

## 1 – PRODUCT IDENTIFICATION

**PRODUCT NAME:**..... FERROZINE

**COMPANY:**..... CH<sub>2</sub>O, Incorporated

8820 Old Hwy. 99 SE, Tumwater, WA 98501

360-943-6063, 800-562-6184, (fax) 360-352-4813, www.ch2o.com

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

**SDS DATE:** ..... 11/15/2017

**SHELF LIFE:** 2 Years

## 2 – HAZARDS IDENTIFICATION

**GHS HEALTH CLASSIFICATIONS:** ..... Acute Toxicity Oral (3) Acute Toxicity Inhalation (2)  
Skin Corrosion (1B) Serious Eye Damage (1) Respiratory Sensitizer (1A) Skin Sensitizer (1A)

**GHS ENVIRONMENTAL CLASSIFICATIONS:** ..... Acute Aquatic Toxicity (3) Chronic Aquatic Toxicity (3)

**GHS PHYSICAL CLASSIFICATIONS:** ..... None



**GHS SIGNAL WORD: DANGER**

### GHS HAZARD STATEMENTS:

H301: Toxic if swallowed

H330: Fatal if inhaled

H314: Causes severe skin burns and eye damage

H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled

H317: May cause an allergic skin reaction

H412: Harmful to aquatic life with long lasting effects

### GHS PRECAUTIONARY STATEMENTS:

#### PREVENTION:

P260: Do not breathe dust/fumes/gas/mist/vapors/spray.

P264: Wash skin thoroughly after handling.

P270: Do not eat, drink or smoke when using this product.

P271: Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

#### RESPONSE:

P301+310: IF SWALLOWED: Immediately call a POISON CENTER or doctor.

P303+361+353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing.

P333+313: If skin irritation or a rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

P330: Rinse mouth.

P331: Do NOT induce vomiting.

#### STORAGE:

P403+233: Store in a well ventilated place, in a tightly closed container.

P405: Store locked up.

**DISPOSAL:**

P501: Dispose of contents/container in accordance with local, state, and federal regulations.

**HAZARDS NOT OTHERWISE CLASSIFIED:** None known

**UNKNOWN TOXICITY STATEMENT:** 0% of this mixture consists of ingredient(s) of unknown acute toxicity.

### 3 – COMPOSITION / INFORMATION ON INGREDIENTS

**TRADE SECRET STATEMENT:** The specific chemical identity and/or the exact percentage of composition has been withheld as a trade secret.

HAZARDOUS INGREDIENT	PERCENT	CAS NUMBER	OSHA-STEL	OSHA-TWA

### 4 – FIRST-AID MEASURES

**EYES:** Flush with large amounts of water, lifting upper and lower lids occasionally. Get medical attention if irritation persists. **SKIN:** Wash exposed areas thoroughly with soap and water. Remove contaminated clothing and launder before reuse. If skin feels slippery, continue washing until slick feeling is gone. Contact a physician if irritation persists. **INGESTION:** Give large quantities of water. DO NOT induce vomiting. If vomiting occurs administer additional fluids. Contact a physician for further directions. Never give anything by mouth to an unconscious person. **INHALATION:** Remove individual to fresh air. If breathing is difficult, give oxygen. Contact a physician if irritation persists.

### 5 – FIRE-FIGHTING MEASURES

When responding to a fire involving this product, personal protection equipment must be worn that is appropriate to the chemicals involved in the fire, as well as respiratory protection. If it can be done safely and without risk, stop any release of chemical at the source. Move undamaged containers away from the vicinity of the fire if it can be done safely. Water spray may be used in cooling equipment and containers that have been exposed to heat and/or flame. Avoid spreading burning material with water used for cooling purposes.

**FLASHPOINT:** >200°F

**EXTINGUISHING MEDIA:** Dry Powder

**SPECIAL FIRE FIGHTING PROCEDURES:** None

**UNUSUAL FIRE AND EXPLOSION HAZARDS:** None

### 6 – ACCIDENTAL RELEASE MEASURES

**SPILL PROCEDURES:** Only trained personnel equipped with proper protective gear should be permitted in the area. Stop spill at source. Reclaim material if possible for reuse. Containerize contaminated material for disposal. After all visible traces have been removed flush area thoroughly with water.

