SAFETY DATA SHEET

Issue Date 15-Oct-2014
Revision Date 15-Oct-2014
Version 1

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product Name
POWDERED CHLORINE BLEACH

Other means of identification
Product Code 200
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use Chlorinated Laundry Bleach.
Uses advised against No information available

Manufacturer Address
Anderson Chemical Company, 325 South Davis Avenue, Litchfield, MN 55355 (320-693-2477)

Emergency telephone number
Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status
This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Inhalation (Dusts/Mists) Category 4
Serious eye damage/eye irritation Category 2A

Label elements

Emergency Overview

Warning

Hazard statements
Harmful if inhaled
Causes serious eye irritation

Appearance powder Physical state Solid Odor Slight chlorine

Precautionary Statements - Prevention
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only in well-ventilated areas
Wash hands thoroughly after handling
Wear eye/face protection

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell

Hazardous not otherwise classified (HNOC)

Other Information
• May be harmful if swallowed
• Toxic to aquatic life with long lasting effects
• Toxic to aquatic life
Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>497-19-8</td>
<td>45</td>
<td></td>
</tr>
<tr>
<td>Sodium dichloroisocyanurate dihydrate</td>
<td>51580-86-0</td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Eye contact
Flush immediately with water for 15 minutes. Lift upper and lower eyelids for complete rinsing. Get immediate medical attention.

Skin Contact
Flush with water for 15 minutes. If irritation persists after rinsing, get medical attention. Remove contaminated clothing and wash before reuse.

Inhalation
Remove victim from immediate source of exposure to fresh air. If breathing is difficult, administer oxygen if available. If victim is not breathing, administer CPR. If individual experiences nausea, headache, or dizziness, get immediate medical attention.

Ingestion
Rinse mouth with water. Give water to dilute. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to a semi-comatose, comatose, convulsing or unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms
Severe irritation and/or burns can occur following eye exposure. Contact may cause permanent eye injury. Can cause severe irritation and/or burns to skin characterized by redness and swelling. Inhalation to the nose, mouth, throat, and lungs. Can result in shortness of breath, wheezing, choking, chest pain, and impairment of lungs function. Ingestion can cause irritation and/or burns can occur characterized by nausea, vomiting, diarrhea, abdominal pain, bleeding.

Indication of any immediate medical attention and special treatment needed

Note to physicians
Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable extinguishing media
Dry chemical extinguisher containing ammonia compounds.

Specific hazards arising from the chemical
No information available.
**Explosion data**
- Sensitivity to Mechanical Impact: None.
- Sensitivity to Static Discharge: None.

**Protective equipment and precautions for firefighters**
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to cool fire exposed containers.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions**
Evacuate nonessential personnel. Ventilate area. Wear appropriate personal protection equipment.

**Environmental precautions**
See Section 12 for additional ecological information. Prevent run-off into ground or surface waters or sewers.

**Methods for containment**
Contain spill.

**Methods for cleaning up**
Recover as much material as possible into containers for disposal or reuse. Remaining material may be diluted with water and neutralized. Flush spill area with water. Neutralization products, both solid and liquid, must be recovered for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**

**Advice on safe handling**
Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wear appropriate protective clothing/equipment. Do not breathe dust. Use with adequate ventilation. Do not ingest.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions**
Keep containers tightly closed and properly labeled. Containers that have been emptied will retain product residue and should be handled as if they were full. Store in a cool, dry, well-ventilated place away from incompatible materials. Wash hands before eating, drinking, using tobacco, applying make-up or using the toilet. Do not store, use, and/or consume foods, beverages, tobacco in areas where this product is stored.

**Incompatible materials**
Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines**

**Appropriate engineering controls**

- Showers
- Eyewash stations
- Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**
Avoid contact with eyes.
Skin and body protection  For prolonged or repeated exposures, use impervious clothing (boots, gloves, aprons, etc.) over parts of the body subject to exposure.

