

**BAY AREA CHEMICAL CONSORTIUM  
BID FORM FOR BID NO. 07-2026  
FOR SUPPLY AND DELIVERY OF FERROUS CHLORIDE**

Sealed bids must be submitted in a PDF format and bidders must enter bid prices into the electronic bid platform (Line Item page)

<https://bacwa.org/about-bacc/>

No later than 4:00 PM. PT  
Thursday, February 19, 2026

Legal Name of Bidder:

Pencco, Inc.

Business Address

PO Box 600

San Felipe, TX 77473

Telephone Number: 979.885.0005

Facsimile Number: 979.885.3208

Email Address: [jguajardo@pencco.com](mailto:jguajardo@pencco.com)

Authorized Representative (Please Print):

Jennifer Guajardo, Bid Supervisor

Signature: 

Date: 2/18/26

**I. All costs except California State sales tax and tariffs for the purchase of FERROUS CHLORIDE must be included in the amount shown entered into the electronic bid platform (Line Item page), including any and all mill assessments, fees, excise taxes, transportation charges, etc. Any exceptions to the bid must be noted under Specific Deviations on the Standard Agreement. Bidders shall submit bids per unit of measure as specified in the electronic bid platform (Line Item page).**

**II. Bidders must submit all of the following, attached to this Bid Form:**

- a. All requirements listed in Section 2.21 Manufacturer's Info.
- b. If applicable, the name, address, and contact information for the third party hauling company as well as an affidavit signed by the Bidder that the third party hauler can and will deliver the chemical to each and every participating BACC Agency.

**III. Bidder Obligations**

By signing this Bid Form and entering into individual purchase orders, purchase agreements and /or contracts with BACC agencies, the bidder expressly agrees to be bound by all the provisions of the bid solicitation, including Sections I-IV.



PO Box 600 San Felipe, Texas 77473  
(979) 885-0005 Fax: (979) 885-3208

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BOARD OF DIRECTORS MEETING

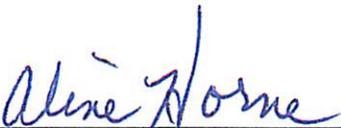
Prior notice was waived, and a meeting of the Directors was held on February 20, 2025. The following resolution was adopted in respects to the official signing of bids and contracts on behalf of Pencco, Inc.

BE IT RESOLVED that Sarah Duffy, Bid Director, of the Corporation has authority to negotiate for and sign any bids/contracts which the Corporation might enter into for the furnishing of goods and services for the Corporation under such terms, conditions and stipulations, as for such consideration as she may deem to be in the best interest of the Corporation.

BE IT RESOLVED that Jennifer Guajardo, Bid Supervisor, of the Corporation has authority to negotiate for and sign any bids/contracts which the Corporation might enter into for the furnishing of goods and services for the Corporation under such terms, conditions and stipulations, as for such consideration as she may deem to be in the best interest of the Corporation.

No further business was necessary, and the meeting was concluded.

  
\_\_\_\_\_  
R. L. Horne, President

  
\_\_\_\_\_  
Aline Horne, Secretary

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The Public Health and Safety Organization

## NSF Product and Service Listings

These NSF Official Listings are current as of **Wednesday, February 18, 2026** at 12:15 a.m. Eastern Time. Please [contact NSF](#) to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: <http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=penco&>

### NSF/ANSI/CAN 60 Drinking Water Treatment Chemicals - Health Effects

#### PENCCO, Inc.

831 Bartlett Road

Sealy, TX 77474

United States

800-864-1742

979-885-0005

Visit this company's website (<http://www.penco.com>)

