



P.O. Box 600
 San Felipe, TX 77473
 Customer Service 800-864-1742
 FAX 888-273-6226

Liquid Ferrous Sulfate: pH>2.0

Product Data Sheet

Revision Date: 3/5/13

Description

Penco's Ferrous Sulfate is a clear-green, aqueous solution containing soluble ferrous iron. Ferrous Sulfate is a high quality product manufactured to strict specifications. Penco's manufacturing process results in a superior liquid iron product by the reaction of sulfuric acid and high quality metallic iron.

Application

Ferrous Sulfate is applied to wastewater collection systems, lift stations, headworks and internal plant processes for multiple purposes, such as odor and corrosion control. Specifically, Ferrous Sulfate aids in H₂S control, phosphorus removal, TSS reduction, sludge conditioning, and other benefits.

Typical Analysis

| | |
|---|---------------------|
| Concentration (%Fe ⁺²)..... | 5% |
| Specific Gravity..... | 1.15; 9.6 lbs./gal |
| Free Acid..... | nil |
| pH..... | ≥2.0 |
| Appearance..... | Clear-Green to Aqua |

Health and Safety

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

Certifications

Ferrous Sulfate meets or exceeds all AWWA standards.

Product Handling and Shipping

Ferrous Sulfate is shipped in railcars, tank trucks, totes, and drums. Suitable materials of construction include fiberglass, PVC, polypropylene, polyethylene, and stainless steel. No dilution or preparation necessary.

DOT Classification: Environmentally Hazardous Substance, Liquid, N.O.S. (Contains Ferrous Sulfate)
 Hazard Class: 9 DOT ID Number: UN 3082 Packing Group: III
 RQ = 1000 Lbs.

Dosage Guidelines

Removal of 1 lb. H₂S requires 4.5 lbs. of Ferrous Sulfate (1.6 lbs. as Fe or 8.0 lbs. as FeSO₄· 7H₂O)
 Removal of 1 lb. H₂S requires 3.2 gallons of Ferrous Sulfate solution (5% Fe)
 For odor control, complete removal of H₂S from a wastewater stream is usually unnecessary. Typically, removal of 40-50% of H₂S will give excellent results.

Penco provides the information contained in each material safety data sheet ("MSDS"), technical data sheet ("TDS"), product information brochure and/or information contained herein (including data and statements) in good faith and makes no representations as to its comprehensiveness or accuracy as of the date of publication. The MSDSs, TDSs, and product information brochures are referred to collectively as the "Data Sheets". It is the responsibility of the user to obtain and use the most recent version of the Data Sheets. Each Data Sheet relates only to the specific product designated therein and may not be valid where such product is used in combination with any other materials or in any process. Further, since the conditions and methods of use of the product and information are beyond the control of Penco, Penco expressly disclaims any and all liability as to any consequential damages or results obtained or arising from any use of the products or the information contained in the Data Sheets. NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE AS CONCERNS THE DATA SHEETS OR THE RELATED PRODUCTS.