Safety Data Sheet

Section 01 - Identification

| Product Identifier | On and Gone – Mould and Mildew Stain Remover. |

| Product Use and Restrictions on Use | Removal of mold stains. |

| 24-Hour Emergency Phone | Phone: 1 (306) 664 – 2522 |
|                         | Alternative Phone: 1 (800) 387 – 7503 |

Section 02 - Hazard Identification

GHS-Classification

<table>
<thead>
<tr>
<th>Skin Corrosion/Irritation</th>
<th>Category 1A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serious Eye Damage/Eye Irritation</td>
<td>Category 1</td>
</tr>
<tr>
<td>Acute Aquatic Toxicity</td>
<td>Category 1</td>
</tr>
<tr>
<td>Chronic Aquatic Toxicity</td>
<td>Category 1</td>
</tr>
<tr>
<td>STOT-Single Exposure</td>
<td>Category 3</td>
</tr>
</tbody>
</table>

Signal Word

Danger

Hazard Statements

Causes severe skin burns and eye damage.
Causes serious eye damage.
May cause respiratory irritation.
Very toxic to aquatic life with long lasting effects.
Physical Hazards

Corrosive To Metals  Category 1

Signal Word
Warning

Hazard Statement
May be corrosive to metals.

Pictograms

Precautionary Statements
Store locked up.
Keep only in original container.
Store container tightly closed in well-ventilated place.
Store in corrosive resistant/container with a resistant inliner.
Use only outdoors or in well-ventilated area.
Absorb spillage to prevent material damage.
Wear protective gloves/clothing and eye/face protection.
Wash thoroughly after handling.
Do not breathe dust or mist.
Avoid breathing dust/fume/gas/mist/vapours/spray.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
Avoid release to the environment.
Collect spillage.

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 Hypochlorite 6%</td>
<td>7681-52-9</td>
<td>95%</td>
<td>None</td>
</tr>
<tr>
<td>Surfactant Solution</td>
<td>Mixture</td>
<td>5%</td>
<td>None</td>
</tr>
</tbody>
</table>

Common Name and Synonyms

None
**Section 04 - First Aid Measures**

**Inhalation**
Can release corrosive chlorine gas
Remove victim to fresh air. Give artificial respiration only if breathing has stopped.
If breathing is difficult, give oxygen. DO NOT allow victim to move about unnecessarily. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. Seek immediate medical attention.

**Skin Contact / Absorption**
As quickly as possible, flush with lukewarm, gently flowing water for at least 20 minutes, or until the chemical is removed. If irritation persists, repeat flushing.
Under running water, remove contaminated clothing, shoes and leather goods. Completely decontaminate clothing, shoes and leather goods before reuse, or discard. Obtain medical advice immediately.

**Eye Contact**
Contact lenses should never be worn when working with this product. Flush immediately with lukewarm, gently flowing water for at least 20-30 minutes. Forcibly hold eyelids apart to ensure complete irrigation of eye tissue. DO NOT INTERRUPT FLUSHING. Take care not to rinse contaminated water into the unaffected eye or onto the face. Seek immediate medical attention.

**Ingestion**
NEVER give anything by mouth if victim is rapidly losing consciousness, is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 240 to 300 mL (8 to 10 oz.) of water to dilute material in stomach. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Rinse mouth and repeat administration of water. Quickly transport victim to an emergency care facility.

**Additional Information**
Provide general supportive measures (comfort, warmth, rest).
Consult a doctor and/or the nearest Poison Control Centre for all exposures except minor instances of inhalation or skin contact.

**Section 05 - Fire-Fighting Measures**

Sodium hypochlorite solutions do not burn. Extinguish fire using extinguishing agents suitable for the surrounding fire and not contraindicated for use with sodium hypochlorite. Cool exposed containers with water.

**Unsuitable Extinguishing Media**
DO NOT use dry chemical fire extinguishing agents containing ammonium compounds (such as some A:B:C agents), since an explosive compound can be formed.

**Specific Hazards Arising From the Chemical**
Chlorine, hydrogen chloride gas, oxygen gas and disodium oxide.
NOTE: releases chlorine when heated above 35°C.