**Facility :** Distribution Center - Gadsden, AL

#### Ferric Sulfate

**Trade Designation**

50% Ferric Sulfate

60% Ferric Sulfate

Ferric Sulfate

Ferric Sulfate Solution

Poly Ferric Sulfate

**Product Function**

Coagulation & Flocculation

**Max Use**

650mg/L

650mg/L

650mg/L

650mg/L

650mg/L

#### Hydrofluosilicic Acid

**Trade Designation**

Fluorosilicic Acid

Fluosilicic Acid

HFS

HFSA

Hydrofluorosilicic Acid

Hydrofluosilicic Acid

**Product Function**

Fluoridation

Fluoridation

Fluoridation

Fluoridation

Fluoridation

Fluoridation

**Max Use**

5mg/L

5mg/L

5mg/L

5mg/L

5mg/L

5mg/L

**Facility :** Glendale, AZ

#### Ferric Chloride

**Trade Designation**

Ferric Chloride

**Product Function**

Coagulation & Flocculation

**Max Use**

600mg/L

#### Ferrous Chloride

**Trade Designation**

Ferrous Chloride

**Product Function**

Coagulation & Flocculation

**Max Use**

500mg/L

#### Hydrofluosilicic Acid

**Trade Designation**

Fluorosilicic Acid

Fluosilicic Acid

Hydrofluorosilicic Acid

**Product Function**

Fluoridation

Fluoridation

Fluoridation

**Max Use**

5mg/L

5mg/L

5mg/L

|                       |              |       |
|-----------------------|--------------|-------|
| Hydrofluosilicic Acid | Fluoridation | 5mg/L |
|-----------------------|--------------|-------|

**Facility : Distribution Center - Stockton, CA**

|                              |                            |                |
|------------------------------|----------------------------|----------------|
| <b>Ferric Chloride</b>       |                            |                |
| <i>Trade Designation</i>     | <i>Product Function</i>    | <i>Max Use</i> |
| Ferric Chloride              | Coagulation & Flocculation | 600mg/L        |
| <b>Hydrofluosilicic Acid</b> |                            |                |
| <i>Trade Designation</i>     | <i>Product Function</i>    | <i>Max Use</i> |
| Fluorosilicic Acid           | Fluoridation               | 5mg/L          |
| Fluosilicic Acid             | Fluoridation               | 5mg/L          |
| HFS                          | Fluoridation               | 5mg/L          |
| HFSA                         | Fluoridation               | 5mg/L          |
| Hydrofluorosilicic Acid      | Fluoridation               | 5mg/L          |
| Hydrofluosilicic Acid        | Fluoridation               | 5mg/L          |

**Facility : Vernon, CA**

|                          |                            |                |
|--------------------------|----------------------------|----------------|
| <b>Ferric Chloride</b>   |                            |                |
| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
| Ferric Chloride          | Coagulation & Flocculation | 600mg/L        |
| <b>Ferrous Chloride</b>  |                            |                |
| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
| Ferrous Chloride         | Coagulation & Flocculation | 500mg/L        |

**Facility : Distribution Center - Willow Springs, IL**

|                              |                         |                |
|------------------------------|-------------------------|----------------|
| <b>Hydrofluosilicic Acid</b> |                         |                |
| <i>Trade Designation</i>     | <i>Product Function</i> | <i>Max Use</i> |
| Fluorosilicic Acid           | Fluoridation            | 5mg/L          |
| Fluosilicic Acid             | Fluoridation            | 5mg/L          |
| Hydrofluosilicic Acid        | Fluoridation            | 5mg/L          |

**Facility : Distribution Center - Whippany, NJ**

|                              |                         |                |
|------------------------------|-------------------------|----------------|
| <b>Hydrofluosilicic Acid</b> |                         |                |
| <i>Trade Designation</i>     | <i>Product Function</i> | <i>Max Use</i> |
| Hydrofluosilicic Acid        | Fluoridation            | 5mg/L          |

**Facility : Middlesex, NC**

|                                      |                            |                |
|--------------------------------------|----------------------------|----------------|
| <b>Ammonium Sulfate</b>              |                            |                |
| <i>Trade Designation</i>             | <i>Product Function</i>    | <i>Max Use</i> |
| Ammonium Sulfate                     | Chloramination             | 55mg/L         |
| LAS                                  | Chloramination             | 55mg/L         |
| Liquid Ammonium Sulfate              | Chloramination             | 55mg/L         |
| <b>Blended Coagulation Chemicals</b> |                            |                |
| <i>Trade Designation</i>             | <i>Product Function</i>    | <i>Max Use</i> |
| COAGteC PFS                          | Coagulation & Flocculation | 200mg/L        |
| <b>Ferric Sulfate</b>                |                            |                |

