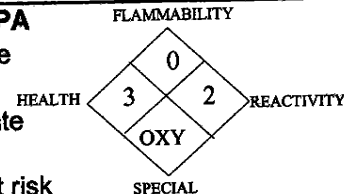


**METRO SUPPLY  
COMPANY**8997 Timmons Circle  
Villa Rica, GA**RISK NFPA**4.- Extreme  
3.- High  
2.- Moderate  
1.- Light  
0.- Without risk**MATERIAL SAFETY DATA SHEET****FOR EMERGENCY ASSISTANCE INVOLVING CHEMICALS CALL - CHEMTEL Inc (800) 255-3924**

Material: <b>SHIMMER</b>	Classification: <b>Bleach liquid</b>	Date: Jan-00	Code:
Formula: Chlorine in solution	Chemical Name and Synonymous Chemical blend.	D.O.T. SHIPPING INFORMATION: HYPOCHLORITE SOLUTION 8, UN1791, PG II	

**I.- HAZARDOUS INGREDIENTS**

Hazardous Components ( Specific Chemical Identity; Common Name(s)	% by weight	CAS	TWA/TLV
Sodium Hypochlorite	8.0 - 12.5	7681-52-9	

**II.- PHYSICAL AND CHEMICAL CHARACTERISTICS**

Appearance:	Clear, yellow - greenish to yellow liquid.	Boiling Point  198-210 °F		
Odor:	Chlorine odor.			
pH solution 1% in H <sub>2</sub> O :	11.0 - 12.0			
Vapor Pressure 20 °C (mm Hg) Not determined		Vapor Density ( Air = 1 ) Not determined	Evaporation Rate ( Butyl Acetate = 1 ) Not applicable	
Melting Point / Freezing Point. (°C) Not determined		Specific Gravity ( H <sub>2</sub> O = 1 ) 1.23 - 1.28	% Volatile by weight: Not applicable	Solubility in water: Miscible

**III.- FIRE AND EXPLOSION HAZARD DATA**

Flash Point & Method Used: Not applicable		Flammable limits in air, % by vol. Lower: Not applicable		Flammable limits in air, % by vol. Upper: Not applicable	
Auto-Ignition Temperature (°C) Not applicable		Dust: N/A	Explosion, minim concentration. (O2/Cu Ft) Not applicable		Ignition energy (Millijoules) Not applicable
Extinguishing Media:					
<input type="checkbox"/> Foam <input type="checkbox"/> "Alcohol" Foam. <input type="checkbox"/> CO <sub>2</sub> <input type="checkbox"/> Water <input type="checkbox"/> Other <input type="checkbox"/> Dry Chemical					
<input checked="" type="checkbox"/> Not applicable      Sand					

Special Fire Hazards: None

Fire Fighting Methods: Product does not support combustion.

**IV.- HEALTH INFORMATION**Time - weighted average. Concentrations for up a 8 - hour workday during a 40 - hour work - week.  
Not determined**Signs and Symptoms of Exposure:**

- a) Inhalation.- May cause mucous irritation,nose and throat.  
 b) Contact.- Eyes.- Contact cause strong irritation or damage non reversible. Skin.-May cause strong irritation and burns.  
 c) Ingestion.- Internal organ perforation, nausea,vomiting, strong abdominal pain.

**Emergency first aid procedure:**

Inhalation: Immediately remove victim to fresh air. At first sign of difficulty in breathing start artificial respiration.  
 Contact: Eyes.- Immediately flush eyes with plenty of cool water for at last 15 minutes. Get medical attention immediately. Skin.- Immediately flush skin with plenty of soap and water, rinse with water while removing contaminated clothing. Wash contaminated clothing before reuse.  
 Ingestion: Do not induce vomiting. If victim is conscious and able to swallow, promptly have victim drink water, after by two glasses of milk. Never give anything by mouth if the victim is unconscious or having convulsions.  
 Call a physician immediately.

**V.- REACTIVITY DATA**

Stability: <input checked="" type="checkbox"/> Stable Shimmer <input type="checkbox"/> Unstable	Conditions to Avoid: Open containers and hot rooms.
Hazardous Decomposition or Byproducts: Releases chlorine with heat and fire.	
Hazardous Polymerization: <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not Occur	Conditions to Avoid: NA
Incompatibility ( Materials to Avoid ): <input type="checkbox"/> Water <input checked="" type="checkbox"/> Other Acids, oxidizing - reducing agents, ammonia compounds, amines, and cationic surfactants.	

**VI.- PRECAUTIONS FOR SAFE HANDLING AND USE**

Step to be taken in case materials is released or spilled:

Stop spill immediately, isolate the area, contain spilled material, collect using absorbent media ( sand ).  
Transfer to secure containers. Wash the area with soap and water, rinse with water to eliminate residues.  
Avoid direct contact with the product.

Waste Disposal Method:

Dilute with plenty of water. Neutralize chlorine and alkalinity to pH 7.0 and disposed in conformance with all applicable local, state and federal laws and regulations, and in conformance with good engineering practices.

**VII.- CONTROL MEASURES**

Ventilation: Handle in the presence of adequate ventilation.
Respiratory Protection Not necessary.
Protective Gloves: Rubber or neoprene, when needed, to prevent skin contact.
Eye protection: Wear chemical splash goggles or safety glasses where there is a potential for eye contact.
Other Protective Clothing or Equipment: In case of incidental contact have fresh water available for rinsing.

**VIII.- HANDLING, STORAGE AND USAGE**

Storage: <b>3 Months</b>	Inside: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Not	Hot Rooms: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not	Refrigerate: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not	Outer: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not
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Storage - Temperature °F Maxim. 113	Minim.
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General Observations in Storage.

Storage in dry and fresh atmosphere, under roof. Keep container closed when product in not in use.  
Keep out of the reach of children, or the mentally ill and foods.

Preventive Etiquette:

Metro Supply Company	Villa Rica, Ga Address
Michael Thomas Prepared By	Michael Thomas Authorization

**ADVISE.-**

The information presented herein is believed to be factual as it has been derived from the works and opinions of persons believed to be qualified experts; however, nothing contained in this information is to be taken as a warranty or representation for which METRO SUPPLY bears legal responsibility. The user should review any recommendations in the specific context of the intended use to determine whether they are appropriate.