SECTION 1: Identification

1.1. Identification

Product form : Mixture
Product name : HYPO-CHLOR® 0.52%
Product code : SDS VEL-126

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Disinfectant/Cleaning agent

1.3. Supplier

Veltek Associates, Inc.
15 Lee Blvd
Malvern, PA 19355-1234 USA
Telephone: +1 610-644-8335 - Fax: +1 610-644-8336
E-mail: vai@sterile.com

In Canada distributed by:
Canada Clean Room (CCR)
20 Cope Dr.
Kanata, ON K2M 2V8, Canada
Telephone: (888)595-8070

1.4. Emergency telephone number

Emergency number : CARECHEM 24: 1-215-207-0061
1-866-928-0789 (toll free)
Canada: 1-800-579-7421 (toll free)
Mexico: +52-55-5004-8763

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Corrosive to metals Category 1 H290 May be corrosive to metals
Hazardous to the aquatic environment - Acute Hazard Category 2 H401 Toxic to aquatic life
Hazardous to the aquatic environment - Chronic Hazard Category 3 H412 Harmful to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) : 

Signal word (GHS US) : Warning
Hazard statements (GHS US) : H290 - May be corrosive to metals
H401 - Toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (GHS US) : P234 - Keep only in original container.
P273 - Avoid release to the environment.
P390 - Absorb spillage to prevent material-damage.
P406 - Store in corrosive resistant container with a resistant inner liner.
P501 - Dispose of contents/container to an authorized waste collection point.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
</table>
| Sodium hypochlorite   | CAS-No.: 7681-52-9 | 0.40 - 0.65 | Met. Corr. 1, H290
|                       |                    |        | Skin Corr. 1B, H314                   |
|                       |                    |        | Eye Dam. 1, H318                       |
|                       |                    |        | STOT SE 3, H335                        |
|                       |                    |        | Aquatic Acute 1, H400 (M=10)           |
|                       |                    |        | Aquatic Chronic 1, H410                |

Full text of hazard classes and H-statements: see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Remove person to fresh air and keep at rest in a position comfortable for breathing. If symptoms develop obtain medical attention.
First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms develop, obtain medical attention.
First-aid measures after ingestion: Do NOT induce vomiting. Rinse mouth. Never give anything by mouth to an unconscious person. If symptoms develop, obtain medical attention.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after skin contact: Repeated and/or prolonged skin contact may cause irritation.
Symptoms/effects after eye contact: Slight eye irritant upon direct contact.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Not combustible. Use extinguishing media appropriate for surrounding fire.
HYPO-CHLOR® 0.52%
Safety Data Sheet

Unsuitable extinguishing media: None known.

5.2. Specific hazards arising from the chemical

Fire hazard: Not flammable.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions: Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.

Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures: Ventilate area. Avoid inhalation of vapors. Avoid contact with skin, eyes and clothing. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment: Use personal protective equipment as required. See Section 8.

Emergency procedures: Ventilate area. Avoid inhalation of vapors. Avoid contact with skin, eyes and clothing.

6.2. Environmental precautions

Do not allow to enter drains or water courses. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store in corrosive resistant container with a resistant inner liner. Store away from other materials.

6.4. Reference to other sections

SECTION 8: Exposure controls/personal protection. SECTION 13: Disposal considerations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Provide adequate ventilation. Avoid inhalation of vapors. Avoid contact with skin, eyes and clothing.

Hygiene measures: Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures: Comply with applicable regulations.

Storage conditions: Keep only in the original container in a cool, well ventilated place away from: acids. Store in corrosive resistant container with a resistant inner liner. Keep container closed when not in use.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls: Provide adequate ventilation.
Environmental exposure controls: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:
Avoid all unnecessary exposure.

Hand protection:
Wear chemically resistant protective gloves. The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed. Gloves should be removed and replaced if there are any signs of degradation or breakthrough.

Eye protection:
Wear goggles or safety glasses with side shields if contact with the eyes is possible

Skin and body protection:
Long-sleeved protective clothing

Respiratory protection:
Not required for normal conditions of use

Thermal hazard protection:
Not required for normal conditions of use.

Other information:
Do not eat, drink or smoke during use. Handle in accordance with good industrial hygiene and safety procedures.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Colorless to slightly yellow.</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless to slightly yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>Chlorine</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>10.5 – 12.4</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>212 °F (100 °C)</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>1 – 1.07 (Water = 1)</td>
</tr>
<tr>
<td>Solubility</td>
<td>Water: Miscible</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>
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9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under recommended handling and storage conditions (see section 7).

