



Material Safety Data Sheet (MSDS)

Date Issued: 01/28/2010

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1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Viking Pure- Hypochlorous Acid Solution
GENERAL USE: Disinfecting/Sanitizing
FORMULA: H₂O + HOCl
CHEMICAL FAMILY: Inorganic Solution in Water, Dilute Acidic Sanitizer
GENERIC NAME: None

MANUFACTURER

Viking Pure, LLC
 501 Pullman Rd.
 Edgewater, FL 32132
 USA

EMERGENCY TELEPHONE NUMBERS

Customer Service: 1-386-428-9800
 Customer Fax: 1-386-409-0360

2. COMPOSITION/ INFORMATION ON INGREDIENTS

Acidic Stream of Water Produced by Viking Pure System

<u>Chemical Name</u>	<u>Wt. %/1 ltr.</u>	<u>CAS Reg. #</u>	<u>EINECS #</u>
Hypochlorous Acid (HOCl)	1%	7790-92-3	232-232-5
Water (H ₂ O)	99%		

COMMENTS: Product composition ranges shown are typical values for health, safety and environmental use and are not intended as specifications

3. HAZARDS IDENTIFICATION

EPA Rating (with 0 for No Hazard to 4 for Life Threatening)
 Fire - 0; Health - 1, Reactivity - 1; Special - None

Emergency Overview

- **Physical Appearance:** Colorless liquid- slight Chlorine related smell
- **Immediate Concerns:** No hazard expected under normal conditions of use

Potential Health Effects

- **Inhalation:** Insure proper ventilation of storage tanks if applicable
- **Skin:** May cause dryness (If you are allergic to Chlorine you should avoid direct contact as it may cause irritation with symptoms including redness, itching or swelling)
- **Eyes:** Direct exposure may cause irritation
- **Ingestion:** Ingestion of large quantities (greater than one Liter or one Quart) may produce gastric discomfort, nausea, vomiting or diarrhea
- **Carcinogenicity:** Active ingredients are not listed by OSHA, EPA or any other authority as a carcinogen or tumor promoter

4. FIRST AID MEASURES

- **Skin:** If redness or irritation is severe, consult a physician
- **Eyes:** Immediately flush eyes with water for at least 15 minutes while frequently lifting upper and lower eyelids. Consult a physician if irritation results
- **Ingestion:** Drink large quantities of water
- **Inhalation:** If dizziness occurs, immediately get into open space- no other actions are required

5. FIRE FIGHTING MEASURES

- **Flash Point:** None
- **Flammable Limits:** Not Available
- **Flammable Class:** Nonflammable
- **Auto-Ignition Temperature:** Not-Applicable
- **Extinguishing Media:** Choose extinguishing media suitable for surrounding materials, chemical type foam, sand, water spray
- **Fire Fighting Procedures:** This product is a nonflammable substance. However, hazardous decomposition and combustion products may be formed in a fire situation especially when product is used in conjunction with storage tanks
- **Fire Fighting Equipment:** Respiratory and eye protection are required for firefighting personnel. Full protective equipment (Bunker Gear) and Self Contained Breathing Apparatus (SCBA) should be used for all indoor fires and any significant outdoor fires. For small outdoor fires, which may easily be extinguished with a portable fire extinguisher, use of a SCBA may not be required. Do not allow Chlorine gas to accumulate within a confined space, insure proper ventilation to the outside
- **General Hazard:** Evacuate personnel downwind of fire to avoid inhalation of irritating and/or harmful fumes and smoke. Immediately locate and isolate storage tanks used in conjunction with this product.

6. ACCIDENTAL RELEASE MEASURES

- **Small Spill:** No special requirements, wash to waste
- **Large Spill:** No special requirements, wash to waste

7. HANDLING AND STORAGE

- **Handling:** No special handling required
- **Storage:** If containers are used, insure containers are located in well-ventilated area.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

- **Ventilation:** Good room ventilation is normally adequate for safe use of this product
- **Respiratory Protection :** Not necessary as long as there is adequate ventilation
- **Eye Protection:** Good manufacturing practice recommends the use of chemical safety goggles for all applications involving chemical handling
- **Protective Clothing:** Not necessary

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical State:** Liquid
- **Odor:** Practically odorless
- **Appearance:** Colorless Liquid
- **pH:** 2.8 to 7.5
- **Vapor Pressure:** Not available
- **Vapor Density:** > 1.0
- **Boiling Point:** > 100°C
- **Freezing Point:** <0°C
- **Point de Fusion:** <0°C
- **Soluble in Water:** Soluble
- **Density:** 0.9 g/ml at 20°C (68°F)
- **Viscosity:** Not Available
- **Molecular Formula:** Not Available
- **Molecular Weight:** Not Available
- **Coeff. Oil/Water:** Not Available

10. STABILITY AND REACTIVITY

- **Stable:** Yes
- **Hazardous Polymerization:** None
- **Conditions to Avoid:** None reported
- **Stability:** The product is stable under normal ambient conditions of temperature and pressure
- **Polymerization:** Will not occur
- **Hazardous Decomposition Products:** Oxides of chlorine: amine vapors
- **Incompatible Materials:** Ammonia

11. TOXICOLOGICAL INFORMATION

- **Dermal LD50:** Not Available
- **Oral LD50:** > 2000 mg/kg
- **Eye Effects:** Negative
- **Skin Effects:** Negative
- **Sensitization:** Negative
- **Mutagenicity:** Negative
- **Epidemiology:** No Information Found
- **Neurotoxicity:** No Information Found
- **Reproductive Effects:** Not Available
- **Teratogenic Effects:** Not Available

12. ECOLOGICAL INFORMATION

- **Environmental Data:** Presents no hazard to the environment

13. DISPOSAL CONSIDERATIONS

No special precautions are required for this product

14. TRANSPORTATION INFORMATION

Not Applicable

15. REGULATORY INFORMATION

- **United States: Health & Safety Reporting List**
 - None of the chemicals are on the Health & Safety Reporting List
- **Chemical Test Results:**
 - None of the chemicals in this product are under a chemical test rule
- **Section 12b:**
 - None of the chemicals are listed under TSCA Section 12b
- **TSCA Significant New Use Rule :**
 - None of the chemicals in this material have a SNUR under TSCA
- **Clean Air Act:**
 - This material does not contain any hazardous air pollutants
- **OSHA:**
 - None of the chemicals in this product are considered highly hazardous by OSHA
- **Canada:**
 - This product does not contain any known ingredient(s) on the “Ingredient Disclosure List”
- **European Community Regulatory:**
 - All intentional ingredients are listed on the European’s EINECS Inventory.
- **State Regulations:**
 - Not Available
- **Local Regulations:**
 - Not Available

Disclaimer:

Information given herein is offered in good faith as accurate and, to the best of our knowledge, conforms to the requirements of US OSHA 29 CFR 1910, 1200, 91/155/EEC and Canadian Hazardous Products Act. Conditions of use and suitability of the product for particular uses are beyond our control; all risks of use of the product are therefore assumed by the user. Nothing is intended as a recommendation for uses which infringe valid patents or as extending license under valid patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.