

# SAFETY DATA SHEET: FERRIC CHLORIDE, Hexahydrate

## 1. IDENTIFICATION

Product Name: FERRIC CHLORIDE, Hexahydrate  
Synonyms: Iron (III) chloride hexahydrate  
Formula and Formula Weight: FeCl<sub>3</sub> 6H<sub>2</sub>O 270.30  
Integra numbers beginning with: F200.10  
Recommended Use: Commercial/industrial use  
Restrictions on Use: No information available

INTEGRA Chemical Company      **24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)**  
1216 6th Ave N  
Kent WA 98032  
Phone: 253-479-7000

## 2. HAZARDS IDENTIFICATION

<u>OSHA Classification:</u>	<u>Hazard Category:</u>	<u>Hazard Statement:</u>
Acute Toxicity - Oral	4	Harmful if swallowed.
Skin Corrosion/Irritation	2	Causes skin irritation.
Eye Damage/Irritation	1	Causes serious eye damage.
Corrosive to Metals	1	May be corrosive to metals.

Signal Word:      Danger



### Precautionary Statements

#### Prevention:

Keep only in original container.  
Wash thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves.  
Wear eye protection, face protection.

#### Response

If swallowed: Call a poison center, doctor if you feel unwell.  
If on skin: Wash with plenty of water  
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a poison center, doctor  
Specific treatment (see first aid section on this label)  
Rinse mouth.  
If skin irritation occurs: Get medical advice, attention.  
Take off contaminated clothing and wash it before reuse.  
Absorb spillage to prevent material damage.

#### Storage

Store in a corrosive resistant container with a resistant inner liner.

#### Disposal

Dispose of contents, container in accordance with all governmental regulations.

Hazards Not Otherwise Classified: No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<u>Component</u>	<u>Synonyms</u>	<u>CAS #</u>	<u>% Weight</u>
Ferric chloride, hexahydrate	Iron (III) chloride hexahydrate	10025-77-1	100

## 4. FIRST AID MEASURES

Inhalation: Remove person to fresh air.  
Eye Contact: Flush eyes with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Seek immediate medical attention.  
Skin Contact: Flush skin with plenty of water. Seek medical attention.  
Ingestion: Rinse mouth and give victim large quantities of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention.  
Additional notes: Symptoms and effects include irritation or burns to skin, eyes, nose, throat, mouth, respiratory tract, gastrointestinal tract; nausea, vomiting.

## 5. FIRE-FIGHTING MEASURES

Extinguishing Media:	Material is not flammable. Use extinguishing media suitable to surrounding materials.
Special Equipment and Precautions:	Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.
Specific Hazards:	Fire conditions may liberate toxic and noxious fumes.
Hazardous combustion products:	Hydrogen chloride gas; iron oxides

## 6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:	Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into clean, dry disposal container in a manner that does not generate dusts. Flush spill area with water.
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## 7. HANDLING AND STORAGE

Incompatible Materials:	Incompatible with strong bases and strong oxidizers. Most common metals, sodium, potassium, mineral acids.
Storage and Handling:	Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers tightly closed and protect them from physical damage. Protect from direct light and minimize contact with air. Store in a corrosive resistant container with a resistant inner liner. Keep only in original container.  Keep only in original container. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves. Wear eye protection, face protection.

## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

### OSHA & ACGIH Exposure Limits:

Ferric chloride, hexahydrate                      OSHA TWA: 1 mg/m<sup>3</sup> (as Fe)    ACGIH TWA: 1 mg/m<sup>3</sup> (as Fe)

Engineering Controls:	Use general or local exhaust ventilation to meet TLV and PEL requirements.
Respiratory Protection:	Respiratory protection required if airborne concentrations exceed PEL or TLV. Use a NIOSH approved respirator with a particulate filter.
Skin/Eye Protective Equipment:	Safety goggles, protective clothing and gloves appropriate for the risk of exposure.  Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Brown to brownish-yellow or brownish-orange crystals
Odor:	Slight odor of hydrochloric acid
Odor Threshold:	Not available
pH:	2.0 for 0.1 M solution
Melting/Freezing Point:	37 °C
Initial Boiling Point and Boiling Range:	280 °C
Flash Point:	Not available
Evaporation Rate:	Not available
Flammability:	Not available
Flammable or Explosive Limits (% by volume in air)	Upper: Not available Lower: Not available
Vapor Pressure:	1 mm Hg @194°C
Vapor Density:	Not available
Relative Density:	1.82    Water=1
Solubility:	Readily soluble in water
Partition Coefficient: n-octanol/water	Not available
Auto-Ignition Temperature:	Not available
Decomposition Temperature:	Not available
Viscosity:	Not available

## 10. STABILITY AND REACTIVITY

Reactivity:	No information available
Stability:	Stable
Possibility of Hazardous Reactions:	Hazardous polymerization will not occur
Conditions to Avoid:	Heat and moisture.
Incompatibles:	Incompatible with strong bases and strong oxidizers. Most common metals, sodium, potassium, mineral acids.
Decomposition Products:	Hydrogen chloride gas; iron oxides

## 11. TOXICOLOGICAL INFORMATION

### Effects of Over Exposure:

Inhalation:	Inhalation may irritate the nose, throat and upper respiratory tract.
Skin Contact:	Contact may cause irritation or burns.
Eye Contact:	May irritate or burn the eyes.

Ingestion: Harmful if swallowed. Ingestion may cause nausea, vomiting and gastrointestinal irritation and burns to the mouth and throat.  
Chronic Effects: Liver damage.  
Target Organs: Liver.  
Additional Effects: No information available  
Reproductive Effects: No information available  
Carcinogenicity: None identified

Toxicity Data:

Ferric chloride, hexahydrate	LD50 (oral, rat)	900 mg/kg
	LD50 (intraperitoneal, mouse)	260 mg/kg

**12. ECOLOGICAL INFORMATION**

	<u>Aquatic Toxicity Data:</u>	<u>Terrestrial Toxicity Data:</u>
Ferric chloride, hexahydrate	No information available	No information available

Persistence and degradability: No information available  
Bioaccumulative potential: No information available  
Mobility in soil: No information available  
Other adverse effects: No information available

**13. DISPOSAL CONSIDERATIONS**

Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

**14. TRANSPORTATION INFORMATION**

This product is not a regulated material for domestic ground transportation.

Environmental hazards: No information available  
Special precautions: No information available  
Bulk transport: No information available

**15. REGULATORY INFORMATION**

Ferric chloride, hexahydrate is listed in the TSCA inventory.

**16. OTHER INFORMATION**

OSHA SDS #: 25637 rev 101 3/27/2015

NE = Not established, NA = Not applicable or Not available

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\*\*\*\*\* END OF SDS \*\*\*\*\*