

# SAFETY DATA SHEET

## 12.5% Sodium Hypochlorite Solution

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**MANUFACTURER:** Griffin Bros., Inc.  
P.O. Box 7719  
Salem, OR 97303

**INFORMATION PHONE:** (800) 456-4743

**EMERGENCY PHONE:** **CHEMTREC:** (800) 424-9300

**PRODUCT NAME:** 12.5% Sodium Hypochlorite Solution

**PRODUCT NUMBER:** G-399

**DATE PREPARED:** 12/31/99

**LAST REVISION:** 001/09/2013

Recommended uses:  
**Dairy, food and beverage industries:** Sanitizing processing equipment.  
**Textile industry:** Bleaching agent.  
**Water treatment:** Sanitizing agent.

PURE:  LIQUID:   
MIXTURE:  SOLID:

### 2. HAZARDOUS IDENTIFICATION

#### EMERGENCY OVERVIEW: Corrosive

**GHS CLASSIFICATION:** Corrosive to Metals (Category 1) Skin: (Category 1C) Eyes: (Category 1) Aquatic Toxicity: (Category 1)

#### GHS Label elements, including precautionary statements

**SIGNAL WORD:** Danger

#### PICTOGRAM:



#### HAZARD STATEMENT(S):

H290: May be harmful to metals  
H314: Causes severe skin burns and eye damage  
H401: Very toxic to aquatic life

#### PRECAUTIONARY STATEMENT(S):

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P264 Wash hands thoroughly after handling.  
P273 Avoid release to the environment.  
P280: Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353: IF ON SKIN (or hair): Remove/Take off Immediately all contaminated clothing. Rinse SKIN with water/shower.  
P304+P340: IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.  
P305 +P351 +P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P333+P313 IF SKIN: irritation or rash occurs: Get medical advice/attention.  
P337+P313: IF eye irritation persists: Get medical advice/attention.  
P405: Store Locked up.  
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

#### POTENTIAL HEALTH EFFECTS

**EYE CONTACT:** May cause severe irritation or damage to the eyes.  
**INHALATION:** Accidental mixing with other chemicals or decomposition of sodium hypochlorite vapor is irritating to the respiratory system.  
**INGESTION:** Nausea, vomiting, diarrhea, abdominal pain and gastrointestinal Irritation may result from ingestion.  
**SKIN CONTACT:** Severely irritating; may cause permanent skin damage. Prolonged or repeated contact may result in the absorption of potentially harmful amounts of material  
**AGGRAVATED MEDICAL CONDITIONS:** Pre-existing eye, skin, asthma, heart conditions or respiratory conditions.  
**SUPPLEMENTAL HEALTH INFORMATION:** Based on the toxicity profile and exposure scenarios for sodium hypochlorite, EPA concludes that the risks from chronic and sub-chronic exposure to low levels of this pesticide are minimal and without consequence to human health.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Weight %
Sodium Hypochlorite	7681529	9 – 16
Sodium Hydroxide	1310732	0.1 – 2.0

### 4. FIRST AID MEASURES

**EYE CONTACT:** Immediately flush eyes with water for at least 15 minutes. Hold eyelids open while flushing the eyes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Get medical attention.

**SKIN CONTACT:** Rinse skin with plenty of water. Change contaminated clothing. Get medical attention if irritation develops or persists.

**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, and then give artificial respiration, preferably mouth-to-mouth if possible. Get medical attention immediately.

**INGESTION:** Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor.

**NOTE TO PHYSICIAN:** Probable mucosal damage may contraindicate the use of gastric lavage.

### 5. FIRE FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Use extinguishing media appropriate for surrounding fire.

**SPECIAL FIRE FIGHTING PROCEDURES:** Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face-piece in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** May decompose, generating irritating chlorine gas.

**COMBUSTION PRODUCTS:** N/A

**WARNING REMARKS ON FIRE HAZARDS:** Do not use Mono Ammonium Phosphate (MAP) fire extinguishers. Such use may cause explosion with release of toxic gases.

## 6. ACCIDENTAL RELEASE MEASURES

### STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

**Small spills:** Mop up, wipe up or soak up immediately. Remove to out of doors. With permission from local authorities, diluted product may be flushed to a sanitary sewer.

