Aquamira Water Treatment Part A
Safety Data Sheet
Date of issue: 02/08/2016 Revision date: 02/08/2016 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product name: Aquamira Water Treatment Part A
Product code: 67202 & 67203
EPA Reg. No.: 71766-1

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: A 2% Aqueous Solution of Chlorine Dioxide for Use in controlling the Build-Up of Slime in water storage containers. Kills Odor-Causing Bacteria and Enhances the Taste of Stored Potable Water

1.3. Details of the supplier of the safety data sheet
Aquamira Technologies, Inc
917 West 600 North
Logan, UT 84321
T 360-306-5586

1.4. Emergency telephone number
Emergency number: ChemTel (800) 255-3924

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
GHS-US classification
Skin Irritation 2
Eye Irritation 2A

2.2. Label elements
GHS-US labelling
Hazard pictograms (GHS-US):

![GHS07]

Signal word (GHS-US): Warning
Hazard statements (GHS-US): Causes skin irritation. Causes serious eye irritation.
Precautionary statements (GHS-US): Wash hands thoroughly after handling. Wear protective gloves/eye protection/face protection. If on skin: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

2.3. Other hazards
Other hazards not contributing to the classification: In contact with Aquamira Water Treatment Part B, releases gases which are fatal if inhaled.

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/information on ingredients

3.1. Substance
Not applicable

3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlorine dioxide</td>
<td>(CAS No) 10049-04-4</td>
<td>1 – 2.5</td>
</tr>
</tbody>
</table>

* The exact percentage (concentration) of composition has been withheld as a trade secret in accordance with paragraph (i) of §1910.1200.
Aquamira Water Treatment Part A
Safety Data Sheet


SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation: If inhaled and if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

First-aid measures after skin contact: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

First-aid measures after eye contact: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses if present after the first 5 minutes then continue rinsing eye. Call a poison control center or doctor for treatment advice.

First-aid measures after ingestion: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation: May cause respiratory tract irritation. In contact with Aquamira Water Treatment Part B, releases gases which are fatal if inhaled.

Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Symptoms/injuries after ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may not appear immediately. In case of accident or if you feel unwell, seek medical advice immediately (show the label or SDS where possible). Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 5: Firefighting measures

5.1. Extinguishing media


Unsuitable extinguishing media: None known.

5.2. Special hazards arising from the substance or mixture

Fire hazard: Products of combustion may include, and are not limited to: oxides of carbon, hydrogen chloride and traces of other toxic gases cannot be excluded.

5.3. Advice for firefighters

Protection during firefighting: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.2. Methods and material for containment and cleaning up

For containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for cleaning up: Scoop up material and place in a disposal container.

6.3. Reference to other sections

See section 8 for further information on protective clothing and equipment and section 13 for advice on waste disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Do not get in eyes, on skin, or on clothing. Do not swallow. Do not breathe dust/fume/gas/mist/vapors/spray. Handle and open container with care. Do not eat, drink or smoke when using this product. Non-refillable container. Do not reuse or refill this container. Do not mix with Aquamira Water Treatment Part B until all relevant instructions have been read and understood. See main packaging for storage and disposal directions.

Hygiene measures: Launder contaminated clothing before reuse. Wash hands before eating, drinking, or smoking.
7.2. Conditions for safe storage, including any incompatibilities

Storage conditions: Water container should be sufficiently sealed to prevent outside contamination and direct sunlight if water is to be stored for a long period of time. If proper precautions are not taken, additional treatments may be necessary. For best results, cap Aquamira® Water Treatment bottles tightly and store away from heat and sunlight. Contact with extreme heat or extended direct sunlight will reduce the effectiveness of Aquamira® Water Treatment.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th>Chlorine dioxide (10049-04-4)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ACGIH ACGIH TWA (ppm)</td>
<td>0.1 ppm</td>
</tr>
<tr>
<td>ACGIH ACGIH STEL (ppm)</td>
<td>0.3 ppm</td>
</tr>
<tr>
<td>OSHA OSHA PEL (TWA) (mg/m³)</td>
<td>0.3 mg/m³</td>
</tr>
<tr>
<td>OSHA OSHA PEL (TWA) (ppm)</td>
<td>0.1 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection: Wear suitable gloves.

Eye protection: Safety glasses with side shields.

Skin and body protection: None necessary under normal conditions of use. Wear suitable protective clothing.

Respiratory protection: In case of insufficient ventilation, wear suitable respiratory equipment. 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.