**Special Protective Equipment and Precautions for Fire-Fighters**
Wear NIOSH-approved self-contained breathing apparatus and protective clothing.
The decomposition products of sodium hypochlorite, such as chlorine and hydrogen chloride are extremely hazardous to health. Do not enter without wearing specialized protective equipment suitable for the situation. Firefighter's normal protective equipment (Bunker Gear) will not provide adequate protection.
Further Information

Sodium hypochlorite solutions will not accumulate static charge. Since these solutions do not burn, they will not be ignited by a static discharge. Sodium hypochlorite is not combustible (will not burn). It decomposes when heated, giving off corrosive chlorine gas and hydrogen chloride. Solutions decompose when exposed to sunlight, giving off oxygen gas. However, the amount of oxygen produced is not sufficient to cause combustion. Explosive decomposition may occur under fire conditions and closed containers may rupture violently due to rapid decomposition, if exposed to fire or excessive heat for a sufficient period of time.

Section 06 - Accidental Release Measures

Personal Precautions / Protective Equipment / Emergency Procedures
Wear appropriate personal protective equipment. Ventilate area. Only enter area with PPE. Stop or reduce leak if safe to do so. Prevent material from entering sewers. Flush with water to remove any residue.

Environmental Precautions
Harmful to aquatic life in very low concentrations. May be dangerous if it enters water intakes. Prevent material from entering sewers or confined spaces. Notify local health and wildlife officials. Notify operators of nearby water intakes.

Methods and Materials for Containment and Cleaning Up
Do not touch spilled material. Prevent material from entering into soil, ditches, sewers, waterways and/or groundwater.

Contain spill with earth, sand or absorbent material which does not react with spilled material.

SMALL SPILLS: Soak up spill with absorbent material which does not react with spilled chemical [sawdust, Cob grit, Zorb-all®, Hazorb®. Put material in suitable, covered, labelled containers. Flush area with water [AFTER material has been cleaned up with an absorbent material]. Contaminated absorbent material may pose the same hazards as the spilled product. Collect in suitable and properly labeled containers.

LARGE SPILLS: Contact fire and emergency services and supplier for advice.

Section 07 - Handling and Storage

Precautions for Safe Handling
This material is a CORROSIVE liquid. This material is a slipping hazard. 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. Avoid generating mists. Prevent the release of mists into the workplace air. Inspect containers for damage or leaks before handling. Label containers. Never add water to a corrosive. Always add corrosives to water. When mixing with water, stir small amounts in slowly. Use cold water to prevent excessive heat generation. Never return contaminated material to its original container. Have suitable emergency equipment for fires, spills and leaks readily available.
Conditions for Safe Storage

Store in a cool, dry, well-ventilated area, out of direct sunlight and away from heat sources. Strong solutions (greater than 10% available chlorine) may slowly give off chlorine during storage, especially when warm (above 18°C). Vent caps may be required to prevent a build-up of pressure that could cause containers to burst. Always store in original labelled container. Keep containers tightly closed when not in use and when empty. Empty containers may contain hazardous residues. Protect label and keep it visible.

Keep away from incompatible materials, such as acids, metals, primary or aromatic amines, ammonia and ammonia salts. – see section 10 for more information.

Section 08 - Exposure Controls / Personal Protection

<table>
<thead>
<tr>
<th>Exposure Limit(s)</th>
<th>Component</th>
<th>Regulation</th>
<th>Type of Listing</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sodium hypochlorite</td>
<td>AIHA</td>
<td>WEEL-STEL</td>
<td>2mg/m³ (15 min)</td>
</tr>
<tr>
<td></td>
<td>Chlorine</td>
<td>ACGIH</td>
<td>TLV-TWA</td>
<td>0.5 ppm</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

Chemical goggles, full-face shield, or a full-face respirator is to 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.

Guidelines for sodium hypochlorite, less than 30%:
RECOMMENDED (resistance to breakthrough longer than 8 hours): Butyl rubber, Natural rubber, Neoprene rubber, Nitrile rubber, Polyethylene, Polyvinyl chloride, Viton(TM), Silver Shield/4H(TM) (polyethylene/ethylene vinyl alcohol), Tychem(TM) SL (Saranex(TM)).