**WASTE:** Dispose of all waste in accordance with local, state and federal regulations. Care must be taken when using or disposing of chemical materials and/or their containers to prevent environmental contamination.

## 7 – HANDLING and STORAGE

**HANDLING & STORAGE:** This product has a very irritating odor. Inhalation of dust/mist will irritate the nose, throat, and lungs. Respiratory protection is recommended when handling this material. Eye contact will cause severe irritation and/or minor burns. Prolonged or repeated skin contact can cause irritation. Wear impervious gloves and safety glasses or goggles when handling. Respiratory protection is recommended during all phases of product handling. Wear additional protective clothing as necessary to minimize contact with product. Store in a cool, dry, well ventilated place away from incompatible materials.

## 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

**RESPIRATORY PROTECTION:** Atmospheric levels should be maintained below the exposure guidelines. When respiratory protection is required, use an approved air-purifying respirator. When exposure guidelines may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus. A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

**PROTECTIVE CLOTHING:** Chemical safety glasses and impervious gloves.

## 9 – PHYSICAL / CHEMICAL PROPERTIES

**PHYSICAL STATE:** ..... Liquid  
**APPEARANCE; Color & Odor:** .. Yellow; Strong, sulfurous  
**SPECIFIC GRAVITY:**..... 1.31  
**pH, 1%:** .. ..... 3.5  
**SOLUBILITY IN WATER:**..... Complete in water.  
**VOLATILITY (wt. %, incl. H<sub>2</sub>O):** . 100

## 10 – STABILITY and REACTIVITY

**STABILITY:** Stable  
**HAZARDOUS DECOMP.:** None known  
**INCOMPATIBILITY:** Strong oxidizing agents. Strong acids. Strong bases.  
**HAZARDOUS REACTIONS:** None known

## 11 – TOXICOLOGICAL INFORMATION

**TOXICOLOGICAL PROPERTIES:** The toxicological properties of this chemical mixture as a whole have not been thoroughly investigated.  
**LISTED CARCINOGEN:** This material does not contain any known or suspected carcinogens.  
**MEDICAL CONDITION AGGRAVATED:** May cause sensitization in susceptible persons.

## 12 – ECOLOGICAL INFORMATION

**ENVIRONMENTAL FATE:** The environmental properties of this chemical mixture have not been thoroughly investigated.  
**NOTE:** This chemical mixture and its use solutions are toxic to fish. Any discharge to the environment must be made only in accordance with an NPDES permit.

**13 –DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL:** Dispose of all waste product and wastes generated from this product in accordance with local, state, and federal regulations. Assume wastes are hazardous unless characterization demonstrates otherwise. Handle empty drums as if they contain chemical residual until they have been thoroughly decontaminated.

**14 – TRANSPORTATION INFORMATION**

**PROPER SHIPPING NAME:** .....TOXIC, LIQUID, ORGANIC, N.O.S. (Thioglycolic Acid/Ammonium Thioglycolate Solution)  
**HAZARD CLASS:** .....6  
**UN/NA NUMBER:** .....2810  
**PACKAGING GROUP :** .....III

**15 - REGULATIONS**

Contents of this MSDS comply with the OSHA Hazard Communication Standard 29CFR 1910.1200

**EPA SARA Title III Chemical Listings:**

<b>Acute:</b> ..... Yes	<b>Chronic:</b> ..... Yes
<b>Fire:</b> ..... No	<b>Pressure:</b> ..... No
<b>Reactive:</b> ..... No	

**SARA SECTION 313:** This product DOES NOT contain toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40 CFR Part 372.

**16 – OTHER INFORMATION**

**HMIS RATING:**

**HEALTH:** 3,      **FLAMMABILITY:** 0,      **REACTIVITY:** 0,      **PERSONAL PROTECTION:** B

**ADDITIONAL INFORMATION:** None known