



# PMC WATER SYSTEMS SERVICES INC.

## 124 CONNIE CRES. UNIT 9 CONCORD, ONTARIO.

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### MATERIAL SAFETY DATA SHEET C-2010

#### Protection Required



#### SECTION 1 - MATERIAL IDENTIFICATION AND USE

**Manufacturer's Name** : PMC Water Systems Services Inc.  
**Manufacturer's Address** : 124 Connie Crescent, Unit 9, Concord, ON L4K 1L7  
**Manufacturer's Phone #** : (905) 669-8262  
**24 Emergency Phone #** : Canutec (613) 996-6666  
**Product Identifier** : C-2010  
**Product Use** : Water Treatment/Corrosion Inhibitor

#### SECTION 2 – COMPOSITION/INGREDIENTS OF MATERIAL

Ingredients	Concentration	CAS #	LD <sub>50</sub>	LC <sub>50</sub>
Sodium Nitrite	20-30%	7632-00-0	80-185mg/kg, oral – rat	1.45-5.5mg/m <sup>3</sup> , rat – 4hr
Sodium Metaborate Tetrahydrate	1-5%	10555-76-7	2330mg/kg, oral – rat	No Data Available

#### SECTION 3 – HAZARDS IDENTIFICATION

##### Acute Health Effects

##### Eye Contact

May cause irritation, tearing and swelling.

##### Skin Contact

May cause irritation.

##### Inhalation

Breathing of vapor or mist is possible. Breathing this material may be harmful. Symptoms are not expected at air concentrations below the recommended exposure limits, if applicable.

##### Ingestion

May be fatal if large volumes of concentrated product ingested. May cause irritation, nausea, vomiting and diarrhea. Aspiration of vomited contents may cause chemical pneumonitis. Ingestion of large amounts of sodium nitrite component can cause conversion of hemoglobin to methemoglobin, which can cause cyanosis, respiratory issues, possible collapse, coma and death. Not expected when used as directed.

##### Acute Overexposure

Previously existing respiratory conditions may be aggravated by inhalation of spray mists

##### Chronic Overexposure

Possible respiratory damage from excessive inhalation of spray mists.

#### SECTION 4 – FIRST AID MEASURES

##### Eye Contact

Flush eyes with abundant water for at least 20 minutes while holding eyelids open to ensure complete irrigation of the entire eye cavity. Get immediate medical attention.

##### Skin Contact

Wash skin with soap and water. Remove contaminated clothing. Get medical attention.

##### Inhalation

Remove victim to fresh air. Assist breathing as needed. If symptoms persist, get medical attention. Do not induce vomiting. If victim is conscious, give 1 - 2 glasses of water to dilute stomach contents. Get immediate medical attention. Never give anything by mouth to an unconscious person.

##### Ingestion

Remove victim to fresh air. If breathing stops, administer artificial respiration and seek medical aid promptly. If breathing is difficult, get immediate medical attention.

##### Notes to Physician

All treatments should be based on observed signs/symptoms of distress in the patient. The possibility of overexposure to materials other than this product should be considered

#### SECTION 5 - FIRE FIGHTING MEASURES

##### Flammability

Non-flammable liquid

##### Flash Point

None

##### Autoignition

Not Available

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<b>Temperature</b>	
<b>Extinguishing media</b>	Use extinguishing media appropriate for surrounding fire.
<b>Special Firefighting Procedures/Equipment</b>	Firefighters should wear full protective equipment and use approved self-contained breathing apparatus. Use water spray to cool fire exposed containers to prevent pressure buildup and possible rupture. Do not spatter or splash product. Dike to contain water used in fighting fire.
<b>Explosion Data</b>	Not Applicable
<b>Hazardous Combustion Products</b>	Oxides of carbon and nitrogen.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Safety eye goggles. Wear protective clothing and equipment.
<b>Environment Precautions</b>	Do not allow this water into open waterways or sewers.
<b>Spill Response/Cleanup</b>	Use full protective equipment. Remove unprotected personnel away from spill area. Ventilate area. Caution: spill area may be slippery. Mop up, and flush area with water. In case of a large spill: Dike spill. Do not allow spill to enter open waterways or sewers. Reclaim all material possible. Absorb remainder with inert material and place in suitable containers for disposal. Flush area with water

## SECTION 7 – HANDLING AND STORAGE

<b>Handling</b>	Avoid contact with eyes, skin or clothing. Wash skin thoroughly after handling. Do not breathe mists/ sprays. Remove contaminated clothing and laundry before reuse. Keep container closed when not in use. Mix only with water. Read and follow label instructions. Do not contaminate food, water or feed during use or storage of this product. Do not eat or smoke while handling product.
<b>Storage Requirements</b>	Keep container closed when not in use. Store indoors in a cool well-ventilated area away from incompatible materials. Keep from freezing. Keep out of reach of children. Do not reuse container.

## SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

<b>Ventilation</b>	Good general ventilation should be sufficient for most conditions.
<b>Respiratory Protection</b>	None normally required. Use NIOSH approved respirator if exposure limits are exceeded or irritation occurs.
<b>Skin Protection</b>	Rubber or neoprene gloves
<b>Eye/Face Protection</b>	Chemical splash goggles
<b>Other Comments</b>	An eyewash station and safety shower should be available

Ingredients	Exposure Limit - ACGIH	Exposure Limit - OSHA
Sodium Nitrite	TWA Total Inhalable Particulate 10 mg/m <sup>3</sup>	TWA Total Dust 15 mg/ m <sup>3</sup> TWA Respirable Dust 5 mg/m <sup>3</sup>
Sodium Metaborate Tetrahydrate	TLV 10mg/m <sup>3</sup>	PEL 15 mg/m <sup>3</sup> , Total Dust 5 mg/m <sup>3</sup>

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State</b>	:	Liquid
<b>Odour and Appearance</b>	:	Mild organic odour; clear to slightly hazy light yellow coloured liquid
<b>Odour Threshold</b>	:	Not Available
<b>Specific Gravity (Water = 1)</b>	:	1.137 to 1.167
<b>Vapour Pressure (mmHg)</b>	:	Not Available
<b>Vapour Density (Air = 1)</b>	:	Not Available
<b>Evaporation Rate</b>	:	Not Available
<b>Boiling Point</b>	:	100° C, 212° F
<b>Freezing/Melting Point</b>	:	Not Available
<b>pH</b>	:	10.25 - 11
<b>Coefficient Water/Oil Distribution</b>	:	Completely water soluble

## SECTION 10 – STABILITY AND REACTIVITY

<b>Stability/Reactivity</b>	Stable when used and stored as directed.
<b>Conditions for Reactivity</b>	None
<b>Incompatible Materials</b>	Do not mix with acids, ammonia compounds, amines, oxidizing and reducing agents. Cyanides, activated carbon, powdered metals.
<b>Hazardous Decomposition Products</b>	Oxides of carbon and nitrogen.
<b>Hazardous Polymerization</b>	No Data Available

## SECTION 11 – TOXICOLOGICAL INFORMATION

<b>Routes of Entry</b>	:	Eyes, skin, respiratory and digestive system
<b>Skin Contact</b>	:	May cause irritation
<b>Eye Contact</b>	:	May cause irritation, tearing and swelling.
<b>Ingestion</b>	:	May cause irritation, nausea, vomiting and diarrhea.
<b>Inhalation</b>	:	May be harmful.
<b>Chronic Exposure Effects</b>	:	Chronic inhalation exposure may lead to respiratory disorders, such as emphysema and chronic bronchitis. Chronic skin contact may cause dermatitis.
<b>Irritancy</b>	:	Moderate irritant
<b>Sensitization</b>	:	Not Available
<b>Carcinogenicity</b>	:	No known carcinogens listed by OSHA, IARC or NTP. Under certain conditions, nitrites may react with secondary amines to form carcinogenic nitrosamines
<b>Teratogenicity</b>	:	There is no clear evidence of sodium nitrite induced mammalian embryotoxicity or teratogenicity. Fetal toxicity due to the formation of methemoglobin. Has been demonstrated in pregnant animals fed toxic doses of sodium nitrite
<b>Mutagenicity</b>	:	Sodium nitrite component has been shown to induce somatic cell mutations in hamsters given 100 mg/kg orally. Sodium nitrite does not product heritable genetic damage. No adverse mutagenic effects anticipated for borate compounds.
<b>Reproductive Effects</b>	:	In rodents, oral administration of sodium nitrite reportedly resulted in adverse reproductive effects such as developmental abnormalities in newborns and fetuses and decreased fertility. Animal ingestion studies in several species, at high doses, indicate that borates cause reproductive and developmental effects. A human study of occupational exposure to borate dust showed no adverse effects on reproduction.
<b>Other Information</b>	:	Nitrites can cross the placental barrier to generate methemoglobin.

## SECTION 12 – ECOLOGICAL INFORMATION

<b>General Comments</b>	There is no ecological information available for product. Large amounts of sodium metaborate tetrahydrate can be harmful to plants and other species. Sodium nitrite component is very harmful to aquatic organisms in very low concentrations.
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## SECTION 13 – DISPOSAL CONSIDERATIONS

<b>Waste Disposal</b>	Dispose in accordance with federal, provincial or local government requirements. Contact your local, provincial or federal environmental agency for specific regulations.
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## SECTION 14 – TRANSPORT INFORMATION

<b>TDG Shipping Regulations</b>	Not TDG Regulated
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## SECTION 15 – REGULATORY INFORMATION

<b>WHMIS Classification</b>	CLASS D1B: Toxic Material
<b>Domestic Substances List</b>	All ingredients are listed on the DSL or are not required to be listed.

## SECTION 16 – OTHER INFORMATION

<b>Prepared by:</b>	Lab Services PMC Water Systems Services Inc. 124 Connie Crescent, Unit 9 Concord Ontario L4K 1L7
<b>Preparation Date:</b>	December 14, 2015

While all the data presented is believed to be accurate at the time of preparation, PMC Water Systems Services Inc. makes no warranty; the data is offered for your consideration, investigation and verification.