Material Safety Data Sheet

<table>
<thead>
<tr>
<th>WHMIS</th>
<th>TDG Road/Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image.png" alt="Image" /></td>
<td></td>
</tr>
</tbody>
</table>

### 1. Product and company identification

<table>
<thead>
<tr>
<th>Product name</th>
<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>PH +</td>
<td>30-13190</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date of issue (yyyy/mm/dd)</th>
<th>Material uses</th>
<th>Manufacturer</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014-12-09</td>
<td>Consumer products: Pool &amp; Spa water treatment product</td>
<td>Manufactured for: Clearwater C.P. 25 Victoriaville, Quebec G6P 6S4</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. [Solid powder.]

**Odor**: Odorless.

**Emergency overview**: Slightly irritating to the eyes and skin. Avoid contact with eyes. Avoid prolonged or repeated contact with skin. Wash thoroughly after handling.

**Routes of entry**: Dermal contact. Eye contact. Inhalation. Ingestion.

**Potential acute health effects**

- **Inhalation**: No known significant effects or critical hazards.
- **Ingestion**: No known significant effects or critical hazards.
- **Skin**: Slightly irritating to the skin.
- **Eyes**: Slightly irritating to the 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>sodium carbonate</td>
<td>497-19-8</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. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

**Skin contact**: In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

**Inhalation**: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or wristband. Get medical attention immediately.

**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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

### 5. Fire-fighting measures

**Flammability of the product**: No specific fire or explosion hazard.

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

**Suitable**: None.

**Not suitable**: None known.

**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.

**Hazardous thermal decomposition products**: Decomposition products may include the following materials: carbon dioxide, carbon monoxide, 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.

2014-12-09.
5. Fire-fighting measures

No action shall be taken involving any personal risk or without suitable training. 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. 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.

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).

7. Handling and storage

Handling: Put on suggested personal protective equipment when handling the product. Avoid contact with skin and eyes. Do not ingest. This product is formulated for commercial, institutional and industrial uses only.

Storage: Store in cool ventilated place. Keep container tightly closed when product is stored. Protect from freezing. Keep out of reach of children.

8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

Engineering measures: General room ventilation is adequate for the use of this product.

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 protective equipment suggested.

Hands: It is suggested to use chemical imprevious protective gloves when using this product.

Eyes: It is suggested to wear safety glasses when handling or using chemical products.

Skin: 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.

9. Physical and chemical properties

Physical state: Solid. [Solid powder.]

Molecular formula: Not applicable.

Flammable limits: Not available.

Color: White.

Molecular weight: Not applicable.

Burning rate: Not available.

Odor: Odorless.

Vapor pressure: Not available.

Burning time: Not available.

Relative density: 2.53

Vapor density: Not available.

Critical temperature: Not available.

pH: 11 [Conc. (% w/w): 1%]

Volatility: Not available.

Auto-ignition temperature: Not available.

Viscosity: Not available.

Evaporation rate: Not available.

Flash point: [Product does not sustain combustion.]

Odor threshold: Not available.

Ionicity (in water): Not available.

Dispersibility properties: Not available.

Solubility: Soluble in the following materials: cold water and hot water. Insoluble in the following materials: methanol.

Melting/freezing point: 854°C (1569.2°F)

Boiling/condensation point: Not available.

10. Stability and reactivity

Chemical stability: The product is stable.

Conditions to avoid: No specific data.

Materials to avoid: No specific data.

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

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

The symptoms, hazards and situations described in this section are not expected when manufacturer’s direction for use, proper security measures and given professional exposure limits are correctly followed.

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: upper respiratory tract, central nervous system (CNS).

Over-exposure signs/symptoms

Inhalation: Not a usual way of absorption
Ingestion: No specific data.
Skin: Adverse symptoms may include the following:
  - irritation
  - redness
Eyes: Adverse symptoms may include the following:
  - irritation
  - watering
  - redness

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>sodium carbonate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>4090 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 carbonate</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>0.5 minutes 100</td>
<td>milligrams</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100</td>
<td>milligrams</td>
</tr>
<tr>
<td></td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>50 milligrams</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500</td>
<td>milligrams</td>
</tr>
</tbody>
</table>

12. Ecological information

Ecotoxicity: No known significant effects or critical hazards.

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>sodium carbonate</td>
<td>-</td>
<td>Acute EC50 242000 µg/l</td>
<td>Fresh</td>
<td>Algae - Diatom -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fresh water</td>
<td>96 hours</td>
<td>Navicula seminulum</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>Acute LC50 176000 µg/l</td>
<td>Fresh</td>
<td>Crustaceans - Scud</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fresh water</td>
<td>48 hours</td>
<td>Order - Amphipoda</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>Acute LC50 265000 µg/l</td>
<td>Fresh</td>
<td>Daphnia - Water flea</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fresh water</td>
<td>48 hours</td>
<td>Daphnia magna</td>
</tr>
<tr>
<td></td>
<td>-</td>
<td>Acute LC50 300000 µg/l</td>
<td>Fresh</td>
<td>Fish - Bluegill -</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fresh water</td>
<td>96 hours</td>
<td>Lepomis macrochirus</td>
</tr>
</tbody>
</table>

13. Disposal considerations

Waste disposal: 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.

Waste stream: Not available.
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>Not regulated.</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>TDG Classification</td>
<td>Not regulated.</td>
<td>-</td>
<td>-</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): Not controlled under WHMIS (Canada).
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.

Canadian 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: MAY CAUSE EYE AND SKIN IRRITATION.

Date of printing (YYYY-MM-DD): 2014-12-09.
Date of issue (YYYY-MM-DD): 2014-12-09.
Note: MSDS are valid for a 3 years period after the date of issue.

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). To minimize potential hazards associated with this product it is of users responsibility to conform the directions for use and all other instructions provided in the 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.