



# Safety Data Sheet

## CS-4111P Closed System Treatment

### Section 1 Identification

**Trade Name:** CS-4111P Closed System Treatment **Date Prepared:** 11/18/2015  
**Product Identification:** GLA-CS4111P  
**Synonyms:** None **CAS No:** Mixture

**Product Use Description:**  
Industrial Water Treatment

#### Details of the supplier of the safety data sheet

G.L.A Water Inc.  
17802 Rapids Road  
HIRAM, OH 44234 US

**Phone:** (440) 834-8435

**website:** [www.glawater.com](http://www.glawater.com)

#### Emergency telephone number

Infotrac (800) 535-5053 (US & Canada)  
(352) 323-3500

### Section 2 Hazards Identification

#### GHS Classification:

Oxidizing Solid Category 2  
Acute Toxicity Oral Category 3  
Skin Corrosion/Irritation Category 2  
Serious Eye Damage/Irritation Category 2A  
Reproductive Toxicity Category 2  
Aquatic Toxicity Acute Category 1

#### GHS Labels:



Oxidizing      Irritant      Environmental H Health Hazard      Toxic

**Signal Word:** Danger

#### Hazard Statements:

**H272** May intensify fire  
**H301** Toxic if swallowed  
**H315** Causes skin irritation  
**H318** Causes serious eye damage  
**H361** Suspected of damaging fertility or the unborn child  
**H410** Very toxic to aquatic life with long lasting effects

#### Precautionary Statements:

##### Prevention

**P201** Obtain special instructions before use.  
**P202** Do not handle until all safety precautions have been read and understood.  
**P210** Keep away from open flames. No smoking.  
**P220** Store away from incompatible combustible materials.  
**P264** Wash skin thoroughly after handling.  
**P270** Do not eat, drink or smoke when using this product.  
**P273** Avoid release to the environment.



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**P280** Wear protective gloves, protective clothing and eye protection or face protection.

### Response

**P301 + P310** IF SWALLOWED: Immediately call a POISON CENTER or physician.

**P302 + P352** IF ON SKIN: wash with plenty of soap and water.

**P305 + P351 + P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P308 + P313** IF exposed or concerned: Get medical attention.

**P332 + P313** IF SKIN irritation occurs: Get medical attention.

**P337 + P313** IF eye irritation persists: Get medical attention.

**P391** Collect spillage.

### Storage

**P405** Store locked up.

### Disposal

**P501** Dispose of contents/container to an approved waste disposal plant.

### Hazards Not Otherwise Classified (HNOC):

None.

### Additional Information:

None.

## Section 3 Composition

Chemical Name	Common Name/Synonym	CAS #	%
sodium nitrite		7632-00-0	75 - 80
sodium tetraborate		12179-04-3	5 - 10
sodium hydroxide		1310-73-2	1 - 5
sodium carbonate		497-19-8	1 - 5

## Section 4 First Aid

### General:

Move out of dangerous area. Perform first aid measures as indicated. Seek medical attention and show this safety data sheet to attending physician.

### Inhalation:

Move to fresh air and keep at rest in a position comfortable for breathing. If breathing difficulty occurs or persists seek medical attention. If not breathing give artificial respiration and seek immediate medical attention.

### Skin Contact:

Immediately flush exposed skin with water for at least 15 minutes while removing contaminated clothing and/or shoes. Thoroughly wash with soap and water. Seek medical attention if irritation develops or persists.

### Eye Contact:

Immediately flush eyes with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. Check for and remove any contact lenses if easy to do. Seek medical attention if irritation develops or persists.

### Ingestion:

Rinse mouth with water. Do not induce vomiting. Seek immediate medical attention.

### Most important symptoms and effects both acute and delayed:

No information available.

### Indication of any immediate medical attention and special treatment needed:

No information available.

## Section 5 Fire Fighting Measures

Trade Name: CS-4111P Closed System Treatment  
SDS ID: SDS00599

SDS #: GLA-CS4111P  
Revision # 1

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**Suitable Extinguishing Media:**

Use extinguishing media suitable for surrounding fire or source of fire. Use water spray to cool fire exposed containers.

**Unsuitable Extinguishing Media:**

No information available.

**Specific Hazards Developing From the Chemical:**

In fire conditions after water loss oxidizer portion of material may intensify fire. Combustion may produce oxides of nitrogen and other unidentified chemical compounds.

**Precautions for Firefighters:**

No information available.

**Firefighting Instructions:**

No information available.

**Protection During Firefighting:**

Wear full protective gear and full face pressure demand self-contained breathing apparatus.

**Other Information:**

No additional information available.

## Section 6 Accidental Release Measures

**Personal precautions, protective equipment and emergency procedures:**

Avoid direct contact with skin, eyes and clothing. Avoid inhalation of mist, vapor or dust. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.

