Material Safety Data Sheet

1. Product and company identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>ZOCHLOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of issue</td>
<td>2015-05-05</td>
</tr>
<tr>
<td>Supplier</td>
<td>Wood Wyant</td>
</tr>
<tr>
<td>Manufacturer</td>
<td>Wood Wyant</td>
</tr>
<tr>
<td>Code</td>
<td>90-12300</td>
</tr>
<tr>
<td>Material uses</td>
<td>Industrial applications: Sanitizer.</td>
</tr>
</tbody>
</table>

In case of emergency

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)

2. Hazards identification

Potential hazards described in this section are not expected when manufacturer’s direction for use and proper security measures are observed.

Physical state: Solid. Odor: Chlorine [Strong]

**WARNING!**

Inhalation: Toxic by inhalation. Severely irritating to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion: Harmful if swallowed.

Skin: Severely irritating to the skin.

Eyes: Severely irritating to eyes. Risk of serious damage to eyes.

Potential acute health effects

Inhalation: Severe irritation to the respiratory system. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion: Harmful if swallowed.

Skin: Severely irritating to the skin.

Eyes: Severely irritating to eyes. Risk of serious damage to eyes.

See toxicological information (Section 11) for more details.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>% (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid sodium salt</td>
<td>2893-78-9</td>
<td>60 - 100</td>
</tr>
</tbody>
</table>

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.

4. First aid measures

**Eye contact**

Check for and remove any contact lenses. Flush eyes with water, occasionally lifting the upper and lower eyelids. Get medical attention if irritation persist or if symptoms develops.

**Skin contact**

In case of contact, flush with water. Get medical attention if irritation develops.

**Inhalation**

There are no specific inhalation hazard associated with this product when directions for uses are followed. No specific measures required.

**Ingestion**

Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

**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.

5. Fire-fighting measures

**Flammability of the product**

Strong oxidizing agent. Contact with combustible material may cause fire.

**Extinguishing media**

Suitable: Do not use water jet. Use flooding quantities of water. Do not use dry chemical extinguishers containing ammonium compounds. May react explosively with calcium hypochlorite in the presence of water.

Not suitable: Do not use water, do not use dry chemical extinguishers containing ammonium compounds.

**Special exposure hazards**

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.

DIN 00764914

2016-03-24
5. Fire-fighting measures

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

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.

Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes. May reacts explosively with calcium hypochlorite in the presence of water.

Special remarks on fire hazards: Contact with small amounts of water may result in an exothermic reaction with the liberation of toxic fumes. May reacts explosively with calcium hypochlorite in the presence of water.

6. Accidental release measures

Personal precautions: 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. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

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 for cleaning up:
- Small spill: Move containers from spill area. Avoid dust generation. Do not dry sweep. Place spilled material in a designated, labeled waste container. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.
- Large spill: Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

7. Handling and storage

Handling: Suggested personal protection equipment should be worn at all time when handling the product. Handle in accordance with manufacturer directions for uses. Avoid contact with eye or skin.

Storage: Store product in a dry, cool ventilated area. Protect from freezing. Keep out of reach of children.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Ingredient | List name | TWA (8 hours) | STEL (15 mins) | Ceiling |
--- | --- | --- | --- | --- |
No exposure limit value known. | | | | |

Recommended monitoring procedures: No specific monitoring procedures required.

Engineering measures: General room ventilation is adequate for the use of the product. No additional ventilation is required.

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.

Personal protection
- Respiratory: No specific respiratory protection required.
- Hands: It is suggested to wear chemical impervious gloves when handling or using the product.
- Eyes: It is suggested to wear safety glasses when handling or using the product.
- Skin: No specific measure required.

Personal protective equipment (Pictograms):

9. Physical and chemical properties

Physical state: Solid.

Molecular formula: Not applicable.

Molecular weight: Not applicable.

Flammable limits: Not available.

Flammable limits: Not available.

Burning rate: Not available.

Burning time: Not available.

Critical temperature: Not available.

Auto-ignition temperature: Not available.

Flash point: [Product does not sustain combustion.]

Boiling/condensation point: Not available.

Solubility: Not available.

Melting/freezing point: Not available.

Flash point: [Product does not sustain combustion.]
### Stability and Reactivity

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

**Conditions to avoid**
- STRONG OXIDIZER. CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE. Keep away from water.

