Safety Data Sheet

Clidox-S® Base

SDS Date of Preparation: 06/10/2019

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND THE COMPANY/UNDERTAKING

1.1 Product Identifier

Trade Name **Clidox-S® Base**

1.2 Relevant Identified Uses of the Substance or Mixture and Uses Advised Against

Product Use: See Technical Data Sheet

1.3 Details of the Supplier of the Safety Data Sheet

Manufacturer: Pharmacal Research Labs.,Inc.
562 Captain Neville Dr
Waterbury, CT 06705, USA

Information Phone Number: 203-755-4908, (800)-243-5350

E-mail info@pharmacal.com

1.4 Emergency Telephone Number

Emergency Spill Information CHEMTREC (USA): (800) 424-9300
IN CANADA CALL CANUTEC: (613) 996-6666

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the Substance or Mixture

GHS Classification

Eye Damage Category 1 (H318)
Skin Irritant Category 2 (H315)
Aquatic Chronic Toxicity Category 3 (H412)

2.2 Label Elements

Danger!
Contains: Sodium Chlorite

Hazard Phrases

H315	Causes skin irritation.
H318	Causes serious eye damage.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Phrases

P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P280	Wear protective gloves and eye protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor.
P302+P352	IF ON SKIN: Wash with plenty of water.

P332+P313	If skin irritation occurs: Get medical attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P501	Dispose of contents and container in accordance with local and national regulations.

2.3 Other Hazards:

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS#	EINECS# / REACH Registration	GHS/CLP Classification	%
Sodium Chlorite	7758-19-2	231-836-6	Oxidizing Solid Category 1 (H271) Acute Toxicity Category 3 (H301) Acute Toxicity Category 2 (H310) Skin Corrosive Category 1B (H314) Eye damage Category 1 (H318) Specific Target Organ Toxicity – Repeat Exposure Category 2 (H373) Aquatic Acute Toxicity Category 1 (H400) Aquatic Chronic Toxicity Category 1 (H410)	<1

See Section 16 for further information on GHS Classification.

SECTION 4: FIRST AID MEASURES

4.1 Description of First Aid Measures

Eye: Immediately flush with large quantities of water for at least 30 minutes. Get immediate medical attention.
Skin: Wash with plenty soap and water for several minutes. Get medical attention if irritation develops.
Inhalation: Immediately remove victim to fresh air. If breathing is difficult, oxygen should be administered by qualified personnel. If breathing has stopped, administer artificial respiration. Get immediate medical attention if any symptoms begin to develop.
Ingestion: Do NOT induce vomiting. Get immediate medical attention if any symptoms begin to develop. If conscious, rinse mouth with a small amount of water and give one glass of water to dilute. Never give anything by mouth to an unconscious or convulsing person.

4.2 Most Important symptoms and effects, both acute and delayed:

Causes severe eye irritation, redness, tearing and corneal damage. Causes skin irritation. Inhalation of mists may cause mucous membrane and respiratory irritation with possible pulmonary edema. Swallowing may cause severe irritation and gastrointestinal upset, with possible damage. Prolonged overexposure may cause damage to eyes, skin, lungs and teeth.

4.3 Indication of any immediate medical attention and special treatment needed: Immediate medical attention is required for eye contact and for all other routes of exposure if any symptoms develop.

SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing Media:

Use media appropriate for the surrounding environment.

5.2 Special Hazards Arising from the Substance or Mixture

Unusual Fire and Explosion Hazards:

Not considered flammable or combustible but will burn under fire conditions.

Hazardous Decomposition Products: Hydrogen chloride and chlorine. Chlorine gas rate of decomposition increases with the concentration with temperatures above 85 degrees F (30C).

5.3 Special Protective Actions for Fire-Fighters:

Special Fire Fighting Procedures: None known.

Fire Fighting Equipment: As in any fire, wear positive pressure, self-contained breathing apparatus and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures:

Evacuate spill area and keep unprotected personnel away. Prevent contact with the eyes, skin and clothing. Ventilate area. Wear appropriate protective clothing.

6.2 Environmental Precautions:

Prevent run-off to sewers, streams or other bodies of water. Report spills and releases as required to appropriate authorities.