**Environmental Precautions:**

Prevent further leakage or spillage if safe to do so. Contain spilled material and prevent run-off onto ground or into water sources or sewers.

**Methods and material for containment and clean up:**

Absorb on inert material and place in containers for disposal. Dispose of spilled/collected material in accordance with all federal, state and local regulations.

## Section 7 Handling and Storage

**Precautions for Safe Handling:**

Avoid contact with skin and eyes. Avoid inhalation of mist, vapor and dust. Ensure adequate ventilation. Do not eat, drink or smoke while handling. Wear appropriate personal protective equipment as outlined in Section 8 of this SDS.

**Conditions for Safe Storage, including Incompatibilities:**

Store in original container. Keep container tightly closed. Store at room temperature (50-90 F) in a dry well-ventilated area.

## Section 8 Exposure Controls/Personal Protection

**Exposure Limits:**

Ingredient	Data Source	Exposure Form	Exposure Value	Exposure Notes
sodium carbonate	ACGIH TLV		Not Established	
	OSHA PEL		Not Established	
sodium hydroxide	NIOSH		2 mg/m3	Ceiling
	OSHA PEL		2 mg/m3	
sodium nitrite	ACGIH TLV		Not Established	
	OSHA PEL		Not Established	
sodium tetraborate	ACGIH TLV	TWA	2 mg/m3	inhalable dust
	CAL/OSHA		5 mg/m3	
	OSHA PEL		15 mg/m3	total dust



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### Appropriate Engineering Controls:

Use local and/or general exhaust ventilation to maintain airborne concentrations below irritating levels or exposure limits. An eyewash and safety shower should be available in the work area.

### Individual Protection Measures:

#### Eye/Face Protection:

Safety glasses or chemical goggles should be worn when handling this material.

#### Skin Protection:

##### Hand Protection:

Wear chemical resistant gloves when handling.

##### Other:

Wear chemical resistant apron when handling.

#### Respiratory Protection:

Wear respiratory protection if mist or vapor is produced, while using this material.

### General Hygiene Considerations:

Follow good hygiene and safety practice. Wash hands and exposed skin before breaks and at the end of the work day. Do not eat, drink or smoke while handling this material. Do not wear contaminated or dirty clothing home from the work-site. Launder contaminated or dirty clothing before reuse.

### Additional Information:

No additional information available.

## Section 9 Physical and Chemical Properties

Appearance	Off White Powder
Odor	Not available.
Odor threshold	Not available.
pH	12 (1% solution)
Melting/freezing point	Not available.
Initial boiling point	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Lower flammability limit	Not available.
Upper flammability limit	Not available.
Lower explosive limit	Not available.
Upper explosive limit	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility in water	Moderate
PC: n-octanol/water	Not available.
Auto-Ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Density	Not available.
Specific gravity	Not available.

## Section 10 Stability and Reactivity

Reactivity :	Not reactive under normal use conditions.
Chemical Stability :	Material is stable under normal handling and storage conditions.
Hazardous Reactions :	Hazardous polymerization will not occur under normal handling and storage.
Conditions to Avoid :	Avoid excessive heating, freezing and chemical contamination.
Decomposition Products:	No decomposition products are expected under normal storage and handling conditions.
Incompatible Materials:	Avoid contact with strong acids.

## Section 11 Toxicological Information



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### Information on the likely routes of exposure:

#### Inhalation:

No information available.

#### Skin Contact:

This material may cause irritation of the skin and may cause burns.

#### Eye Contact:

This material is corrosive to the eyes and can cause irritation and burns.

#### Ingestion:

This material may cause irritation and burns upon ingestion.

### Symptoms related to the physical, chemical and toxicological characteristics:

No information available.

### Delayed and chronic effects:

No information available.

### Numerical measures of toxicity:

Components	Exposure	Species	Dose	Notes
<b>sodium hydroxide:</b>				
Oral	LD50			No Information Available
Dermal	LD50			No Information Available
Inhalation	LC50			No Information Available
<b>sodium nitrite:</b>				
Oral	LD50	Rat	180 mg/kg	
<b>sodium tetraborate:</b>				
Oral	LD50	Rat	>3200 mg/kg	
Dermal	LD50	Rat	>2000 mg/kg	
<b>sodium carbonate:</b>				
Oral	LD50	Rat	4090 mg/kg	
Inhalation	LD50	Rat	5757 mg/l	

### Toxicological Effects:

#### Acute Toxicity:

Mixture:

No information available.

#### Skin Corrosion/Irritation:

Mixture:

No information available.

#### Serious Eye Damage/Irritation:

Mixture:

No information available.

#### Respiratory Sensitization:

Mixture:

No information available.

#### Skin Sensitization:

Mixture:

No information available.