10.2. Chemical stability
Slowly decomposes on contact with air.

10.3. Possibility of hazardous reactions
May produce small amounts of chlorine gas if mixed with incompatible materials.

10.4. Conditions to avoid
Extremely high or low temperatures.

10.5. Incompatible materials

10.6. Hazardous decomposition products
May produce small amounts of chlorine gas if mixed with incompatible materials.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

<table>
<thead>
<tr>
<th>Acute toxicity (oral)</th>
<th>Not classified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

**Sodium hypochlorite (7681-52-9)**

<table>
<thead>
<tr>
<th>LD50 oral, rat</th>
<th>8830 mg/kg (12.5% Aqueous solution)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 dermal, rabbit</td>
<td>&gt; 20000 mg/kg (12.5% Aqueous solution)</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: Not classified

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

Reproductive toxicity: Not classified

STOT-single exposure: Not classified
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according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

**Sodium hypochlorite (7681-52-9)**

<table>
<thead>
<tr>
<th>STOT-single exposure</th>
<th>May cause respiratory irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>STOT-repeated exposure</td>
<td>Not classified</td>
</tr>
<tr>
<td>Aspiration hazard</td>
<td>Not classified</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Symptoms/effects after skin contact</td>
<td>Repeated and/or prolonged skin contact may cause irritation.</td>
</tr>
<tr>
<td>Symptoms/effects after eye contact</td>
<td>Slight eye irritant upon direct contact.</td>
</tr>
</tbody>
</table>

**SECTION 12: Ecological information**

12.1. Toxicity

Ecology - general : Toxic to aquatic life. Harmful to aquatic life with long lasting effects.

<table>
<thead>
<tr>
<th>Sodium hypochlorite (7681-52-9)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish</td>
</tr>
<tr>
<td>EC50 Daphnia</td>
</tr>
<tr>
<td>LC50 fish 2</td>
</tr>
<tr>
<td>EC50 - Crustacea [2]</td>
</tr>
<tr>
<td>ErC50 algae</td>
</tr>
<tr>
<td>NOEC chronic fish</td>
</tr>
<tr>
<td>NOEC chronic crustacea</td>
</tr>
</tbody>
</table>

12.2. Persistence and degradability

Sodium hypochlorite (7681-52-9) : Not relevant for inorganic substances.

12.3. Bioaccumulative potential

Sodium hypochlorite (7681-52-9) : Log Pow -3.42 (20 °C, pH 12.5, Quantitative structure-activity relationship (QSAR))

12.4. Mobility in soil

**HYPO-CHLOR® 0.52%**

Ecology - soil : Miscible with water.

Sodium hypochlorite (7681-52-9) : Miscible with water.

12.5. Other adverse effects

Other information : Avoid release to the environment.

**SECTION 13: Disposal considerations**

13.1. Disposal methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
SECTION 14: Transport information

In accordance with Department of Transport / Transportation of Dangerous Goods / IMDG / IATA

14.1. UN number

DOT NA No : UN1791
UN-No. (TDG) : UN1791
UN-No. (IMDG) : 1791
UN-No. (IATA) : 1791

14.2. UN proper shipping name

Proper Shipping Name (DOT) : Hypochlorite solutions
Proper Shipping Name (TDG) : HYPOCHLORITE SOLUTION
Proper Shipping Name (IMDG) : HYPOCHLORITE SOLUTION
Proper Shipping Name (IATA) : Hypochlorite solution

Transport document description (DOT) : UN1791 Hypochlorite solutions, 8, III
Transport document description (TDG) : UN1791 HYPOCHLORITE SOLUTION, 8, III
Transport document description (IMDG) : UN 1791 HYPOCHLORITE SOLUTION, 8, III
Transport document description (IATA) : UN 1791 Hypochlorite solution, 8, III

14.3. Transport hazard class(es)

DOT
Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8

TDG
Transport hazard class(es) (TDG) : 8
Hazard labels (TDG) : 8

IMDG
Transport hazard class(es) (IMDG) : 8
Hazard labels (IMDG) : 8

IATA
Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8
**HYPO-CHLOR® 0.52%**

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14.4. Packing group

<table>
<thead>
<tr>
<th>Packing group (DOT)</th>
<th>III</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packing group (TDG)</td>
<td>III</td>
</tr>
<tr>
<td>Packing group (IMDG)</td>
<td>III</td>
</tr>
<tr>
<td>Packing group (IATA)</td>
<td>III</td>
</tr>
</tbody>
</table>

14.5. Environmental hazards

Other information : No supplementary information available.

14.6. Special precautions for user

**DOT**

<table>
<thead>
<tr>
<th>UN-No.(DOT)</th>
<th>UN1791</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Special Provisions (49 CFR 172.102)</td>
<td>386, IB3, N34, T4, TP2, TP24</td>
</tr>
<tr>
<td>DOT Packaging Exceptions (49 CFR 173.xxx)</td>
<td>154</td>
</tr>
<tr>
<td>DOT Packaging Non Bulk (49 CFR 173.xxx)</td>
<td>203</td>
</tr>
<tr>
<td>DOT Packaging Bulk (49 CFR 173.xxx)</td>
<td>241</td>
</tr>
<tr>
<td>DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)</td>
<td>5 L</td>
</tr>
<tr>
<td>DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)</td>
<td>60 L</td>
</tr>
<tr>
<td>DOT Vessel Stowage Location</td>
<td>B</td>
</tr>
<tr>
<td>DOT Vessel Stowage Other</td>
<td>26</td>
</tr>
</tbody>
</table>

