Liquid Polyferric Sulfate
Product Data Sheet
Revision Date: 3/5/13

Description
Pencco’s Polyferric Sulfate (PFS) is a dark maroon aqueous solution of soluble ferric iron, manufactured to strict specifications from high quality raw materials. Pencco’s unique manufacturing process renders a superior Polyferric Sulfate that is stable at concentrations up to 14.5% ferric iron. Because all of the free acid is consumed prior to the polymerization of iron, PFS is acid deficient. Pencco’s Polyferric Sulfate has a low ferrous iron content, reducing the likelihood of iron carryover throughout the system.

Application
Polyferric Sulfate is manufactured for both municipal and industrial water treatment. Being an iron-based coagulant and having only trace amounts of aluminum, it is widely used for the clarification of drinking water. PFS is very effective as a coagulant in oily water clarification. It is excellent for turbidity control, as well as the removal of phosphorus, color, and suspended solids. PFS is widely used for sludge dewatering, as well, resulting in volume reduction. It is very effective at removing metals, especially arsenic and selenium.

Typical Analysis
Concentration (%Fe$^{3+}$) .................................................................................................................. 10 – 14.5%
Concentration (%Fe$^{2+}$) .................................................................................................................. <0.2%
Specific Gravity ..................................................................................................................................... 1.5 – 1.6
Free Acid ............................................................................................................................................. nil
pH ....................................................................................................................................................... <2.0
Appearance ......................................................................................................................................... Dark Maroon
Freezing Point ..................................................................................................................................... <0°F

Health and Safety
Polyferric Sulfate can cause irritation and burns to the skin and eyes. Ensure that individuals handling PFS 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
Polyferric Sulfate is ANSI/NSF Standard 60 certified for use in potable water treatment and also meets or exceeds all AWWA standards.

Product Handling and Shipping
Polyferric Sulfate is shipped in railcars, tank trucks, totes, and drums. Suitable materials of construction include fiberglass, PVC, polypropylene, polyethylene, and stainless steel. It can be used with diaphragm metering pumps, providing the materials of construction are compatible. No dilution or preparation necessary.

DOT Classification: Corrosive Liquid, Acidic, Inorganic, N.O.S. (Contains Ferric Sulfate)
Hazard Class: 8  DOT ID Number: UN 3264  Packing Group: III
RQ = 1000 Lbs.

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