

Product CS527P  
 Revision Date 08/23/2016  
 Revision 2



## Safety Data Sheet

### SECTION 1: IDENTIFICATION

**Product Name** **CS527P**  
**Identifier Uses** Closed Loop Treatment.

**Supplier** Cannon Water Technology Inc.  
 233 Technology Way, Suite 9  
 Rocklin, California 95765  
 Tel: 916-315-2691  
[csd@cannonwater.com](mailto:csd@cannonwater.com)

**Contact Person**  
**Emergency Telephone** 24-HOUR EMERGENCY TELEPHONE: CHEMTEL: 1-800-255-3924  
 CONTRACT # MIS0001465

### SECTION 2: HAZARDS IDENTIFICATION

**Appearance** Solid.  
**Color** White.  
**Odor** Odorless.

**Pictogram(s)**



**Signal Word** Danger

**Hazard Statements**  
 H272 May intensify fire; oxidizer.  
 H301 Toxic if swallowed.  
 H319 Causes serious eye irritation.  
 H361 Suspected of damaging fertility or the unborn child [\*].  
 H400 Very toxic to aquatic life.

**Precautionary Statements**  
 P202 Do not handle until all safety precautions have been read and understood.  
 P210 Keep away from heat/ sparks/open flames/hot surfaces. — No smoking.  
 P221 Take any precaution to avoid mixing with combustibles/[\*]  
 P273 Avoid release to the environment.  
 P280 Wear protective gloves/ protective clothing/eye protection/face protection.  
 P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
 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 advice/ attention.  
 P391 Collect spillage.  
 P405 Store locked up.

**Contains** BORIC ACID (HBO<sub>2</sub>), SODIUM SALT, TETRAHYDRATE SODIUM METABORATE  
 TETRAHYDRATE sodium  
 oxido(oxo)borane sodium nitrite

**GHS Classification**

<b>Physical and Chemical Hazards</b>	Ox Sol 2- H272,
<b>Human Health</b>	Acute Tox 3 - H301, Eye Irrit.2A - H319, Repr. 2 - H361,
<b>Environment</b>	Aquatic Acute 1 - H400
<b>OSHA Regulatory Status</b>	This product is Hazardous under the OSHA Hazard communication Standard.
<b>Inhalation</b>	Exposure to mists or fumes may cause irritation, but inhalation is not believed to be a likely route of exposure.
<b>Ingestion</b>	Exposure to product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns. Product is considered moderately toxic. Excessive amounts effect the blood and blood vessels. Symptoms of nitrite poisoning may include intense cyanosis, nausea, dizziness, vomiting, collapse, spasms of abdominal pain, rapid heartbeat, irregular breathing, coma, convulsions or death due to circulatory collapse. Do NOT ingest.
<b>Skin contact</b>	Exposure to product may cause moderate to severe irritation to skin, and possible burns. Symptoms of exposure may include redness, itching, swelling or pain. Absorption through the skin may cause systemic poisoning; symptoms parallel ingestion. Avoid contact.
<b>Eye contact</b>	Exposure to product may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.
<b>Routes of Exposure</b>	No Information available.

### SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

<b>Composition Comments</b>	Confidential business information has been removed without affecting the overall safety information on the safety data sheet.
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### SECTION 4: FIRST AID MEASURES

#### Description of first aid measures

<b>General Information</b>	General first aid, rest, warmth and fresh air.
<b>Inhalation</b>	If this product is inhaled and symptoms occur, move the exposed person to fresh air promptly. If not breathing, give the exposed person artificial respiration. If breathing is difficult, give the exposed person oxygen. Seek medical attention if symptoms persist.
<b>Ingestion</b>	If this product is ingested, drink small amounts of water and seek medical attention immediately. Induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person.
<b>Skin contact</b>	If this product contacts the skin, immediately flush the affected area with soap and water for at least fifteen (15) minutes. If the product penetrates the clothing, promptly remove the contaminated clothing or shoes, and flush the affected area as described. Seek medical attention if irritation persists.
<b>Eye contact</b>	If this product contacts the eyes, immediately flush eyes with plenty of clean running water for at least fifteen (15) minutes, lifting the upper and lower eyelids occasionally. Remove contact lenses if worn. Seek medical attention if irritation persists.

