MATERIAL SAFETY DATA SHEET

CWT-350 Micro Biocide

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: CWT-350 Micro Biocide

Synonyms: Bleach
CAS Number: mixture
Chemical Family: Base
Formula: NaOCl

Distributed by: **Kriss Premium Products, Inc.**
3400 East 42nd Street, Minneapolis, MN 55406
(612) 722-8485

EMERGENCY RESPONSE NUMBERS:
24 Hour Emergency CHEMTREC #: (800) 424-9300

2. HAZARDS INDENTIFICATION

EMERGENCY OVERVIEW: DANGER! CORROSIVE. Causes severe burns to eyes, skin, and respiratory tract. Harmful or fatal if swallowed. Harmful if inhaled.

Physical State: Liquid.
Color: Clear. Yellow.

Odor: Chlorine odor.

POTENTIAL HEALTH EFFECTS

Routes of Exposure: Eyes. Skin. Ingestion. Inhalation.

Target Organs: Eyes. Skin. Respiratory System.

Eye Contact: CORROSIVE-Causes severe irritation and burns. Small amounts may cause: permanent eye damage, blindness.

Skin Contact: CORROSIVE-Causes severe irritation and bums. Corrosive action causes burns and frequently deep ulceration with ultimate scarring. Contact may cause: redness, swelling, burns, blistering, and tissue destruction.

Skin Absorption: No absorption hazard expected under normal use.

Inhalation: CORROSIVE-Causes severe irritation and burns. May cause: coughing, difficulty breathing, pulmonary edema, nausea. May irritate: nose, throat, mucous membranes.

Ingestion: CORROSIVE-Causes severe irritation and bums. May cause damage to the: mouth, esophagus, stomach. May cause: vomiting, colitis, hypotension, perforation of the esophagus, circulatory collapse, convulsions, coma, and death.

Medical Conditions Aggravated by Exposure to Product: Respiratory system disorders.

Other: None known.

Cancer Information:
This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

Potential Environmental Effects: See Section 12.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS NUMBER	% by Wt.
Water	7732-18-5	87.5%
Sodium Hypochlorite	7681-52-6	12.5%

4. FIRST AID MEASURES

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Do not apply oils or ointments unless ordered by the physician.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

Ingestion: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATELY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious victim. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Note to Physicians:
Do not administer acidic antidotes or Sodium Bicarbonate following overexposure. An ounce of 1% Sodium Thiosulfate or milk of magnesia may be helpful.

5. FIRE FIGHTING MEASURES

Extinguishing Media: For fires in area use appropriate media. For example: Water spray. Dry chemical. Carbon dioxide. Alcohol foam.

Fire Fighting Methods: Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors.

Fire and Explosion Hazards: May generate potentially explosive oxygen.

Hazardous Combustion Products: Chlorine-containing gases.

6. ACCIDENTAL RELEASE MEASURES

Spill Clean-Up Procedures: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs.

7. HANDLING AND STORAGE

Handling: Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death.

Storage: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Relieve pressure in containers weekly. Do not freeze. Avoid temperatures greater than 70 Deg. F. Product degrades more rapidly with increasing temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

OSHA Exposure Guidelines:

Component	Limits
No components found.	

ACGIH Exposure Guidelines:

Component	Limits
No components found.	

Note:

*Exposure Limit for Chlorine: 1 ppm Ceiling; 3 mg/m3 Ceiling (OSHA); 0.5 ppm TWA; 1 ppm STEL (ACGIH).

Engineering Controls: Local exhaust ventilation, process enclosures, or other engineering controls are required when handling or using this product to avoid overexposure. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

Eye/Face Protection: Wear chemical safety goggles and a full face shield while handling this product. Do not wear contact lenses.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Rubber (latex). Polyvinyl chloride. Neoprene.

Respiratory Protection: If vapors or mists are present, wear: NIOSH-Approved respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI 288.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Protective clothing.

General Hygiene Conditions: Wash with soap and water before meal times and at the end of each work shift. Good manufacturing practices require gross amounts of any chemical be removed from skin as soon as practical, especially before eating or smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.
Color: Clear. Yellow.
Odor: Chlorine odor.
Boiling Point (deg. F): Not Established.
Freezing Point (deg. F): ~ -10
Melting Point (deg. F): N.D.
Vapor Pressure (mm Hg): Not Established.
Vapor Density (air=1): > 1
Solubility in Water: Complete
pH: > 12
Specific Gravity: 1.210 @ 25C
% Volatile (wt%): 100
Evaporation Rate (nBuAc = 1): N.D.
VOC (wt%): 0
VOC (lbs/gal): 0
Viscosity: N.D.
Flash Point: None.
Flash Point Method: N.A.
Lower Explosion Limit: N.A.
Upper Explosion Limit: N.A.
Autoignition Temperature: No Data
Fire Point: N.D.