#### Germ Cell Mutagenicity:

Mixture:

No information available.

#### Carcinogenicity:

Mixture:

This product is considered to be a potential carcinogen by:

NTP: No

OSHA: No

IARC: No

#### Reproductive Toxicity:

Mixture:

This product is not expected to cause reproductive and developmental effects.

#### STOT-Single Exposure:

Mixture:

No information available.

#### STOT-Repeated Exposure:



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Mixture:  
No information available.

**Aspiration Hazard:**

Mixture:  
This product is not an aspiration hazard.

**Additional Information:**

None.

### Section 12 Ecological Information

**Ecotoxicity:**

No information available.

**Numerical Measures of Ecotoxicity:**

Components	Type	Species	Dose	Notes
<b>sodium hydroxide:</b>				
Fish	LC50	Mosquito Fish	125 mg/l	96 hr
Invertebrates immobilization	EC50	Daphnia magna	40.38 mg/l	48 hr
<b>sodium nitrite:</b>				
Fish	LC50	Salmo gairdneri	>0.54 mg/l	96 hr
Invertebrates	EC50	Daphnia magna	15.4 mg/l	48 hr
Algae	EC50	Scenedesmus subspicatus	>100 mg/l	72 hr
<b>sodium tetraborate:</b>				
Fish	LC50	Rainbow Trout	150 mg/B/l	24 day
Fish	LC50	Goldfish	178 mg/B/l	72 hr
Invertebrates	LC50	Daphnia magna	133 mg/B/l	48 hr
<b>sodium carbonate:</b>				
Fish	LC50	Bluegill	300 mg/l	96 hr

**Persistence and Degradability:**

Mixture:  
No information available.

**Bioaccumulative Potential:**

Mixture:  
No information available.

**Mobility in Soil:**

Mixture:  
No information available.

**Other Adverse Effects:**

Mixture:  
No information available.

**Additional Information:**

No information available.

### Section 13 Disposal Considerations

**Disposal Instructions:**

Dispose of material in accordance with all federal, state and local regulations.

**Contaminated Packaging:**

No information available.

**Additional Information:**

No additional information available.

### Section 14 Transport Information

**DOT:**

**UN number:** UN1500  
**UN proper shipping name:** UN1500, Sodium Nitrite, 5.1 (6.1), PGIII  
**Class:** 5.1



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**Subsidiary risk:**6.1  
**Label(s):**5.1, 6.1  
**Packing group:** III  
**Packaging exceptions:**none

### Section 15 Regulatory Information

#### Federal Regulations:

##### SARA 311/312 Hazard Categories:

Immediate (Acute) Health Hazard  
Immediate (Acute) Health Hazard  
Immediate (Acute) Health Hazard  
Immediate (Acute) Health Hazard  
Delayed (Chronic) Health Hazard  
None.

##### SARA 302 Extremely Hazardous Substance:

Not listed.

##### SARA 304 Emergency Release Notification:

Not regulated.

##### SARA 311/312 Hazardous Chemical:

No

##### SARA 313 Toxic Release Inventory (TRI) Report:

sodium nitrite Reportable Quantity: RQ 100 lbs.

##### CERCLA Hazardous Substance List:

Not Listed.

##### Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA):

This chemical is not a pesticide product.

##### Clean Air Act Regulated Substances:

None.

##### Clean Water Act Regulated Substances:

None.

#### U.S. State Regulations:

##### Massachusetts RTK Substances

sodium nitrite Listed.

##### New Jersey RTK Substances

sodium nitrite Listed.

##### Pennsylvania RTK Substance

sodium nitrite Listed.

#### Canadian Regulations:

##### Canadian Ingredient Disclosure List Substances:

None listed.

##### WHMIS Classification:

###### sodium tetraborate

Class D-2A

Class D-2B

###### sodium carbonate

Class D-2B

Class E

### Section 16 Other Information

HMIS Hazard ID:



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<b>HEALTH</b>	2
<b>FLAMMABILITY</b>	0
<b>REACTIVITY</b>	1
<b>PERSONAL PROTECTION</b>	F

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; \*-Chronic Health Effect

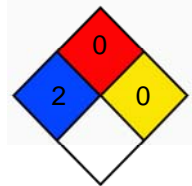
### NFPA Hazard ID:

Flamability:

Health:

Reactivity:

Special Hazard:



Hazard Rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

**Disclaimer:** The Manufacturer believes that the information contained in the Safety Data Sheet is accurate. The suggested procedures are based on experience as of the date of the publication. They are not necessarily all inclusive nor fully adequate in every circumstance. Also, the suggestions should not be confused with, nor followed in violation of applicable laws, regulations, rules or insurance requirements.

**Issue Date:** 11/18/2015

**Revision:** 1