According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.13.2018

Sodium Hypochlorite, 12.5%

### **SECTION 1: Identification**

# Product identifier

Product name: Sodium Hypochlorite,12.5% Product code: SH8110

# Recommended use of the product and restriction on use

Relevant identified uses: Laboratory chemicals Uses advised against: Not determined or not applicable. Reasons why uses advised against: Not determined or not applicable.

### Manufacturer or supplier details

Manufacturer: United States AquaPhoenix Scientific, Inc. 860 Gitts Run Road Hanover, PA 17331 1-717-632-1291

# Emergency telephone number: United States ChemTel Inc +1(800)255-3924 +1(813)248-0585

# **SECTION 2: Hazard identification**

# **GHS classification:**

Corrosive to metals, category 1 Skin irritation, category 2 Serious eye damage, category 1 Acute aquatic hazard, category 2 Chronic aquatic hazard, category 3

# Label elements

### Hazard pictograms:



### Signal word: Danger

### Hazard statements:

H290 May be corrosive to metals H315 Causes skin irritation H318 Causes serious eye damage H401 Toxic to aquatic life H412 Harmful to aquatic life with long lasting effects

# **Precautionary statements:**

Page 1 of 8

According to Canadian Hazardous Products Regulations and WHMIS 2015

### Initial preparation date: 02.13.2018

### Sodium Hypochlorite, 12.5%

Page 2 of 8

P234 Keep only in original container

P264 Wash skin thoroughly after handling

P280 Wear protective gloves/protective clothing/eye protection/face protection

P273 Avoid release to the environment

P390 Absorb spillage to prevent material damage

P321 Specific treatment (see supplemental first aid instructions on this label).

P362 Take off contaminated clothing and wash before reuse

P302+P352 If on skin: Wash with soap and water

P332+P313 If skin irritation occurs: Get medical advice/attention

P305+P351+P338+P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

P406 Store in corrosive resistant stainless steel container with a resistant inner liner

P501 Dispose of contents and container as instructed in Section 13

### Hazards not otherwise classified: None

# **SECTION 3: Composition/information on ingredients**

Identification	Name	Weight %
CAS number: 7732-18-5	Deionized water	87.5
CAS number: 7681-52-9	Sodium hypochlorite	12.5

# Additional Information: None

### SECTION 4: First-aid measures

# **Description of first-aid measures**

#### General notes:

Not determined or not available.

#### After inhalation:

Loosen clothing as necessary and position individual in a comfortable position Maintain an unobstructed airway Get medical advice/attention if you feel unwell

#### After skin contact:

Rinse affected area with soap and water If symptoms develop or persist, seek medical attention Wash affected area with soap and water Seek medical attention if symptoms develop or persist

#### After eye contact:

Rinse/flush exposed eye(s) gently using water for 15-20 minutes If symptoms develop or persist, seek medical attention Remove contact lens(es) if able to do so during rinsing Immediately call a POISON CONTROL CENTER or seek medical attention

# After ingestion:

Rinse mouth thoroughly Seek medical attention if irritation, discomfort, or vomiting persists

# Most important symptoms and effects, both acute and delayed

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.13.2018

#### Sodium Hypochlorite, 12.5%

#### Acute symptoms and effects:

Not determined or not available.

#### **Delayed symptoms and effects:**

Not determined or not available.

#### Immediate medical attention and special treatment

#### **Specific treatment:**

Not determined or not available.

#### Notes for the doctor:

Not determined or not available.

#### **SECTION 5: Fire-fighting measures**

### **Extinguishing media**

#### Suitable extinguishing media:

Use appropriate fire suppression agents for adjacent combustible materials or sources of ignition

#### Unsuitable extinguishing media:

Not determined or not applicable.

#### Specific hazards during fire-fighting:

Thermal decomposition can lead to release of irritating gases and vapors May form corrosive mixtures with water

#### Special protective equipment for firefighters:

Use typical firefighting equipment, self-contained breathing apparatus, special tightly sealed suit

#### **Special precautions:**

Not determined or not applicable.

# SECTION 6: Accidental release measures

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

Ensure adequate ventilation Ensure air handling systems are operational Wear protective eye wear, gloves and clothing

#### **Environmental precautions:**

Should not be released into the environment Prevent from reaching drains, sewer or waterway

### Methods and material for containment and cleaning up:

Wear protective eye wear, gloves and clothing Absorb with non-combustible liquid-binding material (sand, diatomaceous earth (clay), acid binders, universal binders) Dispose of contents / container in accordance with local regulations

#### **Reference to other sections:**

Not determined or not applicable.

#### **SECTION 7: Handling and storage**

#### Precautions for safe handling:

Use only with adequate ventilation.

According to Canadian Hazardous Products Regulations and WHMIS 2015

### Initial preparation date: 02.13.2018

### Sodium Hypochlorite, 12.5%

Avoid breathing mist or vapor.

Do not eat, drink, smoke or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

Keep container tightly sealed.

Protect from freezing and physical damage.

Store in a cool, well-ventilated area.

Store in corrosive resistant container with a resistant inner lining.

### **SECTION 8: Exposure controls/personal protection**

Only those substances with limit values have been included below.

### **Occupational Exposure limit values:**

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

### **Biological limit values:**

No biological exposure limits noted for the ingredient(s).

### Information on monitoring procedures:

Monitoring of the concentration of substances in the breathing zone of workers or in the general workplace may be required to confirm compliance with an OEL and adequacy of exposure controls. Biological monitoring may also be appropriate for some substances.

### Appropriate engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling.

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above.

### Personal protection equipment

### Eye and face protection:

Safety goggles or glasses, or appropriate eye protection.

### Skin and body protection:

Select glove material impermeable and resistant to the substance.