There is evidence that this material can cause serious skin injury (e.g. corrosion or absorption hazard).
Recommendations are NOT valid for very thin natural rubber, neoprene, nitrile and PVC gloves (0.3 mm or less).
Resistance of specific materials can vary from product to product. Breakthrough times are obtained under conditions of continuous contact, generally at room temperature. Evaluate resistance under conditions of use and maintain clothing carefully.

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

No specific guidelines are available. Contact chemical manufacturer/supplier for advice. Respiratory protection guidelines for chlorine gas are available.

NIOSH RECOMMENDATIONS FOR CHLORINE CONCENTRATIONS IN AIR:
Up to 5 ppm:
(\(\text{APF} = 10\)) Chemical cartridge respirator*; SAR*.

Up to 10 ppm:
(\(\text{APF} = 25\)) SAR operated in a continuous-flow mode;* Powered, air-purifying respirator with cartridge(s)*.

The respirator use limitations specified by the approving agency and the manufacturer must be observed. Recommendations apply only to NIOSH approved respirators. Air-purifying respirators do not protect against oxygen-deficient atmospheres.

A NIOSH-approved respirator suitable for chlorine is recommended. Where a higher level of protection is required, use a self-contained breathing apparatus.

### Thermal Hazards

Not Available

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### Section 09 - Physical and Chemical Properties

**Appearance**

<table>
<thead>
<tr>
<th>Physical State</th>
<th>Liquid</th>
</tr>
</thead>
</table>

[Image] CACD

**Responsibility Matters**
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Clear, greenish-yellow solution.</td>
</tr>
<tr>
<td>Odour</td>
<td>Strong chlorine odour.</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>Not Available</td>
</tr>
<tr>
<td>pH</td>
<td>12.6</td>
</tr>
<tr>
<td>Melting Point/Freezing Point</td>
<td>Not Available</td>
</tr>
<tr>
<td>Initial boiling Point and boiling range</td>
<td>Slowly decomposes above 40°C</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 Available</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 Available</td>
</tr>
<tr>
<td>Auto-ignition Temperature</td>
<td>Not Available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Slowly decomposes above 40°C</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not Available</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Pressure buildup in containers could result in an explosion when heated or in contact with acidic fumes. Vigorous reaction with oxidizable organic materials may result in a fire.</td>
</tr>
<tr>
<td>Specific Gravity (Water=1)</td>
<td>1.09</td>
</tr>
<tr>
<td>% Volatiles by Volume</td>
<td>Not Available</td>
</tr>
<tr>
<td>Formula</td>
<td>Not Available</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>Not Available</td>
</tr>
</tbody>
</table>

**Section 10 - Stability and Reactivity**

**Reactivity**

Sodium hypochlorite solutions decompose slowly at normal temperatures releasing low concentrations of corrosive chlorine gas. Decomposition is influenced by temperature, concentration, pH, ionic strength, exposure to light and the presence of metals, such as copper, nickel or cobalt, metal oxides, e.g. rust and other impurities, such as acids and amines. Hypochlorites react with urea to form nitrogen trichloride which explodes spontaneously in air.
### Chemical Stability

Unstable at temperatures above 40°C, in sunlight, and in contact with acid.

### Possibility of Hazardous Reactions

Hazardous polymerization will not occur. Reacts exothermically with acids. Reacts with ammonia, amines and ammonia salts to produce chloramines. Decomposes on heating to produce chlorine gas.

### Conditions to Avoid

Heat, sunlight, strong acids, the presence of metals and other impurities.

### Incompatible Materials

- PRIMARY AMINES: (e.g. ethylamine) and AROMATIC AMINES (e.g. aniline) - react to form explosively unstable N-mono- or di- chloramines.
- AMMONIUM SALTS: (e.g. ammonium sulfate and ammonium nitrate), AMMONIA, UREA or PHENYLACETONITRILE: - form explosive nitrogen trichloride, if acid is present.
- ACIDS: (especially hydrochloric acid) - contact releases corrosive chlorine gas.
- METALS: (especially copper, aluminum, nickel, and cobalt) - accelerate decomposition.
- REDUCING AGENTS: (e.g. hydrides, such as lithium aluminum hydride) - cause a violent reaction.
- ETHYLENEIMINE (AZIRIDINE): - form the explosive N-chloroethyleneimine.
- METHANOL: - can form explosive methyl hypochlorite, especially in the presence of acids or other etherification catalysts.
- FORMIC ACID: - becomes explosive at 55°C.
- FURFURALDEHYDE: - drop wise addition of the aldehyde to a 10% excess of sodium hypochlorite solution at 20-25°C can lead to a violent explosion.
- ETHANEDIOL (ETHYLENE GLYCOL): erupts violently after an induction period of about 4 to 8 minutes.
- SODIUM ETHYLENEDIAMINETETRACETATE (EDTA) SOLUTION and SODIUM HYDROXIDE SOLUTION: mixing the three solutions leads to vigorous foaming decomposition.