**Large spills:** Evacuate area. Absorb with sand, diatomaceous earth or similar products and dispose of in accordance with local regulations. Keep out of water supply. Absorbed products must be disposed of in accordance with applicable Federal, State, and/or local regulations.

## 7. HANDLING AND STORAGE

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:** Protect from freezing. Keep Out of Reach of Children.

Follow all SDS/label precautions even after container is emptied because it may retain product residues.

**OTHER PRECAUTIONS: Mix only with water.** Mixing this product with ammonia, acids, detergents, etc or with organic materials, e.g. feces, urine, etc. will release chlorine gas, which is irritating to eyes, lungs, and mucous membranes.

## 8. EXPOSURE CONTROL/PERSONAL PROTECTION

### EXPOSURE GUIDELINES:

Chemical Name	OSHA PEL	ACGIH TLV
CHLORINE	1ppm	3mg/m3 STEL
SODIUM HYDROXIDE	2mg/m3	2 mg/m3

### PERSONAL PROTECTIVE EQUIPMENT

**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA approved respirator appropriate for vapor concentration at point of use.

**VENTILATION:** Local exhaust sufficient to keep exposure below TLV.

**WORK HYGIENIC PRACTICES:** Use good personal hygiene when handling this product. Wash hands after use, before smoking, drinking, chewing gum, using tobacco or using the toilet.

**PROTECTIVE GLOVES:** Rubber or other impervious material with gauntlets.

**OTHER PROTECTIVE EQUIP:** Boots, apron, lab coat or coveralls of impervious material, safety shower, eyewash.

**ENGINEERING CONTROLS:** Facilities storing or utilizing this material should be equipped with an eye wash facility and safety shower.

**EYE PROTECTION:** Use chemical safety goggles and/or full face shield where splashing is possible.

Contact lenses should not be worn when working with this material. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES:

### INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES:

a) <b>Appearance:</b> Pale yellow/green	k) <b>Vapor pressure:</b> No data available
b) <b>Odor:</b> Chlorine	l) <b>Vapor density:</b> 2.61
d) <b>pH:</b> 12.5 (1% w/w)	m) <b>Relative density (Specific Gravity):</b> 1.198
e) <b>Melting point/freezing point:</b> No data available	n) <b>Water solubility:</b> Miscible
f) <b>Initial boiling point and boiling range:</b> Decomposes @ 110°C (230°F)	p) <b>Auto-ignition temperature:</b> Not Applicable
g) <b>Flash point:</b> n/a <b>Method Used:</b> n/a	r) <b>Viscosity:</b> No data available
h) <b>Evaporation rate:</b> No data available	-) <b>Pounds Per Gallon:</b> 9.99
j) <b>Upper/lower flammability or explosive limits:</b> n/a	<b>OTHER:</b> No other data is available for this product. . . .

## 10. STABILITY AND REACTIVITY

**STABLE:** Stable

**INCOMPATIBILITY:** Various substances. Oxidizing agents, acids, nitrogen containing organics, metals, iron, copper, nickel, cobalt, organic materials, and ammonia. May develop chlorine if mixed with acidic solutions.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** All bleach decomposition is dependant on temperature. For any given temperature, the higher the strength, the faster it decomposes.

**HAZARDOUS POLYMERIZATION:** Will not occur

**CONDITIONS TO AVOID:** High Temperatures and/or Ultra-Violet Light

## 11. TOXICOLOGICAL INFORMATION: No data available

## 12. ECOLOGICAL INFORMATION: Keep out of waterways

## 13. DISPOSAL CONSIDERATIONS: Dilute with large amounts of water and dispose to municipal or industrial waste treatment facility in accordance with applicable regulations.

## 14. TRANSPORT INFORMATION

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
US DOT	1791	Hypochlorite Solutions	8	III

**GUIDE NUMBER:** 154

## 15. REGULATORY INFORMATION: No data available

## 16. OTHER INFORMATION

**HMS INFORMATION: HEALTH: 3 FLAMMABILITY: 0 PHYSICAL HAZARD: 1 PERSONAL PROTECTION: H**  
**NFPA INFORMATION: TOXICITY: 3 FIRE: 0 REACTIVITY: 1 SPECIAL: C**

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