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| 50% Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| 60% Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| Ferric Sulfate           | Coagulation & Flocculation | 650mg/L        |
| Penn 3202                | Coagulation & Flocculation | 650mg/L        |
| Poly Ferric Sulfate      | Coagulation & Flocculation | 650mg/L        |

**Hydrofluosilicic Acid**

| <i>Trade Designation</i> | <i>Product Function</i> | <i>Max Use</i> |
|--------------------------|-------------------------|----------------|
| Fluorosilicic Acid       | Fluoridation            | 5mg/L          |
| Fluosilicic Acid         | Fluoridation            | 5mg/L          |
| Hydrofluorosilicic Acid  | Fluoridation            | 5mg/L          |
| Hydrofluosilicic Acid    | Fluoridation            | 5mg/L          |

**Facility : Distribution Center - Bardwell, TX**

**Blended Coagulation Chemicals**

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| COAGteC PFS              | Coagulation & Flocculation | 200mg/L        |

**Ferric Chloride**

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| Ferric Chloride          | Coagulation & Flocculation | 600mg/L        |
| Pencco 3012              | Coagulation & Flocculation | 600mg/L        |

**Ferric Sulfate**

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| Ferric Sulfate Solution  | Coagulation & Flocculation | 650mg/L        |

**Ferrous Chloride**

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| Ferrous Chloride         | Corrosion Control          | 500mg/L        |
|                          | Coagulation & Flocculation |                |
| Pencco 0210              | Corrosion Control          | 500mg/L        |
|                          | Coagulation & Flocculation |                |

**Hydrofluosilicic Acid**

| <i>Trade Designation</i> | <i>Product Function</i> | <i>Max Use</i> |
|--------------------------|-------------------------|----------------|
| Fluorosilicic Acid       | Fluoridation            | 5mg/L          |
| Fluosilicic Acid         | Fluoridation            | 5mg/L          |
| Hydrofluorosilicic Acid  | Fluoridation            | 5mg/L          |
| Hydrofluosilicic Acid    | Fluoridation            | 5mg/L          |

**Facility : Ennis, TX**

**Ammonium Sulfate**

| <i>Trade Designation</i> | <i>Product Function</i> | <i>Max Use</i> |
|--------------------------|-------------------------|----------------|
| Ammonium Sulfate         | Chloramination          | 60mg/L         |

**Ferric Chloride**

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| Ferric Chloride          | Coagulation & Flocculation | 600mg/L        |
| Pencco 3012              | Coagulation & Flocculation | 600mg/L        |

**Ferric Sulfate**

| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
|--------------------------|----------------------------|----------------|
| 50% Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| 60% Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| Ferric Sulfate           | Coagulation & Flocculation | 650mg/L        |
| Ferric Sulfate Solution  | Coagulation & Flocculation | 650mg/L        |

|                           |                            |                |
|---------------------------|----------------------------|----------------|
| Poly Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| <b>Ferrous Chloride</b>   |                            |                |
| <i>Trade Designation</i>  | <i>Product Function</i>    | <i>Max Use</i> |
| Ferrous Chloride          | Corrosion Control          | 500mg/L        |
|                           | Coagulation & Flocculation |                |
| Pencco 0210               | Corrosion Control          | 500mg/L        |
|                           | Coagulation & Flocculation |                |
| <b>Ferrous Sulfate[1]</b> |                            |                |
| <i>Trade Designation</i>  | <i>Product Function</i>    | <i>Max Use</i> |
| Ferrous Sulfate           | Coagulation & Flocculation | 150mg/L        |
| GreenIron                 | Coagulation & Flocculation | 150mg/L        |
| SafeIron                  | Coagulation & Flocculation | 150mg/L        |

[1] Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

|                               |                         |                |
|-------------------------------|-------------------------|----------------|
| <b>Hydrofluosillicic Acid</b> |                         |                |
| <i>Trade Designation</i>      | <i>Product Function</i> | <i>Max Use</i> |
| Fluorosilicic Acid            | Fluoridation            | 5mg/L          |
| Fluosilicic Acid              | Fluoridation            | 5mg/L          |
| Hydrofluorosilicic Acid       | Fluoridation            | 5mg/L          |
| Hydrofluosillicic Acid        | Fluoridation            | 5mg/L          |