**Materials to avoid**
  - Avoid materials like: nitrogen containing materials, oils, grease, sawdust, dry fire extinguishers containing monoammonium compounds.

**Hazardous decomposition products**
- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Possibility of hazardous reactions**
- Hazardous reactions or instability may occur under certain conditions of storage or use.

### Toxicological Information

**Potential chronic health effects**

**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.

**Target organs**
- Contains material which may cause damage to the following organs: mucous membranes, upper respiratory tract, skin, eyes.

**Over-exposure signs/symptoms**

- Inhalation: Adverse symptoms may include the following:
  - Respiratory tract irritation
  - Coughing

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

- Skin: Adverse symptoms may include the following:
  - Irritation
  - Redness

- Eyes: Adverse symptoms may include the following:
  - Pain or irritation
  - Watering

**Medical conditions aggravated by over-exposure**
- Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

**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>Dichloroisocyanuric acid sodium salt</td>
<td>LC50 Inhalation Dists and mists</td>
<td>Rat</td>
<td>847.5 mg/m³</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1420 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>Dichloroisocyanuric acid sodium salt</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 10 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Carcinogenicity Classification**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>EPA</th>
<th>NIOSH</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid sodium salt</td>
<td>-</td>
<td>4</td>
<td>E</td>
<td>-</td>
<td>-</td>
<td>None.</td>
</tr>
</tbody>
</table>

### Ecological Information

**Ecotoxicity**
- Do not contaminate water by cleaning of equipment or disposal of wastes. Toxic to aquatic organisms. When used according to the label instructions, hazards to non-target plants and aquatic organisms are very low.

**Aquatic ecotoxicity**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Exposure</th>
<th>Species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dichloroisocyanuric acid sodium salt</td>
<td>US EPA</td>
<td>Acute EC50 0.11 ppm Fresh water</td>
<td>48 hours</td>
<td>Daphnia - Water flea - Daphnia magna</td>
</tr>
<tr>
<td></td>
<td>US EPA</td>
<td>Acute LC50 0.217 ppm Fresh water</td>
<td>96 hours</td>
<td>Fish - Rainbow trout, donaldson trout - Oncorhynchus mykiss</td>
</tr>
</tbody>
</table>

**Toxicity of the products of biodegradation**
- The products of biodegradation are less toxic than the original product.
13. Disposal considerations

Waste disposal : Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Classes</th>
<th>PG*</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
<td>2465</td>
<td>UN2465 DICHLOROISOCYANURIC ACID DRY (Dichloroisocyanuric acid sodium salt)</td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TDG Classification</td>
<td>2465</td>
<td>UN2465 DICHLOROISOCYANURIC ACID DRY (Dichloroisocyanuric acid sodium salt)</td>
<td>5.1</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

PG*: Packing group

15. Regulatory information

United States inventory (TSCA 8b): All components are listed or exempted.

WHMIS (Canada):
- Class C: Oxidizing material.
- Class D-1B: Material causing immediate and serious toxic effects (Toxic).
- Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists:
- CEPA Toxic substances: None of the components are listed.
- Canadian ARET: None of the components are listed.
- Canadian NPRI: None of the components are listed.
- Alberta Designated Substances: None of the components are listed.
- Ontario Designated Substances: None of the components are listed.
- Quebec Designated Substances: None of the components are listed.

Canada inventory:
- At least one component is not listed.

Other certification:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information on the product

Label requirements: HARMFUL IF INHALED. CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED.

References:
- Manufacturer's Material Safety Data Sheet.
- MSDS prepared by: QA and Documentation Department
- Wood Wyant A division of Sani-Marc Group
- 42, rue de l'Artisan
- Victoriaville, Québec
- G6P 7E3

Date of printing (YYYY-MM-DD): 2016-03-24
Date of issue (YYYY-MM-DD): 2015-05-05

Note: MSDS are valid for a 3 years period after the date of issue

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)

Notice to reader

There are potential hazards to people and goods associated with the use of this product which are detailed in the present Material Safety Data Sheet (MSDS) of this product. The manufacturer, distributors and suppliers of this product are exonerating themselves and consequently shall not be liable for any prejudice or damage of any kind, resulting from the use of this product which may not be in accordance with the directions for use or all the instructions provided in the present Material Safety Data Sheet (MSDS) or resulting from an unadvised use of the present product.

Emergency phone: CANUTEC (613) 996-6666 (Collect calls accepted)