10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions.

Conditions to Avoid: Avoid exposure to light. Avoid temperatures greater than 70 Deg. F. Product degrades more rapidly with increasing temperature.

Incompatible Materials: Ammonia. Organic materials. Acids. Amines. Ammonium salts. Aziridine. Methanol. Reducing agents. Oxidizing agents. Iron. Copper. Bisulfates. Phenyl acetonitrile. Cellulose. Ethyleneimine. Oxidizable metals. Soaps.

Hazardous Decomposition Products: Chlorine-containing gases. Reacts with acids to release poisonous chlorine gas. Sodium oxide.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

Component	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hypochlorite	Rat: 8200 mg/kg	Rabbit: > 10000 mg/kg	No Data

Other Information
Inhalation LC50: Rat: 293 ppm/1 H (Chlorine)

12. ECOLOGICAL INFORMATION

Ecotoxicological Information: DATA PROVIDED ARE FOR SODIUM HYPOCHLORITE-

Freshwater Fish Toxicity:
LC50 clupea harengus 0.033 - 0.097 mg//l/96 hr, flow through bioassay (pH: 8)
LC50 cymatogaster aggregate 0.045 - 0.098 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 gasterosteus aculeatus 0.141 - 0.193 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 oncorhynchus gorbuscha 0.023 - 0.052 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 oncorhynchus kisutch 0.026 - 0.038 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 oncorhynchus mykiss: 0.05-0.771 mg/L/96 hr, flow through
LC50 oncorhynchus mykiss: >0.03-<0.19 mg/L/96 hr, semi-static
LC50 oncorhynchus mykiss: 0.18-0.22 mg/L/96 hr, static
LC50 parophrys vetulus 0.044 - 0.144 mg/l/96 hr, flow through bioassay (pH: 8)
LC50 pimephales promelas 0.22 - 0.62 mg/l/96 hr, flow through bioassay (pH: 7)
LC50 pimephales promelas: 4.5-7.6 mg/L/96 hr, static
LC50 lepomis macrochirus: 0.4-0.8 mg/L/96 hr, static
LC50 lepomis macrochirus: 0.28-1 mg/L/96 hr, flow through

Invertebrate Toxicity: EC50 ceriodaphnia sp.
0.006 mg/l/24 hr EC50 daphnia magna 0.07 -
0.7 mg/l/24 hr EC50 daphnia magna 2.1
mg/l/96 hr EC50 gammarus fasciatus 4 mg/l/96
hr EC50 nitocra spinipes 40 mg/l/96 hr EC50
palaemonetes pugio 52 mg/l/96 hr

Other Toxicity:
Algae:
ErC50 dunaliella sp. 0.6 mg/l/24 hr
ErCSO dunaliella tertiolecta 0.11 mg/l/24 hr
ErC50 skeletonema costatum 0.095 mg/l/24 hr

Chemical Fate Information: BIODEGRADATION: This material is inorganic and not subject to biodegradation. PERSISTENCE: This material is believed not to persist in the environment. BIOCONCENTRATION: This material is not expected to bioconcentrate in organisms.

13. DISPOSAL CONSIDERATIONS

Hazardous Waste Number: D002

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and Federal regulations. If approved, flush to sewer with large quantities of water.

14. TRANSPORATION INFORMATION

DOT (Department of Transportation):

Identification Number:	UN1791
Proper Shipping Name:	HYPOCHLORITE SOLUTION
Hazard Class:	**8**
Packing Group:	**III**
Label Required:	CORROSIVE
Reportable Quantity (RQ):	100# (Sodium Hypochlorite)

15. REGULATORY INFORMATION

TSCA Inventory Status: All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

SARA Title III Section 311/312 Category Hazards:

Immediate (Acute)	Delayed (Chronic)	Fire Hazard	Pressure Release	Reactive
Yes	No	Yes	No	No

Regulated Components: Component	CAS Number	CERCLA RQ	SARA EHS	SARA 313	U.S. HAP	WI HAP	Prop 65
Sodium Hypochlorite	7681-52-9	Yes	No	No	No	No	No

***Prop 65 - May Contain the Following Trace Components**
No data available.

NSF/ANSI Standard 60 Maximum Use Level: 84 mg/L.

16. ADDITIONAL INFORMATION

Hazard Rating System
Health: 3
Flammability: 0
Reactivity: 1
* = Chronic Health Hazard

NFPA Rating System
Health: 3
Flammability: 0
Reactivity: 1
Special Hazard: OX

MSDS Abbreviations
N.A = Not Applicable
N.D. = Not Determined
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
C = Ceiling Limit
NE/Not Estab. = Not Established

Reason for Revision: Change(s) made in Section 12.

Revision Date: 1/01/11

The data in this Material Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Kriss Premium Products assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.