**Facility : Sealy, TX**

|                          |                         |                |
|--------------------------|-------------------------|----------------|
| <b>Ammonium Sulfate</b>  |                         |                |
| <i>Trade Designation</i> | <i>Product Function</i> | <i>Max Use</i> |
| Ammonium Sulfate         | Chloramination          | 55mg/L         |

|                                      |                            |                |
|--------------------------------------|----------------------------|----------------|
| <b>Blended Coagulation Chemicals</b> |                            |                |
| <i>Trade Designation</i>             | <i>Product Function</i>    | <i>Max Use</i> |
| COAGteC PFS                          | Coagulation & Flocculation | 200mg/L        |

|                          |                            |                |
|--------------------------|----------------------------|----------------|
| <b>Ferric Sulfate</b>    |                            |                |
| <i>Trade Designation</i> | <i>Product Function</i>    | <i>Max Use</i> |
| 50% Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| 60% Ferric Sulfate       | Coagulation & Flocculation | 650mg/L        |
| Ferric Sulfate           | Coagulation & Flocculation | 650mg/L        |
| Ferric Sulfate Solution  | Coagulation & Flocculation | 650mg/L        |
| Penn 3202                | Coagulation & Flocculation | 650mg/L        |
| Poly Ferric Sulfate      | Coagulation & Flocculation | 650mg/L        |

|                               |                         |                |
|-------------------------------|-------------------------|----------------|
| <b>Hydrofluosillicic Acid</b> |                         |                |
| <i>Trade Designation</i>      | <i>Product Function</i> | <i>Max Use</i> |
| Fluorosilicic Acid            | Fluoridation            | 5mg/L          |
| Fluosilicic Acid              | Fluoridation            | 5mg/L          |
| Hydrofluosillicic Acid        | Fluoridation            | 5mg/L          |

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Number of matching Manufacturers is 1  
Number of matching Products is 81  
Processing time was 0 seconds



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## Safety Data Sheet (SDS) Ferrous Chloride Solution

### SECTION 1 – Chemical Identification and Supplier Information

**Product ID:** Ferrous Chloride Solution  
**Chemical Family:** Inorganic Iron Salts  
**Product Use:** Water Treatment Chemical  
**CAS #:** 7758-94-3  
**Product Formula:** FeCl<sub>2</sub>

**Supplier's Name and Address:**

Penco, Inc.  
P.O. Box 600  
San Felipe, TX 77473

**Emergency Phone Number:**

PENCCO (979) 885-0005  
CHEMTREC (800) 424-9300 – 24 hours a day

### SECTION 2 – Hazards Identification

#### GHS Information

**Signal Word:** **Warning**

**Hazard Class:** Corrosive to Metals (H290)

**Hazard Category:** 1

**Hazard Statement:** Harmful if Swallowed (H302)

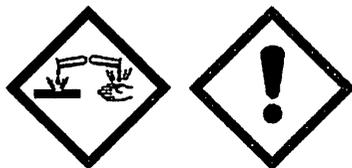
Causes severe skin damage  
(H314) and eye damage.  
(H318)

Harmful in contact with skin  
(H312). Harmful if inhaled (H332)

**Appearance and Odor:** Pale green liquid with a slightly acidic odor.

**Emergency Overview:** A corrosive material. Harmful or fatal if swallowed. Harmful if inhaled. Eye or skin contact may cause irritation. Contact with liquid or vapor form of this chemical may cause severe injury. Avoid overexposure.

**Pictograms:**



#### Health Hazards

**Acute Toxicity, Oral** – Category 4. Toxic if ingested. May cause irritation to the mouth and stomach. Higher doses may lead to abnormal liver function with nausea or vomiting, stomach pain, diarrhea, fast and weak pulse, lethargy, pallor, shock, hypertension, dilated pupils, fever, coma, and even death. Individuals with pre-existing liver diseases may have increased susceptibility to the toxicity of exposure.