### Hazardous Decomposition Products

Chlorine (by reaction with acids), oxygen (by reaction with nickel, copper, tin, manganese, iron), sodium chloride, sodium chlorate, with increased temperature.

### Section 11 - Toxicological Information

#### Acute Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>Oral LD$_{50}$ (rat, undiluted)</th>
<th>Dermal LD$_{50}$ (rabbit, undiluted)</th>
<th>Inhalation LC$_{50}$ (rat, 4hr exposure, concentration not specified)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite</td>
<td>8910mg/kg</td>
<td>&gt;10,000mg/kg</td>
<td>&gt;5250mg/m$^3$</td>
</tr>
</tbody>
</table>

-7540mg/kg (female mouse, 50% solution )

#### Chronic Toxicity – Carcinogenicity

<table>
<thead>
<tr>
<th>Component</th>
<th>IARC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Hypochlorite</td>
<td>Group 3: Not classifiable as to its carcinogenicity to humans. [hypochlorite salts]</td>
</tr>
</tbody>
</table>
Skin Corrosion/Irritation

Very dilute solutions have caused negligible irritation, while more concentrated solutions have caused corrosive injury to skin and eyes.

Ingestion

Burning of the mouth and throat, abdominal cramps, nausea, vomiting, diarrhea, shock. May lead to convulsions, coma, and even death.

Inhalation

Irritant of the nose and throat, causing coughing, difficulty breathing, and pulmonary edema.

Serious Eye Damage/Irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

Respiratory or Skin Sensitization

Negative results (0/20 guinea pigs sensitized) have been obtained for 8% sodium hypochlorite solution in a skin sensitization test. Insufficient details are available to evaluate a report of a positive result (positive reactions in 2/10 animals) obtained using 6% sodium hypochlorite (pH 11.2) with the guinea pig ear swelling test for non-immunological contact urticaria.

Germ Cell Mutagenicity

The available information does not suggest that sodium hypochlorite is mutagenic.

Reproductive Toxicity

There is insufficient information available to draw conclusions.

STOT-Single Exposure

May cause respiratory irritation.

STOT-Repeated Exposure

Not Available

Aspiration Hazard

Prolonged or repeated overexposure causes lung damage.

Synergistic Materials

Not Available

Section 12 – Ecological Information

Ecotoxicity Component  | Toxicity to Algae  | Toxicity to Fish  | Toxicity to Daphnia and Other Aquatic Invertebrates |
------------------------|--------------------|-------------------|---------------------------------------------------|
Sodium Hypochlorite     | Not Available      | LC₅₀(Salmo gairdneri, 96hr): 0.172mg/L | LC₅₀(Daphnia magna, 96hr): 2.1mg/L |
                        |                    | LC₅₀(Ictalurus punctatus, 96hr): 0.156mg/L | LC₅₀(Gammarus fasciatus, 96hr): 4mg/L |
Biodegradability        | Not Available      |                   |                                                   |
Bioaccumulation          | No evidence to support any rating. |                   |                                                   |
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 Proper Shipping Name**
CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.

**Transport Hazard Class(es)**
8

**Packaging Group**
III

**Environmental Hazards**
Listed as a marine pollutant under Canadian TDG Regulations Schedule 1, Column 10.

**Transport in Bulk**
Not Available

**Special Precautions**
Not Available

**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.

**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**
February 3, 2015

**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 (CACD) 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 or technical service department.
References


24 Hour Emergency Number - All Locations – 1(306) 664-2522
Alternative - 1(800) 387-7503

End of Safety Data Sheet