**TDG**

<table>
<thead>
<tr>
<th>UN-No. (TDG)</th>
<th>UN1791</th>
</tr>
</thead>
<tbody>
<tr>
<td>Explosive Limit and Limited Quantity Index</td>
<td>5 L</td>
</tr>
<tr>
<td>Excepted quantities (TDG)</td>
<td>E1</td>
</tr>
<tr>
<td>Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index</td>
<td>5 L</td>
</tr>
<tr>
<td>Emergency Response Guide (ERG) Number</td>
<td>154</td>
</tr>
</tbody>
</table>

**IMDG**

No data available

**IATA**

No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

**HYPO-CHLOR® 0.52%**

This chemical is a pesticide product registered by the United States Environmental Protection Agency (Registration no. 68959-6) and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets (SDS), and for workplace labels of non-pesticide chemicals. The hazard information required on the pesticide label is: WARNING/AVERTISSEMENT/ADVERTENCIA. The pesticide label also includes other important information, including directions for use.
## HYPO-CHLOR® 0.52%

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<table>
<thead>
<tr>
<th>HYPO-CHLOR® 0.52%</th>
</tr>
</thead>
<tbody>
<tr>
<td>SARA Section 311/312 Hazard Classes</td>
</tr>
</tbody>
</table>

### Sodium hypochlorite (7681-52-9)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

| CERCLA RQ | 100 lb |

### 15.2. International regulations

#### CANADA

**HYPO-CHLOR® 0.52%**

In Canada, this product is a drug product registered with Health Canada. Canada DIN #02360217.

### 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

<table>
<thead>
<tr>
<th>Component</th>
<th>State or local regulations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium hypochlorite (7681-52-9)</td>
<td>U.S. - Massachusetts - Right To Know List; U.S. - New Jersey - Right to Know Hazardous Substance List; U.S. - Pennsylvania - RTK (Right to Know) List</td>
</tr>
</tbody>
</table>

### SECTION 16: Other information

Revision date : 09/16/2021
Other information : None.

### Full text of H-phrases

- **H290** May be corrosive to metals
- **H314** Causes severe skin burns and eye damage
- **H318** Causes serious eye damage
- **H335** May cause respiratory irritation
- **H400** Very toxic to aquatic life
- **H401** Toxic to aquatic life
- **H410** Very toxic to aquatic life with long lasting effects
- **H412** Harmful to aquatic life with long lasting effects
Abbreviations and acronyms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH</td>
<td>American Conference of Government Industrial Hygienists</td>
</tr>
<tr>
<td>CAS</td>
<td>Chemical Abstracts Service number</td>
</tr>
<tr>
<td>EC50</td>
<td>Effective Concentration 50%</td>
</tr>
<tr>
<td>IARC</td>
<td>International Agency for Research on Cancer</td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods Code</td>
</tr>
<tr>
<td>IMO</td>
<td>International Maritime Organisation</td>
</tr>
<tr>
<td>LC50</td>
<td>Lethal Concentration 50%</td>
</tr>
<tr>
<td>LD50</td>
<td>Lethal Dose 50%</td>
</tr>
<tr>
<td>NOEC</td>
<td>No Observed Effect Concentration</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Co-operation and Development</td>
</tr>
<tr>
<td>OSHA</td>
<td>Occupational Safety and Health Administration (US)</td>
</tr>
<tr>
<td>STEL</td>
<td>Short Term Exposure Limit</td>
</tr>
<tr>
<td>TSCA</td>
<td>Toxic Substances Control Act (US)</td>
</tr>
<tr>
<td>TWA</td>
<td>Time Weighted Average</td>
</tr>
<tr>
<td>UNxxxx</td>
<td>Number assigned by the United Nations Committee of Experts on the Transport of Dangerous Goods</td>
</tr>
</tbody>
</table>

NFPA health hazard: 1 - Materials that, under emergency conditions, can cause significant irritation.

NFPA fire hazard: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.

NFPA reactivity: 1 - Materials that in themselves are normally stable but can become unstable at elevated temperatures and pressures.

Hazard Rating

Health: 1 Slight Hazard - Irritation or minor reversible injury possible

Flammability: 0 Minimal Hazard - Materials that will not burn

Physical: 1 Slight Hazard - Materials that are normally stable but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.

Indication of changes:

<table>
<thead>
<tr>
<th>Section</th>
<th>Changed item</th>
<th>Change</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Hazards identification</td>
<td>Modified</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Fire fighting measures</td>
<td>Modified</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Accidental release measures</td>
<td>Modified</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Handling and storage</td>
<td>Modified</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Physical and chemical properties</td>
<td>Modified</td>
<td></td>
</tr>
</tbody>
</table>
Safety Data Sheet (SDS), USA

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This SDS has been translated into the official language of the country/region in which the product is to be placed on the market. Where no official translation exists, the regulatory text is reported in English, as it appears in the relevant regulatory text.