**Acute Toxicity, Dermal** – Category 4. Prolonged contact may cause irritation and, possibly, burns.

**Eye Contact** – Irritation and, possibly, burns.

**Inhalation** – May cause irritation of the upper respiratory tract, resulting in difficulty breathing.

#### Precautionary Statements

Prevention

- Wash skin thoroughly after handling. (P264)
- Do not eat, drink, or smoke when using this product. (P270)



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- Avoid release to the environment. (P273)

this material are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

Response

- If swallowed: Rinse mouth. (P301+P330)
  - Call a POISON CENTER/doctor/physician. (P312)
  - Collect spillage (P391)

**Fire and Explosion Hazards:** Substance itself does not burn, but may decompose upon heating to produce corrosive and/or toxic fumes, such as hydrogen chloride and phosgene gas. Ferrous chloride can react with metals to form flammable and potentially explosive hydrogen gas.

Disposal Considerations

- Dispose of this material and its container to hazardous or special waste collection point in accordance with local, regional, national, and/or international regulation. (P501)

|              | NFPA Rating | HMIS Rating | 4 = Extreme / Severe |
|--------------|-------------|-------------|----------------------|
| Health       | 2           | 2           | 3 = High / Serious   |
| Reactivity   | 0           | 0           | 2 = Moderate         |
| Flammability | 0           | 0           | 1 = Slight           |

**Carcinogenicity:** None of the components of

**SECTION 3 – Composition/Information on Ingredients**

**Chemical Identity:** FeCl<sub>2</sub>

**Common Name and Synonyms:** Ferrous chloride; no known synonyms

| Ingredient        | CAS #     | Weight Percentage | ACGIH TLV           | OSHA PEL            | STEL |
|-------------------|-----------|-------------------|---------------------|---------------------|------|
| Water             | 7732-18-5 | < 80%             | N/A                 | N/A                 | N/A  |
| Ferric Chloride   | 7705-08-0 | < 3%              | 1 mg/m <sup>3</sup> | 1 mg/m <sup>3</sup> | N/A  |
| Ferrous Chloride  | 7758-94-3 | < 36%             | 1 mg/m <sup>3</sup> | 1 mg/m <sup>3</sup> | N/A  |
| Hydrochloric Acid | 7647-01-0 | < 0.5%            | 5 ppm               | 5 ppm               | N/A  |

**Section 313 Supplier Notification:** The hydrochloric acid mentioned above is subject to the reporting requirements of SARA TITLE III Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372). This notification must be included in all MSDS's that are copied and distributed for this material.

**SECTION 4 – First Aid Measures**

**Eye Contact First Aid:** Immediately flush eyes for 15 minutes with large amounts of water while holding eyelids apart. Washing within one minute is essential to achieve maximum effectiveness. Obtain medical attention IMMEDIATELY after flushing.

**Skin Contact First Aid:** Flush skin with water. Remove contaminated clothing; wash before reuse. If irritation is still present, seek medical attention IMMEDIATELY.

**Inhalation First Aid:** Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention IMMEDIATELY.



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**Ingestion First Aid:** DO NOT INDUCE VOMITING. Give 1 or 2 glasses of water or milk. Never give anything by mouth to an unconscious individual. Obtain medical attention IMMEDIATELY.

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## **SECTION 5 – Fire Fighting Measures**

**Flash Point:** Not applicable.

**Upper/Lower Explosion Limits in Air:** Not applicable.

**Auto Ignition Temperature:** Not applicable.

**Extinguishing Media:** Will not burn; use materials appropriate for surrounding fire.

**Fire and Explosion Hazards:** Substance itself does not burn, but may decompose upon heating to produce corrosive and/or toxic fumes, such as hydrogen chloride and phosgene gas. Ferrous chloride can react with metals to form flammable and potentially explosive hydrogen gas.

