SAFETY DATA SHEET

Drain Opener

Section 1. Identification

GHS product identifier: Drain Opener
Other means of identification: 2853SP
Product type: Liquid

Relevant identified uses of the substance or mixture and uses advised against
Not applicable.

Supplier's details: Essential Industries, Inc.
P.O. Box 12
Merton, WI 53056-0012
Phone: 262-538-1122

Emergency telephone number (with hours of operation): 800-843-6174 (24 Hours)

Section 2. Hazards identification

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture:
- ACUTE TOXICITY (inhalation) - Category 4
- SKIN CORROSION/IRRITATION - Category 1
- SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

GHS label elements
Hazard pictograms:

Signal word: Danger
Hazard statements: Harmful if inhaled. Causes severe skin burns and eye damage.

Precautionary statements
General: Read label before use. Keep out of reach of children. If medical advice is needed, have product container or label at hand.

Prevention: Wear protective gloves. Wear eye or face protection. Wear protective clothing. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

Response: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage: Store locked up.
Section 2. Hazards identification

**Disposal**
Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazards not otherwise classified**
None known.

Section 3. Composition/information on ingredients

**Substance/mixture**
Mixture

**Other means of identification**
Not available

**CAS number/other identifiers**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>CAS number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>7681-52-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>1310-73-2</td>
<td>1 - 5</td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>1310-58-3</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**
Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

**Inhalation**
Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Skin contact**
Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Ingestion**
Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact : Causes serious eye damage.
Inhalation : Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.
Skin contact : Causes severe burns.
Ingestion : May cause burns to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:
- pain
- watering
- redness

Inhalation : No specific data.
Skin contact : Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

Ingestion : Adverse symptoms may include the following:
- stomach pains

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments : No specific treatment.
Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media : None known.

Specific hazards arising from the chemical

Hazardous thermal decomposition products : Decomposition products may include the following materials:
- halogenated compounds
- metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Section 5. Fire-fighting measures

**Special protective equipment for fire-fighters**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

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

**For non-emergency personnel**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

**Methods and materials for containment and cleaning up**

**Small spill**: Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

**Large spill**: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

**Precautions for safe handling**

**Protective measures**: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

**Advice on general occupational hygiene**: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials and food and drink. Store locked up. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>AIHA WEEL (United States, 10/2011). STEL: 2 mg/m³ 15 minutes. ACGIH TLV (United States, 6/2013). C: 2 mg/m³ OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m³ NIOSH REL (United States, 10/2013). CEIL: 2 mg/m³ OSHA PEL (United States, 2/2013). TWA: 2 mg/m³ 8 hours. ACGIH TLV (United States, 6/2013). C: 2 mg/m³ OSHA PEL 1989 (United States, 3/1989). CEIL: 2 mg/m³ NIOSH REL (United States, 10/2013). CEIL: 2 mg/m³ OSHA PEL (United States, 2/2013). TWA: 2 mg/m³ 10 hours.</td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td></td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td></td>
</tr>
</tbody>
</table>

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, considering some substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Section 8. Exposure controls/personal protection

**Respiratory protection**: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

**Appearance**
- **Physical state**: Liquid
- **Color**: Colorless
- **Odor**: Chlorine
- **Odor threshold**: Not available
- **pH**: 12.5 to 13.5
- **Melting point**: 0°C (32°F)
- **Boiling point**: 100°C (212°F)
- **Flash point**: Closed cup: >93.334°C (>200°F)
- **Evaporation rate**: Not available
- **Flammability (solid, gas)**: Not available
- **Lower and upper explosive (flammable) limits**: Not available
- **Vapor pressure**: <4 kPa (<30 mm Hg) [room temperature]
- **Vapor density**: <1 [Air = 1]
- **Specific gravity**: 1.1 g/cm³
- **Solubility**: Not available
- **Partition coefficient: n-octanol/water**: Not available
- **Auto-ignition temperature**: Not available
- **Viscosity**: Not available
- **VOC content**: 0 g/l

VOCs are calculated following the requirements under 40 CFR, Part 59, Subpart C for Consumer Products and Subpart D for Architectural Coatings.

Section 10. Stability and reactivity

**Reactivity**: No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**: The product is stable.

**Possibility of hazardous reactions**: Under normal conditions of storage and use, hazardous reactions will not occur.

**Conditions to avoid**: No specific data.

**Incompatible materials**: Reactive or incompatible with the following materials: acids

**Hazardous decomposition products**: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>LC50 Inhalation Gas.</td>
<td>Rat</td>
<td>293 ppm</td>
<td>1 hours</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>1359 mg/kg</td>
<td></td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>140 mg/kg</td>
<td></td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>273 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

#### Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1.31 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Monkey</td>
<td>-</td>
<td>24 hours 1 Percent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>400 Micrograms</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 50 Micrograms</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>1 Percent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 minutes 1 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>Skin - Mild irritant</td>
<td>Human</td>
<td>-</td>
<td>24 hours 2 Percent</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 1 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Guinea pig</td>
<td>-</td>
<td>24 hours 50 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Human</td>
<td>-</td>
<td>24 hours 50 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 50 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Sensitization

Not available.