Wear appropriate clothing to prevent any possibility of skin contact.

# **Respiratory protection:**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

### General hygienic measures:

Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of work. Wash contaminated clothing before reuse.

### **SECTION 9: Physical and chemical properties**

#### Information on basic physical and chemical properties

Appearance (physical state, color):	Clear, light yellow green liquid
Odor:	Chlorine - like
Odor threshold:	Not determined or not available.
pH-value:	Not determined or not available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.13.2018

# Sodium Hypochlorite,12.5%

Pac	10	5	of	8
rau	ie.	<u> </u>	UL	0

Melting/Freezing point:	Approx. 0°C
Boiling point/range:	Decomposes
Flash point:	Not determined or not available.
Evaporation rate:	Not determined or not available.
Flammability (solid, gaseous):	Not determined or not available.
Explosion limit upper:	Non Explosive
Explosion limit lower:	Non Explosive
Vapor pressure:	14 mmHg at 20°C
Vapor density:	> 1
Density:	Not determined or not available.
Relative density:	Approx. 1 g/cm <sup>3</sup>
Solubilities:	Soluble in water.
Partition coefficient (n-octanol/water):	Not determined or not available.
Auto/Self-ignition temperature:	Not determined or not available.
Decomposition temperature:	Not determined or not available.
Dynamic viscosity:	Not determined or not available.
Kinematic viscosity:	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

### Other information

# **SECTION 10: Stability and reactivity**

### **Reactivity:**

Does not react under normal conditions of use and storage.

### **Chemical stability:**

Decomposes slowly at normal temperatures releasing low concentrations of corrosive chlorine gas. Decomposition is influenced by temperature, pH, exposure to light, concentration, ionic strength, and presence of metals.

# Possibility of hazardous reactions:

None under normal conditions of use and storage.

# Conditions to avoid:

Incompatible materials, excess heat. light. Combustible materials. Excess heat.

# Incompatible materials:

Metals, ammonia, strong reducing agents, methanol, strong acids, formic acid, amines, phenyl acetonitrile, ammonium salts.

### Hazardous decomposition products:

Sodium oxides, hydrogen.

### **SECTION 11: Toxicological information**

#### Acute toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.13.2018

Page 6 of 8

# Sodium Hypochlorite, 12.5%

### Skin corrosion/irritation

Assessment: Causes skin irritation

Product data: No data available.

# Substance data:

Name	Result
Sodium hypochlorite	Causes severe skin burns and eye damage.

### Serious eye damage/irritation

Assessment: Causes serious eye damage

Product data: No data available.

Substance data: No data available.

### **Respiratory or skin sensitization**

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Carcinogenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# International Agency for Research on Cancer (IARC):

Name	Classification
Sodium hypochlorite	Group 3 - Not classifiable as to its carcinogenicity to humans

# National Toxicology Program (NTP): None of the ingredients are listed.

#### Germ cell mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

#### **Reproductive toxicity**

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Specific target organ toxicity (single exposure)

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

# Specific target organ toxicity (repeated exposure)

**Assessment:** Based on available data, the classification criteria are not met. **Product data:** No data available.

Substance data: No data available.

# Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product data: No data available.

Substance data: No data available.

#### Information on likely routes of exposure: No data available.

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.13.2018

Page 7 of 8

### Sodium Hypochlorite, 12.5%

# Symptoms related to the physical, chemical and toxicological characteristics: No data available.

Other information: No data available.

### **SECTION 12: Ecological information**

# Acute (short-term) toxicity

Assessment: Toxic to aquatic life Product data: No data available. Substance data:

Name	Result
Sodium hypochlorite	EC50 - Daphnia magna - 1700 ug/L - 48 h
	LC50 - Oncorhynchus kisutch (Silver Salmon) - 32 ug/L - 96 h

#### Chronic (long-term) toxicity

Product data: No data available.

Substance data: No data available.

### Persistence and degradability

**Product data:** No data available. **Substance data:** No data available.

### **Bioaccumulative potential**

**Product data:** No data available. **Substance data:** No data available.

### Mobility in soil

**Product data:** No data available. **Substance data:** No data available.

Other adverse effects: No data available.

# **SECTION 13: Disposal considerations**

### **Disposal methods:**

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

# **SECTION 14: Transport information**

#### **Canadian Transportation of Dangerous Goods (TDG)**

UN number	UN1791
UN proper shipping name	Hypochlorite Solutions
UN transport hazard class(es)	8
Packing group	III
Environmental hazards	None
Special precautions for user	None

# International Maritime Dangerous Goods (IMDG)

According to Canadian Hazardous Products Regulations and WHMIS 2015

Initial preparation date: 02.13.2018

### Sodium Hypochlorite, 12.5%

UN number	UN1791	
UN proper shipping name	Hypochlorite Solutions	
UN transport hazard class(es)	8	CORROSUE
Packing group	Ш	
Environmental hazards	None	
Special precautions for user	None	

# International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number	UN1791
UN proper shipping name	Hypochlorite Solutions
UN transport hazard class(es)	8
Packing group	Ш
Environmental hazards	None
Special precautions for user	None

# **SECTION 15: Regulatory information**

# **Canada regulations**

#### Domestic substances list (DSL):

[	7681-52-9	Sodium hypochlorite	Listed
ŀ	7732-18-5	Deionized water	Listed

Non-domestic substances list (NDSL): Not determined.

# **SECTION 16: Other information**

#### Abbreviations and Acronyms: None

#### Disclaimer:

This product has been classified in accordance with the Canadian Hazardous Products Regulations and WHMIS 2015. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 3-0-1-cor

HMIS: 3-0-1-X

Initial preparation date: 02.13.2018

# **End of Safety Data Sheet**