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

**Hazardous Product of Decomposition or Combustion:** Hydrogen chloride, hydrogen, phosgene.

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## **SECTION 6 – Accidental Release Measures**

**Review safety precautions before proceeding with cleanup. Use appropriate personal protection equipment. Do not touch spilled material. Neutralize spill with lime (calcium hydroxide), limestone (calcium carbonate), or soda ash (sodium carbonate). Restrict access to area until completion of clean up.**

**Caution:** limestone and soda ash will evolve CO<sub>2</sub>; ventilation should be provided in enclosed areas. Dike area around spill to prevent spreading, and use absorbent material to pick up spill.

**CERCLA Reportable Discharge (RQ):** 100 lbs. (45.4 kg), Based on anhydrous ferrous chloride. Divide by solution concentration to obtain solution weight.

**Disposal:** Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine whether a substance should be classified as a hazardous waste at the time of disposal. This is due to the fact that product use, transformation, synthesis, mixtures, etc. may change the nature of the product. Dispose of waste in accordance with applicable federal, state, and local laws.

**RCRA:** Test waste material for corrosivity, DOO<sub>2</sub>, prior to disposal.

**Steps To Be Taken In Case Material Is Released Or Spilled:** Notify the appropriate environmental authorities. Note that spills may need to be reported to the National Response Center ((800) 424-8802)



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## SECTION 7 – Handling and Storage

**Handling:** Store and handle in corrosion-proof materials (and area). Use FRP or PVC pipes. Be cautious of substance residue in empty containers. Act according to precautions and warnings set forth.

**Storage:** Store in a tightly closed container. Do not store in metal containers. Fiberglass, plastic, or rubber-lined tanks may be used for storage. Protect from damage and keep separated from incompatible substances.

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## SECTION 8 – Exposure Controls and Personal Protection

**Respiratory Protection:** Adequate general ventilation should be provided to keep vapor and mists below exposure limits. The exposure limits for some components are listed in Section 2. Wear a NIOSH/OSHA approved respirator with a dust/mist cartridge if there is potential of exposure to mists in excess of applicable limits, in any situation where product vapor or mists may be present, such as in confined spaces.

**Eye Protection:** Wear splash resistant goggles and/or safety glasses with side shields. Wear a full face shield if possibility of material splashing or spraying exists. Maintain eye wash fountain. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

**Skin Protection:** Where there is possibility of skin contact, use the following as appropriate, to avoid skin contact: gloves impervious to material, apron, boots, hood, pants, and jacket. Maintain a safety shower with quick opening valves. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

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## SECTION 9 – Physical and Chemical Properties

|                                 |                           |                             |                  |
|---------------------------------|---------------------------|-----------------------------|------------------|
| <b>Boiling Point:</b>           | 104°C (219°F)             | <b>pH:</b>                  | < 2.1            |
| <b>Melting Point:</b>           | N/A                       | <b>Solubility in Water:</b> | Complete         |
| <b>Specific Gravity:</b>        | 1.21– 1.42                | <b>Vapor Pressure:</b>      | 10 mm Hg @ 700°C |
| <b>% Volatile:</b>              | 55 – 75 (Water)           | <b>Evaporation Rate:</b>    | N/A              |
| <b>Vapor Density (Air = 1):</b> | N/A                       | <b>Molecular Weight:</b>    | 126.76           |
| <b>Appearance:</b>              | Pale Green Colored Liquid | <b>Odor:</b>                | Slightly acrid   |

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## SECTION 10 – Stability and Reactivity

**Stability:** Stable at normal conditions

**Polymerization:** Will not occur.

**Decomposition:** Decomposes upon heating to produce corrosive and/or toxic fumes, such as hydrogen chloride. Contact with metals may evolve flammable hydrogen gas.

**Incompatibility:** Rapidly corrodes most metals (titanium is one exception); may generate



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flammable, potentially explosive hydrogen gas. Avoid contact with nylon, aluminum/aluminum alloys, carbon steel, stainless steel, and copper / copper alloys. Metals, bases, halocarbons, acids, and combustible materials can be considered incompatible.

