

### DESCRIPTION

Ferric Chloride Solution is a concentrated mineral acid solution ranging from 30-45% ferric chloride.

### APPLICATIONS AND BENEFITS

Ferric Chloride Solution is an excellent source of  $Fe_3^+$  ions where the application demands a strong inorganic, cationic metal salt. Ferric Chloride Solution is often the product of choice in the following applications.

#### Municipal and Industrial Wastewater Treatment

- Hydrogen Sulfide ( $H_2S$ ) gas and odor reduction
- TSS (Total Suspended Solids) removal
- Phosphorous removal
- COD (Chemical Oxygen Demand) reduction
- BOD (Biological Oxygen Demand) and TOC (Total Organic Carbon) removal
- Sludge dewatering

#### Municipal and Industrial Water Treatment

- Color removal
- Turbidity removal
- TOC (Total Organic Carbon) reduction
- Printed Circuit Boards
- Copper etchant

### SAFETY

Ferric Chloride Solution is a corrosive mineral acid that has the following ratings:



**Protective Equipment:** Goggles, Long Sleeves and Gloves

Thoroughly read and understand the information presented in the Material Safety Data Sheet prior to using Ferric Chloride Solution in laboratory, pilot plant and/or full plant applications.

### STORAGE AND HANDLING

Storage tanks and piping for Ferric Chloride Solution should be constructed of materials recommended for corrosive products. FRP, PVC, HDPE and/or rubber are the materials of choice for piping and storage tanks. Metering pumps and other equipment that comes in contact with concentrated solutions of Ferric Chloride must also be constructed of acid resistant materials such as PVC, rubber, Teflon<sup>®</sup>, ceramic and Hastelloy C<sup>®</sup>. No wetted parts should contain any metals such as carbon steel, stainless steel, brass or aluminum.

Hazard class: 8-Corrosive

Label: Corrosive

ID Number: UN2582

Packing group: II



### PRODUCT ADDITION CONSIDERATIONS

Ferric Chloride Solution should be fed as a concentrated solution provided that there is adequate mixing to disperse the concentrated solution with the stream being treated. If there is not sufficient mixing then clean dilution water can be used to insure thorough distribution.