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

<b>General Information</b>	No information available
<b>Inhalation</b>	Exposure to mists or fumes may cause irritation, but inhalation is not believed to be a likely route of exposure.
<b>Ingestion</b>	Exposure to product may cause moderate to severe irritation to inner linings of mouth, esophagus and gastrointestinal tract, and possible burns. Product is considered moderately toxic. Excessive amounts effect the blood and blood vessels. Symptoms of nitrite poisoning may include intense cyanosis, nausea, dizziness, vomiting, collapse, spasms of abdominal pain, rapid heartbeat, irregular breathing, coma, convulsions or death due to circulatory collapse. Do NOT ingest.
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<b>Eye contact</b>	Exposure to product may cause severe irritation to eyes, and possibly burns or eye damage. Symptoms of exposure may include redness, swelling, tearing or pain. Avoid contact.
<b>Routes of Exposure</b>	No Information available.

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

<b>Notes to the Physician</b>	Treat Symptomatically.
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## SECTION 5: FIREFIGHTING MEASURES

<b>Auto Ignition Temperature (°C)</b>	No Information available.
<b>Flammability Limit - Lower (%)</b>	No Information available.
<b>Flammability Limit - Upper (%)</b>	No Information available.
<b>Flashpoint</b>	No Information available.
<b>Extinguishing Media</b>	Use water, foam, dry chemical or carbon dioxide to extinguish fire.
<b>Hazardous combustion products</b>	Oxides of Nitrogen.
<b>Unusual Fire &amp; Explosion Hazards</b>	Dried residue can thermally decompose giving off irritating and possibly toxic fumes. Dried residue can stimulate the combustion of organic materials. Nitrite is a strong oxidizer and its heat of reaction with reducing agents or combustibles may cause ignition. Nitrite increases the flammability of any combustible material.
<b>Special Fire Fighting Procedures</b>	Use water to cool containers exposed to a fire.
<b>Protective equipment for fire-fighters</b>	Fire fighters should wear full protective equipment, including a self-contained breathing apparatus.

## SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use proper personal protection (refer to Section 8). Shut off or remove all sources of ignition.
<b>Environmental Precautions</b>	Run off from fire control or dilution water may cause pollution. Keep out of drains, municipal sewers, open bodies of water and water course.
<b>Spill Clean Up Methods</b>	Safely stop source of spill. Clean up spills immediately. Restrict non-essential personnel from the area. Wear protective clothing, goggles and respirator if ventilation is not adequate. Sweep up spilled material and place into container for reuse or disposal. Dispose of waste in accordance with local, state or federal regulations. Use vacuum or wet mop to clean up dust. Flush spill area with water.

## SECTION 7: HANDLING AND STORAGE

<b>Handling</b>	Use proper personal protection when handling (refer to Section 8). Use under well-ventilated conditions. Avoid contact with eyes, skin and clothing. Avoid breathing vapors and mists. Avoid prolonged or repeated contact. Do NOT ingest. Wash thoroughly after handling. Rinse container before disposal.
<b>Usage Description</b>	Use only according to directions.
<b>Storage Precautions</b>	Keep container tightly closed. Do not store in heat or direct sunlight. Keep in dry, cool, and well ventilated place. The recommended storage temperature is 34°F to 129 °F, preferably at room temperature 70°F the recommended storage temperature is above 32°F, preferably at room temperature (70°F).
<b>Specific End Use(s)</b>	The identified uses are in section 1 of this Safety Data Sheet.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### Protective Equipment



### Ingredient Comments

No occupational exposure limits noted for the ingredients(s).

### Process Conditions Engineering Measures Respiratory Equipment

Keep container tightly sealed when not in use. Provide eyewash, quick drench. General mechanical ventilation is recommended for enclosed areas. Use a dust mask to reduce exposure to particulate matter. Use of respirator protection is not generally required. However, if exposure is above the stated limits or ventilation is inadequate, use a NIOSH approved acid gas/organic vapor respirator to reduce potential for inhalation exposure. When using respirator cartridges, they must be changed frequently to assure breakthrough exposure does not occur.

### Hand Protection Eye Protection

Use rubber or plastic gloves to minimize skin contact. To avoid contact with eyes, use safety glasses or chemical splash goggles. Face shield is recommended. Eye wash station should be available in the work area.