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#### **SECTION 11 – Toxicological Information**

**Chronic Effects:** Repeated dosage may cause hemosiderosis, including possible damage to liver and pancreas.

**Toxicological Data:** Anhydrous Ferrous Chloride Solid Oral LD<sub>50</sub> (rat) = 450 mg/kg

**Carcinogenicity:** None of the components of this material are listed as a carcinogen by IARC, NTP, OSHA, or ACGIH.

**Reproductive Effects:** No data available.

**Target Organs:** No data available.

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#### **SECTION 12 – Ecological Information**

**Ecotoxicological Information:** No data available.

**Persistence and Degradation:** No data available.

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#### **SECTION 13 – Disposal Considerations**

Under the Resource Conservation and Recovery Act (RCRA), it is the responsibility of the user to determine whether a substance should be classified as a hazardous waste at the time of disposal. This is due to the fact that product use, transformation, synthesis, mixtures, etc. may change the nature of the product. Product containers should be thoroughly emptied before disposal. Dispose of waste in accordance with applicable federal, state, and local laws.

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#### **SECTION 14 – Transportation Information**

**DOT Shipping Name:** Corrosive Liquid, N.O.S. (Ferrous Chloride Solution)

**Hazard Class:** 8 – Corrosive Material

**UN Number:** UN 1760

**Packing Group:** II

**Reportable Quantity:** 100 lbs (45.4 kg)

**Shipping Containers:** Rubber-lined steel tank cars/trucks; polyethylene drums, bottles

**Storage Conditions:** Keep containers closed

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#### **SECTION 15 – Regulatory Information**

**OSHA:** Hazardous Corrosive Liquid – 29 CFR 1920.1200

OSHA Process Safety (29 CFR 1910.119): No

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Customer Service 800-864-1742  
FAX 888-273-6226

**CERCLA:** Hazardous Substance – Reportable Quantity (RQ) = 100 lbs (45.4 kg)

**SARA Regulations:** 313 and 40 CFR 372: No

**SARA Hazard Categories, SARA Sections 311/312 (40 CFR 370.21):**

Acute: Yes; Chronic: No; Fire: No; Reactive: No; Sudden Release: No

**Clean Water Act:** Designated as a hazardous substance under Section 311(b)(2)(A) of the Federal Water Pollution Control Act; ferrous chloride is also regulated by the Clean Water Act Amendments of 1977 and 1978. This chemical is subject to regulations regarding its discharge.

**TSCA Inventory Status:** Yes

**California Proposition 65:** No

**Right-To-Know Lists:** Massachusetts, California, Pennsylvania, New Jersey. This substance does not contain nor is manufactured with ozone-depleting substances.

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#### **SECTION 16 – Other Information**

**Revision Date:** January 12, 2023

**Issue Date (GHS compliant):** May 15, 2015

**IMPORTANT! Read this MSDS before use or disposal of this product. Pass along the information to employees and any other persons who could be exposed to the product to be sure that they are aware of the information before use or other exposure.**

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PO Box 600  
 San Felipe, TX 77473  
 979.885.0005  
 Fax: 979.885.3208

# Liquid Ferrous Chloride Product Data Sheet

Revision Date 3/5/13

## Description

Pencoco's Ferrous chloride is a clear green aqueous solution of soluble ferrous iron, manufactured to strict specifications from high quality raw materials. Pencoco's unique manufacturing process renders a superior Ferrous Chloride that is stable at concentrations up to 36%. Pencoco's Ferrous Chloride has a low free acid content.

## Application

Ferrous Chloride is manufactured for both municipal and industrial water treatment. Ferrous Chloride is very cost effective and widely used for odor, corrosion and H<sub>2</sub>S control in municipal waste water systems. Ferrous Chloride is also used for hexavalent chrome reduction, phosphorous removal, and as a flocculation aid. It is also effective at removing metals, especially arsenic and selenium.

## Typical Analysis

|   |                   |
|---|-------------------|
| Concentration (%FeCl <sub>2</sub> ) ..... | 30-36%            |
| Concentration (%Fe <sup>+2</sup> ) .....  | 13% to 16%        |
| Specific Gravity.....                     | 1.32 to 1.42      |
| Free Acid .....                           | <0.5%             |
| Ph.....                                   | <2.0              |
| Appearance .....                          | Green/Hazel color |
| Freezing Point .....                      | <32 °F            |

## Health and Safety

Ferrous Chloride can cause irritation and burns to the skin and eyes. Ensure that individuals handling Ferrous Chloride have been fully trained regarding the SDS, along with the PPE requirements and specific operational procedures. In the event of an emergency, call 24 hour CHEMTREC: 800-424-9300.