Respiratory protection  If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations  Handle in accordance with good industrial hygiene and safety practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
<th>Remarks • Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
<td></td>
</tr>
<tr>
<td>Appearance</td>
<td>powder</td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>white</td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Slight chlorine</td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>10.5</td>
<td>1% Solution</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Boiling point / boiling range</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Flammability Limit in Air</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Upper flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Lower flammability limit:</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Vapor density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>Soluble in water</td>
<td></td>
</tr>
<tr>
<td>Solubility in other solvents</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Partition coefficient</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Kinematic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Dynamic viscosity</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Oxidizing properties</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Softening point</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Molecular weight</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>VOC Content (%)</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Density</td>
<td>No information available</td>
<td></td>
</tr>
<tr>
<td>Bulk density</td>
<td>No information available</td>
<td></td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

Reactivity  Not Applicable  No data available

Chemical stability  Stable under recommended storage conditions.

Possibility of Hazardous Reactions  None under normal processing.
Conditions to avoid
Avoid extreme heat, dust formation. Exposure to air or moisture over prolonged periods.

Incompatible materials
Organic materials, reducing agents, nitrogen containing materials, other oxidizers, acids, bases, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.

Hazardous Decomposition Products
Thermal decomposition may yield chlorine gas, halogenated compounds, hydrogen chlorite, oxides of phosphorous, sodium, and sulfur. Carbon dioxide and carbon monoxide may be released upon combustion.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information
No data available

Inhalation
May cause irritation of respiratory tract.

Eye Contact
Risk of serious damage to eyes.

Skin Contact
Prolonged contact may cause redness and irritation.

Ingestion
Ingestion may cause irritation to mucous membranes.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>= 4090 mg/kg (Rat)</td>
<td>-</td>
<td>= 2300 mg/m³ (Rat) 2 h</td>
</tr>
</tbody>
</table>

Information on toxicological effects

Symptoms
No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation
Irritating to skin.

Serious eye damage/eye irritation
Risk of serious damage to eyes.

Sensitization
No information available.

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Reproductive toxicity
No information available.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
No information available.

Numerical measures of toxicity - Product Information

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity
The following values are calculated based on chapter 3.1 of the GHS document.

12. ECOLOGICAL INFORMATION

Ecotoxicity

20% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>242: 120 h Nitzschia mg/L EC50</td>
<td>300: 96 h Lepomis macrochirus mg/L LC50 static</td>
<td>265: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>497-19-8</td>
<td></td>
<td>310 - 1220: 96 h Pimephales promelas mg/L LC50 static</td>
<td></td>
</tr>
</tbody>
</table>
Persistence and degradability
No information available.

Bioaccumulation
No information available.

Other adverse effects
No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes
Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging
Rinse empty container and offer for recycling.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Hazardous Waste Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium carbonate</td>
<td>Corrosive</td>
</tr>
<tr>
<td>497-19-8</td>
<td></td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT
Not regulated

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Inventory</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCA</td>
<td>Complies</td>
</tr>
<tr>
<td>DSL/NDSL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>EINECS/ELINCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>ENCS</td>
<td>Does not comply</td>
</tr>
<tr>
<td>IECS</td>
<td>Complies</td>
</tr>
<tr>
<td>KECL</td>
<td>Does not comply</td>
</tr>
<tr>
<td>PICCS</td>
<td>Complies</td>
</tr>
<tr>
<td>AICS</td>
<td>Complies</td>
</tr>
</tbody>
</table>

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances
AICS - Australian Inventory of Chemical Substances

US Federal Regulations
SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

- Acute health hazard: Yes
- Chronic Health Hazard: No
- Fire hazard: No
- Sudden release of pressure hazard: No
- Reactive Hazard: No

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA
This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium dichloroisocyanurate dihydrate</td>
<td>-</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>51580-86-0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td></td>
<td>Physical and Chemical Properties</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Physical hazards</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>0</td>
<td>1</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Prepared By lmt
Issue Date 15-Oct-2014
Revision Date 15-Oct-2014
Revision Note No information available

Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet