg (gross mass).

**Transport in Bulk**

Not Available

**Additional Information**

<table>
<thead>
<tr>
<th>Packing Group</th>
<th>Limited Quantity Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>II</td>
<td>1 Kg</td>
</tr>
<tr>
<td>III</td>
<td>5 Kg</td>
</tr>
</tbody>
</table>

**TDG**

**Other**

Secure containers (full and/or empty) with suitable hold down devises during shipment and ensure all caps, valves, or closures are secured in the closed position.

**TDG PRODUCT CLASSIFICATION:** This product has been classified on the preparation date specified at section 14 of this MSDS / SDS, for transportation in accordance with the requirements of part 2 of the Transportation of Dangerous Goods Regulations. If applicable, testing and/or published test data regarding the classification of this product are listed in the references at section 16 of this MSDS / SDS.

Section 15 – Regulatory Information

**NOTE:** THE PRODUCT LISTED ON THIS SDS HAS BEEN CLASSIFIED IN ACCORDANCE WITH THE HAZARD CRITERIA OF THE CANADIAN CONTROLLED PRODUCTS REGULATIONS. THIS SDS CONTAINS ALL INFORMATION REQUIRED BY THOSE REGULATIONS.
Section 16 – Other Information

Preparation Date: October 24, 2016

Revision Date: 2017 May 12

Note: The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate. However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations.

Attention: Receiver of the chemical goods / SDS coordinator

As part of our commitment to the Canadian Association of Chemical Distributors (CADC) Responsible Distribution® initiative, ClearTech Industries Inc. and its associated companies require, as a condition of sale, that you forward the attached Safety Data Sheet(s) to all affected employees, customers, and end-users. ClearTech will send any available supplementary handling, health, and safety information to you at your request.

If you have any questions or concerns please call our customer service center.

References:
1) CHEMINFO
2) eChemPortal
3) TOXNET
4) Transportation of Dangerous Goods Canada
5) HSDB
6) ECHA

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