## Certifications

Ferrous Chloride is ANSI/NSF Standard 60 certified for use in potable water treatment and also meets or exceeds all AWWA standards.

## Product Handling and Shipping

Ferrous Chloride is shipped in railcars, tank trucks, totes and drums. Suitable materials of construction include fiberglass, PVC, polypropylene, polyethylene, and Teflon. It is not compatible with most metals. It can be used with diaphragm metering pumps, providing the materials of construction are compatible. No dilution or preparation necessary.

DOT Classification: Ferrous Chloride, Solution  
 Hazard Class: 8      DOT ID Number: UN 1760      Packing Group: II

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# DALLAS LABORATORIES, INC.

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AMERICAN NATIONAL STANDARDS INSTITUTE  
AMERICAN SOCIETY FOR QUALITY CONTROL  
FEDERATION OF SOCIETIES FOR COATINGS TECHNOLOGY

Submitted by: Pencco, Inc.  
831 Bartlett Road  
Sealy, TX 77474

Date: November 20, 2024

Attn: Sarah Duffy

Report No.: 57544

## REPORT

### Lab Sample No.

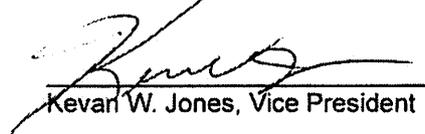
Ferrous Chloride

## RESULTS

| Test   | Sample            |
|--|-------------------|
| Specific Gravity (@ 60°F)                    | 1.3608            |
| Density (@ 60°F), lbs/gal                    | 11.34             |
| Free Sulfuric Acid, % w/w                    | <0.05             |
| Water Insoluble (TSS) Matter, mg/l (mg/kg)   | 8 (6)             |
| Total Dissolved Solids (TDS), mg/l (mg/kg)   | 503,920 (370,312) |
| Total Dissolved Solids (TDS), % vol. (% wt.) | 50.39 (37.03)     |
| Iron, % w/w (Fe <sup>3+</sup> )              | 0.17              |
| Iron, % w/w (Fe <sup>2+</sup> )              | 14.15             |
| Total Iron, % w/w                            | 14.32             |
| Ferrous Chloride, % w/w                      | 32.16             |
| Chlorides, mg/l (mg/kg)                      | 0.5 (0.4)         |
| Fluorides, mg/l (mg/kg)                      | <0.5 (<0.4)       |
| Cyanides, mg/l (mg/kg)                       | <0.1 (<0.1)       |

| Trace Metals     | Sample, mg/l | Sample, mg/kg |
|------------------|--------------|---------------|
| Aluminum         | 107          | 78.6          |
| Antimony         | 8.3          | 6.1           |
| Arsenic          | <0.5         | <0.4          |
| Barium           | <0.5         | <0.4          |
| Beryllium        | 1.3          | 1.0           |
| Boron            | <1.0         | <0.7          |
| Cadmium          | <0.1         | <0.1          |
| Chromium (Hex)   | <0.5         | <0.4          |
| Chromium (total) | 9.5          | 7.0           |
| Cobalt           | 16.8         | 12.3          |
| Copper           | <0.2         | <0.1          |
| Lead             | 7.0          | 5.1           |
| Lithium          | <0.5         | <0.4          |
| Magnesium        | 92.2         | 67.8          |
| Manganese        | 474          | 348           |
| Mercury          | <0.05        | <0.04         |
| Molybdenum       | <0.5         | <0.4          |
| Nickel           | 23.5         | 17.3          |
| Potassium        | <2.0         | <1.5          |
| Selenium         | <0.1         | <0.1          |
| Silver           | <0.1         | <0.1          |
| Thallium         | <0.1         | <0.1          |
| Titanium         | <0.5         | <0.4          |
| Vanadium         | 180          | 132           |
| Zinc             | <0.5         | <0.4          |

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Kevan W. Jones, Vice President

Analyst: KM, KJ, ED  
KWJ: js