### Hygiene Measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before

eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### Information on Basic Physical and Chemical Properties

<b>Appearance</b>	Solid.
<b>Color</b>	White.
<b>Odor</b>	Odorless.
<b>Odor Threshold -Lower</b>	No Information available.
<b>Odor Threshold - Upper</b>	No Information available.
<b>pH-Value, Conc. Solution</b>	1% sol 11.4
<b>Melting point</b>	No Information available.
<b>Initial boiling point and boiling range</b>	No Information available.
<b>Flashpoint</b>	No Information available.
<b>Evaporation rate</b>	No Information available.
<b>Flammability State</b>	No Information available.
<b>Flammability Limit-Lower (%)</b>	No Information available.
<b>Flammability Limit- Upper (%)</b>	No Information available.
<b>Vapor pressure</b>	No Information available.
<b>Vapor Density (air=1)</b>	No Information available.
<b>Relative density</b>	10.01
<b>Bulk Density</b>	No Information available.
<b>Solubility</b>	Completely soluble in water.
<b>Decomposition temperature</b>	No Information available.
<b>Partition coefficient; n-octanol/water</b>	No Information available.
<b>Auto Ignition Temperature (°C)</b>	No Information available.
<b>Viscosity</b>	No Information available.
<b>Explosive Properties</b>	No information available.
<b>Oxidizing Properties</b>	No Information available.
<b>Molecular Weight</b>	No Information available.
<b>Volatile Organic Compound</b>	No Information available.

## SECTION 10: STABILITY AND REACTIVITY

<b>Reactivity</b>	Reactions may occur with strong acids, strong reducing agents, ammonia salts, amines, phthalic acid and cyanides.
<b>Stability</b>	This product is stable at ambient temperatures and atmospheric pressures.
<b>Hazardous Polymerization</b>	Hazardous polymerization is not expected to occur under normal temperatures and

pressures.

<b>Hazardous Decomposition Products</b>	Hazardous combustion results in oxides of nitrogen. Decomposition of sodium nitrite may leave a caustic residue.
<b>Conditions to Avoid</b>	Avoid contact with strong acids, strong reducing agents, ammonia salts, amines, phthalic acid and cyanides.
<b>Materials to Avoid</b>	Keep away from strong acids, strong reducing agents, ammonia salts, amines, phthalic acid and cyanides.

## SECTION 11: TOXICOLOGICAL INFORMATION

<b>Toxicological Information</b>	No Information available.
<b>Acute Toxicity (Oral LD50)</b>	>1419.00mg/kg Rat
<b>Acute Toxicity (Dermal LD50)</b>	>417.00mg/kg
<b>Acute Toxicity (Inhalation LC50)</b>	No Information available.
<b>Skin Corrosion/Irritation</b>	No Information available.
<b>Respiratory Sensitization</b>	No Information available.
<b>Skin Sensitization</b>	No Information available.
<b>Reproductive Toxicity:</b>	No Information available.
<b>Germ Cell Mutagenicity:</b>	
<b>Genotoxicity - In Vitro</b>	
<b>Genotoxicity - In Vivo</b>	
<b>Carcinogenicity:</b>	
<b>Carcinogenicity</b>	No Information available.
<b>NTP - Carcinogenicity</b>	The product and its components are not listed.
<b>OSHA - Carcinogenicity</b>	The product and its components are not listed.
<b>IARC Carcinogenicity</b>	The product and its components are not listed.
<b>Specific Target Organ Toxicity - Single Exposure:</b>	
<b>STOT - Single Exposure</b>	No Information available.
<b>Specific Target Organ Toxicity - Repeated Exposure:</b>	
<b>STOT - Repeated Exposure</b>	No Information available.

Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
BORIC ACID (HBO <sub>2</sub> ), SODIUM SALT, TETRAHYDRATE SODIUM METABORATE TETRAHYDRATE sodium oxido(oxo)borane	2330mg/kg Rat		
sodium nitrite	157.9mg/kg Rat 175mg/kg Mouse 186mg/kg Rabbit 85mg/kg Rat		5.5mg/l (vapors) Rat 4 Hours

## SECTION 12: ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	No Information available.
<b>Acute Toxicity - Fish</b>	LC50 96 Hours >150.00ppm Onchorhynchus mykiss (Rainbow Trout)
<b>Acute Toxicity - Aquatic Invertebrates</b>	LC50 48 Hours >495.00ppm Daphnia magna
<b>Acute Toxicity - Aquatic Plants</b>	EC50 72 Hours >40.00ppm
<b>Degradability</b>	No information available.
<b>Bioaccumulative Potential</b>	No data available on bioaccumulation.
<b>Mobility</b>	No Information available.
<b>Results of PBT and vPvB Assessment</b>	No information available.
<b>Other Adverse Effects</b>	No information available.

Name	Acute Toxicity (Fish)	Acute Toxicity (Aquatic Invertebrates)	Acute Toxicity (Aquatic)
sodium nitrite	LC50 96 Hours 0.13mg/l Onchorhynchus mykiss (Rainbow Trout)	EC50 48 Hours 100.00mg/l Daphnia magna	

### SECTION 13: DISPOSAL CONSIDERATIONS

#### Waste Management

When handling waste, consideration should be made to the safety precautions applying to handling of the product.

#### Disposal Methods

Do NOT dump into any sewers, on the ground or into any body of water. Rinse containers before disposal. Since emptied containers contain product residue, follow label warnings even after container is emptied. Dispose in accordance with all applicable federal, state and local laws and regulations.

### SECTION 14: TRANSPORT INFORMATION

UN No. (DOT/TDG)	1500 - SODIUM NITRITE
UN No. (IMDG)	1500 - SODIUM NITRITE
UN No. (ICAO)	1500 - Sodium nitrite
DOT Proper Shipping Name	1500 - SODIUM NITRITE
TDG Proper Shipping Name	1500 - SODIUM NITRITE
DOT Hazard Class	5.1
DOT Hazard Label	Class 5 - Oxidizing Substance (Division 5.1)
TDG Class	5.1
TDG Label(s)	5.1 +6.1
IMDG Class	5.1
ICAO Class	5.1

#### Transport Labels



DOT PackGroup	III
IMDG Pack Group	III
Air Pack Group	III
EMS	F-A, S-Q
Environmentally Hazardous Substance/Marine Pollutant	No

### SECTION 15: REGULATORY INFORMATION

#### US Federal Regulations

##### SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

The Following ingredients are listed      None Listed.

##### CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

The Following ingredients are listed      None Listed.

**SARA Extremely Hazardous Substances EPCRA Reportable Quantities**

The Following ingredients are listed      None Listed.

**SARA 313 Emission Reporting**

The Following ingredients are listed      None Listed.

**CAA Accidental Release Prevention**

The Following ingredients are listed      sodium nitrite

**OSHA Highly Hazardous Chemicals**

The Following ingredients are listed      None Listed.

US State Regulations

**California Proposition 65 Carcinogens and Reproductive Toxins**

The Following ingredients are listed      None Listed.

**California Air Toxics "Hot Spots" (A-I)**

The Following ingredients are listed      None Listed.

**California Air Toxics "Hot Spots" (A-Ii)**

The Following ingredients are listed      None Listed.

**Massachusetts "Right To Know" List**

The Following ingredients are listed      sodium nitrite

**Rhode Island "Right To Know" List**

The Following ingredients are listed      None Listed.

**Minnesota "Right To Know" List**

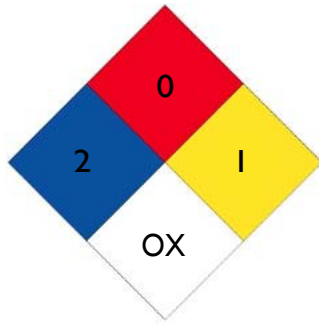
The Following ingredients are listed      None Listed.

**New Jersey "Right To Know" List**

The Following ingredients are listed      sodium nitrite

**Pennsylvania "Right To Know" List**

The Following ingredients are listed      sodium nitrite

**SECTION 16: OTHER INFORMATION****NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)****HAZARDOUS MATERIAL INFORMATION SYSTEM (HMIS)**

Health	2
Flammability	0
Physical Hazard	1
Personal Protection	E

**Revision Comments****Revision Date**

08/23/2016

**Revision**

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**Disclaimer**

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.