6.3 Methods and Material for Containment and Cleaning Up:

Neutralize small spills and residues with dilute acid such as acetic acid and collect using an inert absorbent material. Place in appropriate containers for disposal. Prevent spill from entering sewers and water courses. Report releases as required by local, state and federal authorities.

6.4 Reference to Other Sections:

Refer to Section 8 for protective equipment. Refer to Section 13 for disposal guidance.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for Safe Handling:

Prevent contact with the eyes, skin and clothing. Do not breathe mist or vapor. Wear protective clothing and equipment. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use.

When diluting, always add caustic to cold water while stirring. Never add water to caustic. Never use hot water. Adding water to caustic will generate heat and cause boiling and spattering.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Store in a cool, dry, well ventilated area away from incompatible materials. Store in original container, keep container tightly closed and always replace convers. Store at room temperature. DO NOT CONTAMINATE WATER, FOOD OR FEED BY STORAGE.

7.3 Specific end use(s):

None known.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

Chemical Name	Exposure Limits
Sodium Chlorite	None Established

8.2 Exposure Controls:

Engineering Controls: Use with adequate general or local exhaust ventilation to minimize exposure levels.

Eye and Face: Chemical safety goggles should be worn where splashing is possible.

Skin: Impervious gloves are required if contact is possible.
Respiratory: In operations where exposure is excessive or irritation is experienced, a NIOSH approved respirator with organic vapor cartridges or supplied air respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.
Protective Clothing: Impervious coveralls, apron and boots are required if needed to prevent skin contact and contamination of personal clothing.
Work Hygienic Practices: A safety shower and eye wash should be available in the immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic Physical and Chemical Properties:

Physical State: Liquid	**Appearance:** Clear liquid
Odor: Characteristic Odor	**Odor Threshold**: Not determined
pH: 11.5	**Specific Gravity:** 1.01
Boiling Point: Not determined	**Melting Point:** Not determined
Vapor Pressure: Not determined	**Water Solubility:** Complete at 1 atm and 25°C (77°F)
Vapor Density: Not determined	**Evaporation Rate:** Not determined
Viscosity: Not determined	**Pour Point**: Not determined
Flash Point: Not determined	**Flammable Limits: LEL:** Not determined
Autoignition Temperature: Not determined	**Flammable Limits: UEL:** Not determined
Percent Volatile: Not determined	**Flammability (solid/gas):** Not applicable
Partition Coefficient: n-octanol/water: Not determined	**Decomposition Temperature:** Not determined
Explosive Properties: Not explosive	**Oxidizing Properties:** Not an oxidizer

9.2 Other Information:
None

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity:
Not reactive

10.2 Chemical Stability:
Stable

10.3 Possibility of Hazardous Reactions:
None expected.

10.4 Conditions to Avoid:
Avoid extreme temperatures.

10.5 Incompatible Materials:
Any acidic material, ammonia, urea, oxidizable materials and metals such as nickel, copper, tin, aluminum and iron.

10.6 Hazardous Decomposition Products:
Hydrogen chloride and chlorine. Chlorine gas rate of decomposition increases with the concentration with temperatures above 85 degrees F (30C).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects:
Eye: Causes severe irritation and burns with pain, tearing, and redness. May cause permanent eye damage, vision impairment, and blurred vision.
Skin: May cause irritation, redness and itching.

Ingestion: Ingestion causes severe digestive tract irritation and gastrointestinal distress.
Inhalation: Inhalation of mist or vapor may cause severe irritation of the nose, throat and upper respiratory tract. Prolonged inhalation may cause lung damage.
Chronic Toxicity: Prolonged exposure may cause permanent damage to the eyes and respiratory tract.

Acute Toxicity Data:
Product ATE: Oral LD50 > 2000 mg/kg, dermal LD50 > 2000 mg/kg

Components:
Sodium Chlorite: Oral rat LD50: 390 mg/kg, dermal rabbit LD50: 100 mg/kg

Skin corrosion/irritation: This product is classified as irritating to the skin. Based on corrositex testing, the product was found to be non-corrosive.

Eye damage/irritation: This product is classified as damaging to the eyes.

