

SAFETY DATA SHEET

SECTION 1 - COMPANY AND PRODUCT IDENTIFICATION

PRODUCT

Product Name: FERROUS CHLORIDE SOLUTION

Control Number: 00297

Product Description: Iron II Salt

COMPANY IDENTIFICATION

Supplier: Chemical Distribution Solutions

1125 Oak St. Ste. 303

Conway, AR 72032

24 Hour Emergency Telephone: (800) 424-9300 CHEMTREC

General Information: (501) 978-1111

SECTION 2- HAZARDS IDENTIFICATION

GHS Classification:

[Health]

Acute toxicity, Oral Category 4

Skin corrosion Category 1B

Serious eye damage Category 1

[Environmental]

Acute aquatic toxicity Category 2

Chronic aquatic toxicity Category 2

[Physical]

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Danger

Hazard statement(s)

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P260 Do not breathe dust or mist.

P264 Wash skin thoroughly after handling.

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

P273 Avoid release to the environment.

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

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.

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.

P310 Immediately call a POISON CENTER or doctor/ physician.

P363 Wash contaminated clothing before reuse.

P391 Collect spillage.

P405 Store locked up.

P501 Dispose of contents/ container to an approved waste disposal plant.

SAFETY DATA SHEET

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%WT
Ferrous chloride	7758-94-3	16-30
Hydrogen chloride	7647-01-0	0-06

SECTION 4 · FIRST AID MEASURES

FIRST AID PROCEDURES:

Eye Contact: Flush eyes with plenty of water for at least 15 minutes. Seek medical advice.

Skin Contact: Wash with soap and water. Seek medical attention if irritation develops.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Seek medical attention if symptoms appear.

Ingestion: Never give anything by mouth to an unconscious person. Rinse mouth with water. Seek medical attention.

SECTION 5 · FIRE FIGHTING MEASURES

Suitable Extinguishing media: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Hazardous combustion products: Oxides of iron and Hydrogen chloride gas.

Fire Fighting Procedures: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Unusual Fire and Explosion Hazards: None reported.

SECTION 6 · ACCIDENTAL RELEASE and DISPOSAL MEASURES

Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

Pick up and arrange for disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7 · STORAGE AND HANDLING

Handling: Avoid formation of dust and aerosols. Do not breathe dust. Keep container closed and tightly sealed when not in use. Use good hygiene practices.

Storage: Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers.

SECTION 8 · EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Use explosion-proof ventilation equipment. Provide adequate ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. The level of protection and types of controls will vary depending upon potential exposure conditions.

Exposure Limits:	Ferrous Chloride	1 mg/m ³ ACGIH	1 mg/m ³ OSHA
	Hydrogen Chloride	2 ppm ACGIH	5 ppm OSHA

Personal Protective Equipment (PPE):

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.

Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

Clothing: Selection of protective clothing depends on work conditions, potential exposure conditions and may include gloves, boots, suits and other protective items.

Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, use and maintenance should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined areas, use a self-contained breathing apparatus.

SAFETY DATA SHEET

SECTION 9- PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: Not applicable
Autoignition Temperature: °F
Boiling Point: 212 °F
Melting Point/Freezing Point: -58 °F
Vapor Pressure: 11 mmHg
Vapor Density (Air-1): No available data
Odor/Appearance: Liquid green to yellow with no appreciable odor.

Flammability Limits: Not applicable
Specific Gravity: 1.20
Volatile %: Nil
Evaporation Rate (Water=1): Not applicable
pH: < 2
Solubility in Water: No available data

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.
Conditions to Avoid: Keep away from heat, flame and other potential ignition sources.
Incompatible Materials: Strong oxidizing agents.
Hazardous Polymerization: Will not occur under normal use and temperature conditions.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:

Eye: Contact with eyes may cause severe irritation.
Skin: Contact with skin causes irritation and possible rash, especially if the skin is wet or moist.
Ingestion: May cause gastrointestinal tract irritation.
Inhalation: May cause irritation of the respiratory tract.
lung edema.

Acute oral toxicity:

Ferrous Chloride LD50 rat: 500 mg/kg
Hydrogen Chloride LD50 rat: No available data

Acute inhalation toxicity:

Ferrous Chloride LC50 rat: No available data
Hydrogen Chloride LD50 rat: No available data

Acute dermal toxicity:

Ferrous Chloride LD50 rabbit: No available data
Hydrogen Chloride LD50 rabbit: No available data

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: Toxicity to fish LC50 - *Oryzias latipes* - 46.6 mg/l - 96 h.
Bio-accumulative potential: No Available data.
Mobility: No Available data.

SECTION 13 - DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

SECTION 14 - TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Ferrous Chloride Solution
Hazard Class: 8
NA Number: 1760
Packaging Group: 2

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material is estimated to be 400 pounds. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Acute Health Hazard, Chronic Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories:

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Water Act: This product contains Ferrous Chloride and Hydrogen Chloride chemicals listed as Hazardous Substances under the CWA

Clean Air Act: This product contains Hydrogen Chloride a chemical listed as Hazardous Substances under the CCA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 - OTHER INFORMATION

SDS Revision Date: June 2015

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 3

Flammability: 0

Reactivity: 0

The data in this 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 Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.