LAB-AIDS Experiencing Science

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

MATERIAL SAFETY DATA SHEET

MSDS No: 0086.002.00
Revision Date: December 16, 2011
Approved by: Darius Nicpon

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	7732-18-5	99%	None established
Sodium hypochlorite	7681-52-9	<1%	STEL: 1ppm as Cl_2
Sodium hydroxide	1310-73-2	<1%	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	C

HMIS

Section 4 First Aid Measures

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 attention.
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

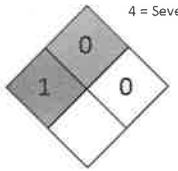
Section 5 Fire Fighting Measures

Nonflammable liquid.
When heated to decomposition, emits toxic fumes of Na_2O and Cl_2
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
1 = Slight
2 = Moderate
3 = Serious
4 = Severe



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 NIOSH-approved 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_2O = 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 LD_{50}: 8910mg/kg [Rat}; 5800mg/kg [Mouse]
Acute vapor toxicity IHL-LC_{50}: not available
DERMAL LD_{50}: not available

Section 12 Ecological Information

Ecotoxicity in water LC_{50} 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