

# **MATERIAL SAFETY DATA SHEET**

Revision Date: December 16, 2011 Approved by: Darius Nicpon

17 Colt Court Ronkonkoma, NY 11779 800-381-8003

Section 1	Chemical Product and Company Name	
Product	BLEACH SOLUTION, 10%	ITEM No: CASE-B001
Synonyms	0.6% Sodium hypochlorite solution	
CHEMTREC	24 Hour Emergency Phone Number (800) 424-9300	

Section 2 Composition/Ingredients Information					
Chemical Name	CAS#	%	TLV Units		
Water Sodium hypochlorite Sodium hydroxide	7732-18-5 7681-52-9 1310-73-2	99% <1% <1%	None established STEL: 1ppm as Cl₂ TWA: 2mg/m³		

#### Section 3 Hazards Identification

WARNING! CORROSIVE! HARMFUL IF SWALLOWED. MAY CAUSE IRRITATION OR EYE BURNS. MAY CAUSE SKIN IRRITATION.

- 0 = Minimal 1 = Slight 2 = Moderate
- 3 = Serious 4 = Severe

Health	2
Flammability	0
Physical Hazard	1
Personal Protection	С

**HMIS** 

## **First Aid Measures** Section 4

INGESTION: Never give anything by mouth to unconscious person. Rinse mouth and get conscious person drink a glass of milk or water. Do NOT induce vomiting unless directed to do so by medical personnel. Get immediate medical

**INHALATION:** Remove to fresh air. Get medical attention if necessary.

EYE CONTACT: Wash immediately with plenty of water, and continue washing for at least 15min., occasionally lifting upper and lower eyelids. Seek medical attention immediately.

SKIN CONTACT: Flush thoroughly with mild soap and water. Remove contaminated clothing. Get medical attention if

# Section 5 Fire Fighting Measures

Nonflammable liquid.

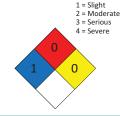
When heated to decomposition, emits toxic fumes of Na<sub>2</sub>O and Cl<sub>2</sub> Contact with metals can generate hydrogen gas.

Extinguishing Media: Use TriClass, dry chemical extinguisher for surrounding fires. Firefighters should use self-contained breathing apparatus and protective clothing.

Flash point: N/A

Autoignition temperature: N/A

Explosion limits: Lower: N/A Upper: N/A



0 = Minimal

## Section 6 **Accidental Release Measures**

Restrict unprotected personnel from the area. Contain the spill with inert absorbent material and deposit in a sealed bag or container. Ventilate and wash spill area with soap and water.

## Section 7 **Handling and Storage**

Read label on container before using. Do not wear contact lenses when working with chemicals. Keep container tightly closed. For laboratory use only. Not for drug, food or household use. Use only under adult supervision. Handling: Use hood or with adequate ventilation. Avoid breathing vapor. Wash hands thoroughly after handling.

Storage: Store away from acids, alkalies, reducing agents combustibles. Keep container in cool, well-ventilated area.

#### Section 8 **Exposure Controls/ Personal Protection**

Engineering controls: Avoid contact with eyes, skin, and clothing. Wear chemical splash goggles, chemical-resistant gloves, and chemical-resistant apron. Use ventilation to keep airborne concentrations below exposure limits.

Respiratory protection: Non should be needed if normal laboratory handling at room temperature. Use a NIOSHapproved respirator with proper cartridge when handling this material in emergency situations.

#### Section 9 **Physical and Chemical Properties**

Physical state: Liquid

Appearance: Transparent, Colorless to yelow.

Odor: Mild bleach odor

pH: Basic

Vapor Pressure ( mm Hg): not available Vapor Density: the highest known is 0.62

**Evaporation Rate:** Not available

Boiling point: The lowest know is 100°C

Melting point: ~ 0 °C/32 Freezing point: 0°C/32 °F

Decomposition temp: >40C°/104 °F

Solubility: Miscible in water

Specific gravity (H<sub>2</sub>O = 1): 1.011 at 20°C Percent volatile (%): Not available Molecular formula: Mixture

Molecular weight: Mixture

## Section 10 **Stability and Reactivity**

Chemical Stability: Stable

Conditions to Avoid: Heat, light, air and incompatible materials.

Incompatibilities: Reducing agents, metals, acids, organic compounds. Ammonium compounds, Hazardous decomposition: Chlorine gas may be evolved when ammonia and bleach are mixed

Hazardous polymerization: Will not occur.

## Section 11 **Toxicological Information**

Effects of overexposure: Eyes: Can cause irritation and possible burns to eyes. Prolonged or repeated eye contact may cause conjunctivitis. Ingestion can cause burns to digestive tract. Symptoms may include pain and inflammation of the mouth, pharynx, esophagus and stomach. Nausea vomiting, choking and hemorrhage may be associated with ingestion. Circulatory collapse with cold and clammy skin due to methemoglobinemia, cyanosis and shallow respirations. Skin: May cause skin irritation. Inhalation: Prolonged or repeated inhalation may cause allergic respiratory reaction.

Acute oral toxicity ORAL LD50: 8910mg/kg [Rat]; 5800mg/kg [Mouse]

Acute vapor toxicity IHL-LC<sub>50</sub>: not available

DERMAL LD<sub>50</sub>: not available

## **Ecological Information** Section 12

Ecotoxicity in water LC<sub>50</sub> 0.030mg/L 96h [Fish(Oncorhynchus mykiss)]. 0.033-0.044mg/L 48h [Daphnia(daphnia)].

### Section 13 **Disposal Considerations**

Disposal of in accordance with all local, state, and federal regulations, or contact with a licensed chemical disposal agency.

## Section 14 **Transport Information**

UN number: 1791

Shipping name: Sodium hypochlorite solution

**Hazard Class: 8** Packing group: PG III Exceptions: Ltd Qty. ≤4L

## Section 15 **Regulatory Information**

TSCA 8(b) Inventory: Water; Sodium hypochlorite. DSCL (EEC) R31-Contact with acids liberates toxic gases. S28-After contact with skin wash immediately with water, R34-Causes burns, S45-In case of accident or if you feel unwell seek immediate medical advise.

#### Section 16 Other Information

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