Respiratory Irritation: Product is expected to cause respiratory irritation.

Respiratory Sensitization: Not expected to be a sensitizer. None of the components of this product are classified as sensitizers.

Skin Sensitization: Not expected to be a sensitizer. None of the components of this product are classified as sensitizers.

Germ Cell Mutagenicity: Product is not classified as a mutagen.

Carcinogenicity: None of the components of this product are listed as carcinogens by OSHA, IARC, NTP, ACGIH and the EU CLP.

Reproductive Toxicity: Product is not classified as toxic to reproduction.

Specific Target Organ Toxicity:
Single Exposure: No data available

Repeat Exposure: No data available

Aspiration Hazard: This product is not classified as an aspiration hazard. None of the components of this product are aspiration hazards.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity:
Sodium Chlorite: Cyprinodon variegatus LC50: 105 mg/L/96 hr

12.2 Persistence and Degradability:
No data available.

12.3 Bioaccumulative Potential::
No data available.

12.4 Mobility in Soil:
No data available.

12.5 Results of PBT and vPvB Assessment:
Not required.

12.6 Other Adverse Effects:
Not known

SECTION 13: DISPOSAL INFORMATION

13.1 Waste Treatment Methods

Disposal Method: Dispose in accordance with all local, state and federal regulations. DO NOT CONTAMINATE WATER, FOOD OR FEED BY DISPOSAL.

Empty Container: Remove product residue and dispose of container at an approved waste handling facility.

General Comments:

(For containers equal to or less than 5 gallons):

Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

(For containers greater than 5 gallons): Non-refillable container. Do not reuse this container to hold materials other than pesticides or dilute pesticides (rinsate). After emptying and cleaning, it may be allowable to temporarily hold rinsate or other pesticide-related materials in the container. Contact your state regulatory agency to determine allowable practices in your state. Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or by other procedures allowed by state and local authorities.

SECTION 14: TRANSPORT INFORMATION

	14.1 UN Number	14.2 UN Proper Shipping Name	14.3 Transport Hazard Class(s)	14.4 Packing Group	14.5 Environmental Hazards
DOT/TDG	None	Not regulated	None	None	Not applicable
EU ADR/RID	None	Not regulated	None	None	Not applicable
IMDG	None	Not regulated	None	None	Not applicable
IATA	None	Not regulated	None	None	Not applicable

14.6 Special Precautions for User:

None

14.7 Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code:

Not determined

SECTION 15: REGULATORY INFORMATION

15.1 Safety, Health and Environment Regulations/Legislation Specific for the Substance or Mixture:

US Regulations:

EPA SARA 311/312 Hazard Classification: Acute Health

EPA SARA 313: This Product Contains the Following Chemicals Subject to Annual Release Reporting Requirements Under SARA Title III, Section 313 (40 CFR 372): None

CERCLA Section 103: This product is not subject to CERCLA spill reporting requirements. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

California Proposition 65: This product is not known to contain chemicals regulated under Proposition 65.

Chemical Inventories:
US Toxic Substances Control Act (TSCA): All the components of this product are listed.
Canada: All of the components are listed on the Canadian DSL.

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
Harmful if absorbed through skin. Avoid contact with skin, eyes, or clothing. Wear long sleeved shirt and long pants, socks and shoes, and chemical-resistant gloves (such as, or made out of, PVC, neoprene, nitrile rubber, or any waterproof material).

Keep out of reach of children. For professional use only. Long term exposure to this product will corrode carbon steel. Solution may bleach clothing. Use in well ventilated areas.

15.2 Chemical Safety Assessment:
Not required

SECTION 16: OTHER INFORMATION

NFPA RATING (NFPA 704) - FIRE: 1 HEALTH: 3 INSTABILITY: 0

EU Classes and Risk Phrases for Reference (See Sections 2 and 3):
H271 May cause fire or explosion; strong oxidizer
H301 Toxic if swallowed
H310 Fatal in contact with skin
H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H373 May cause damage to organs through prolonged or repeated exposure
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

Date of Current Revision: June 10, 2019
Revision Summary: Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this document.
Date of Previous Revision: June 29, 2016
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