Environmental exposure controls: Maintain levels below Community environmental protection thresholds.

Other information: Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Physical state</th>
<th>Liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Clear</td>
</tr>
<tr>
<td>Colour</td>
<td>Light green</td>
</tr>
<tr>
<td>Odour</td>
<td>Chlorine-like</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>3.5 - 6</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</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>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not flammable</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>23 hPa</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not Determined</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>1 g/cm³</td>
</tr>
<tr>
<td>Solubility</td>
<td>Fully miscible</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Viscosity: No data available
Viscosity, kinematic: No data available
Viscosity, dynamic: No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No dangerous reaction known under conditions of normal use.

10.2. Chemical stability
Stable under normal storage conditions.

10.3. Possibility of hazardous reactions
No dangerous reaction known under conditions of normal use. In contact with Aquamira Water Treatment Part B, releases gases which are fatal if inhaled.

10.4. Conditions to avoid
Heat. Incompatible materials.

10.5. Incompatible materials
Stabilized chlorine dioxide is a strong oxidizing agent. Do not mix with any other chemicals.

10.6. Hazardous decomposition products
May include, and are not limited to: oxides of carbon, hydrogen chloride and traces of other toxic gases cannot be excluded.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity: Not classified.

<table>
<thead>
<tr>
<th>Aquamira Water Treatment Part A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>&gt; 2000 mg/kg</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>No data available</td>
</tr>
<tr>
<td>LC50 inhalation rat</td>
<td>No data available</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chlorine dioxide (10049-04-4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation: Causes skin irritation.
Serious eye damage/irritation: Causes serious eye irritation.
Respiratory or skin sensitisation: Based on available data, the classification criteria are not met
Germ cell mutagenicity: Based on available data, the classification criteria are not met
Carcinogenicity: Based on available data, the classification criteria are not met
Reproductive toxicity: Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met
Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met
Aspiration hazard: Based on available data, the classification criteria are not met

Symptoms/injuries after inhalation: May cause respiratory tract irritation.
Symptoms/injuries after skin contact: Causes skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the skin.
Symptoms/injuries after eye contact: Causes serious eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.
Symptoms/injuries after ingestion: May be harmful if swallowed. May cause stomach distress, nausea or vomiting.

SECTION 12: Ecological information

12.1. Toxicity
Ecology - general: This product is toxic to fish and aquatic organisms.

12.2. Persistence and degradability

<table>
<thead>
<tr>
<th>Aquamira Water Treatment Part A</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persistence and degradability</td>
<td>Not established.</td>
</tr>
</tbody>
</table>
12.3. Bioaccumulative potential

Aquamira Water Treatment Part A

Bioaccumulative potential: Not established.

12.4. Mobility in soil

No additional information available.

12.5. Other adverse effects

Effect on the global warming: No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations: Do not contaminate water, food or feed by storage or disposal. Wastes resulting from the use of this product may be disposed of onsite or at an approved waste disposal facility. Non-refillable container Do not reuse or refill this container. If empty place in trash or offer for recycling if available. If partly filled call your local solid waste agency for disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

Department of Transportation (DOT)

No data available.

Additional information

Other information: No supplementary information available.

Special transport precautions: Do not handle until all safety precautions have been read and understood.

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Chlorine dioxide (10049-04-4)

Subject to reporting requirements of United States SARA Section 313

SARA Section 313 - Emission Reporting 1.0 %

Labeling requirements under FIFRA

This chemical is a pesticide product registered by the Environmental Protection Agency 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 and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION:
Causes moderate eye irritation.
Harmful if swallowed or absorbed through the skin.
Avoid direct contact with skin, eyes or clothing.
Wash thoroughly with soap and water after handling.

(If container size is 5 gallons or greater use the following statements)
This product is toxic to fish and aquatic organisms Do not discharge effluent containing this product into lakes streams ponds estuaries oceans or public water unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge Do not discharge effluent containing this product to sewer systems without previously notifying the sewage treatment plant authority For guidance contact your State Water Board or Regional Office of the EPA

(If the container size is less than 5 gallons use the following statement)
This product is toxic to fish and aquatic organisms

Stabilized chlorine dioxide is a strong oxidizing agent. Do not mix with any other chemicals.

15.2. US State regulations

Aquamira Water Treatment Part A

State or local regulations: This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.
Disclaimer: We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind. The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user’s responsibility to satisfy oneself as to the suitability and completeness of this information for the user’s own particular use.