#### Mutagenicity

Not available.

#### Carcinogenicity

Not available.

#### Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>-</td>
<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

#### Reproductive toxicity

Not available.

#### Teratogenicity

Not available.

#### Specific target organ toxicity (single exposure)

Not available.
Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure
Not available

Potential acute health effects

Eye contact
Causes serious eye damage.

Inhalation
Harmful if inhaled. May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system.

Skin contact
Causes severe burns.

Ingestion
May cause burns to mouth, throat and stomach.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
Adverse symptoms may include the following:
- pain
- watering
- redness

Inhalation
No specific data.

Skin contact
Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

Ingestion
Adverse symptoms may include the following:
- stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects
Not available

Potential delayed effects
Not available

Long term exposure

Potential immediate effects
Not available

Potential delayed effects
Not available

Potential chronic health effects
Not available.

- General
  No known significant effects or critical hazards.

- Carcinogenicity
  No known significant effects or critical hazards.

- Mutagenicity
  No known significant effects or critical hazards.

- Teratogenicity
  No known significant effects or critical hazards.

- Developmental effects
  No known significant effects or critical hazards.

- Fertility effects
  No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral</td>
<td>3820.7 mg/kg</td>
</tr>
<tr>
<td>Dermal</td>
<td>56909.5 mg/kg</td>
</tr>
<tr>
<td>Inhalation (gases)</td>
<td>4507.7 ppm</td>
</tr>
</tbody>
</table>

Section 12. Ecological information

**Toxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>Acute EC50 46000 µg/l Marine water</td>
<td>Algae - Gracilaria tenuistipitata</td>
<td>4 days</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 56400 µg/l Marine water</td>
<td>Crustaceans - Palaemonetes pugio</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 32 µg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 32 µg/l Marine water</td>
<td>Fish - Oncorhynchus kisutch - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>96 hours</td>
</tr>
<tr>
<td>Sodium hydroxide</td>
<td>Chronic NOEC 10000 µg/l Marine water</td>
<td>Algae - Gracilaria tenuistipitata</td>
<td>4 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.1 ppm Fresh water</td>
<td>Fish - Cyprinus carpio - Young</td>
<td>30 days</td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>Acute EC50 40.38 mg/l Fresh water</td>
<td>Crustaceans - Ceriodaphnia dubia - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 125 ppm Fresh water</td>
<td>Fish - Gambusia affinis - Adult</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 80 ppm Fresh water</td>
<td>Fish - Gambusia affinis - Adult</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

Not available.

**Bioaccumulative potential**

Not available.

**Mobility in soil**

| Soil/water partition coefficient ($K_{OC}$) | Not available |

**Other adverse effects**

No known significant effects or critical hazards.

Section 13. Disposal considerations

<table>
<thead>
<tr>
<th>Disposal methods</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.</td>
</tr>
</tbody>
</table>
### Section 14. Transport information

<table>
<thead>
<tr>
<th></th>
<th>DOT Classification</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN number</td>
<td>UN1719</td>
<td>UN1719</td>
<td>UN1719</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Caustic Alkali Liquid, N.O.S. (Sodium hypochlorite, Potassium hydroxide)</td>
<td>Caustic Alkali Liquid, N.O.S. (Sodium hypochlorite, Potassium hydroxide)</td>
<td>Caustic Alkali Liquid, N.O.S. (Sodium hypochlorite, Potassium hydroxide)</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Packing group</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>Environmental hazards</td>
<td>No.</td>
<td>Yes.</td>
<td>Yes.</td>
</tr>
<tr>
<td>Additional information</td>
<td>-</td>
<td>The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.</td>
<td>The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.</td>
</tr>
</tbody>
</table>

**Special precautions for user:** Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not available.

### Section 15. Regulatory information

**U.S. Federal regulations**
- United States inventory (TSCA 8b): All components are listed or exempted.

**Clean Air Act Section 112**
- (b) Hazardous Air Pollutants (HAPs)
- Not listed

**SARA 311/312**
- Classification: Immediate (acute) health hazard
- Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite, solid</td>
<td>1-5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>sodium hydroxide</td>
<td>1-5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>potassium hydroxide</td>
<td>1-5</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

**State regulations**

**International regulations**

**Date of issue/Date of revision:** 12/19/2014
**Date of previous issue:** 10/23/2014
**Version:** 0.03 10/12
Section 15. Regulatory information

Canada inventory: All components are listed or exempted.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Instability/Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

History

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Key to abbreviations

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
UN = United Nations

References

Not available

Indicates information that has changed from previously issued version.

Notice to reader
Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.