

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ferric Chloride 40%  
**Synonyms:** trichloroiron, Ferric Chloride  
**CAS Number:** 7705-08-0  
**Grade/Purity:** Reagent  
**Product Type:** Inorganic Compounds, Water Treatment  
**Product Use:** Industrial, Manufacturing or Laboratory use  
**Manufacturer/Supplier:** Alliance Chemical, 204 South Edmond St, Taylor, Texas 76574  
**Information:** 512-365-6838 | [www.alliancechemical.com](http://www.alliancechemical.com)  
**Emergency:** CHEMTEL - 800-255-3924 (24 Hours/Day, 7 Days/Week)

### 2. HAZARDS IDENTIFICATION

**Signal Word:** Danger

**GHS Pictograms:**



**Hazard Statements:**

H302 (96.6%)	Harmful if swallowed [Warning Acute toxicity, oral]
H314 (75.4%)	Causes severe skin burns and eye damage [Danger Skin corrosion/irritation]
H315 (24.4%)	Causes skin irritation [Warning Skin corrosion/irritation]
H318 (24.5%)	Causes serious eye damage [Danger Serious eye damage/eye irritation]
H412 (72.4%)	Harmful to aquatic life with long lasting effects [Hazardous to the aquatic environment, long-term hazard]

**Precautionary Statements:**

P260,	P264, P264+P265, P270, P273, P280, P301+P317, P301+P330+P331, P302+P352, P302+P361+P354, P304+P340, P305+P354+P338, P316, P317, P321, P330, P332+P317, P362+P364, P363, P405, and P501
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### 3. COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENT	CAS #	FORMULA	MOLECULAR WEIGHT	CONCENTRATION
Ferric Chloride	7705-08-0	FeCl <sub>3</sub>	162.21 g/mol	40%
Water	7732-18-5	H <sub>2</sub> O	18.02 g/mol	60%

#### 4. FIRST-AID MEASURES

<b>Eyes</b>	EYES: First check the victim for contact lenses and remove if present. Flush victim's eyes with water or normal saline solution for 20 to 30 minutes while simultaneously calling a hospital or poison control center. Do not put any ointments, oils, or medication in the victim's eyes without specific instructions from a physician. IMMEDIATELY transport the victim after flushing eyes to a hospital even if no symptoms (such as redness or irritation) develop.
<b>Skin</b>	Remove contaminated clothes. Rinse skin with plenty of water or shower.
<b>Inhalation</b>	INHALATION: IMMEDIATELY leave the contaminated area; take deep breaths of fresh air. If symptoms (such as wheezing, coughing, shortness of breath, or burning in the mouth, throat, or chest) develop, call a physician and be prepared to transport the victim to a hospital. Provide proper respiratory protection to rescuers entering an unknown atmosphere. Whenever possible, Self-Contained Breathing Apparatus (SCBA) should be used; if not available, use a level of protection greater than or equal to that advised under Protective Clothing.
<b>Ingestion</b>	INGESTION: DO NOT INDUCE VOMITING. Corrosive chemicals will destroy the membranes of the mouth, throat, and esophagus and, in addition, have a high risk of being aspirated into the victim's lungs during vomiting which increases the medical problems. If the victim is conscious and not convulsing, give 1 or 2 glasses of water to dilute the chemical and IMMEDIATELY call a hospital or poison control center. IMMEDIATELY transport the victim to a hospital. If the victim is convulsing or unconscious, do not give anything by mouth, ensure that the victim's airway is open and lay the victim on his/her side with the head lower than the body. DO NOT INDUCE VOMITING. Transport the victim IMMEDIATELY to a hospital. (NTP, 1992)

#### 5. FIRE-FIGHTING MEASURES

<b>Suitable Media</b>	Dry chemical, CO <sub>2</sub> , water spray. Use water spray to cool containers.
<b>Unsuitable Media</b>	Do not use a solid water stream as it may scatter and spread fire.
<b>Protective Equipment</b>	Wear self-contained breathing apparatus and full protective clothing.
<b>Combustion Products</b>	May include carbon oxides and other toxic fumes. See Section 10.

#### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Use PPE as described in Section 8. Ensure adequate ventilation. Evacuate personnel to safe areas.
<b>Environmental</b>	Prevent leakage or spillage from entering drains, sewers, or waterways.
<b>Containment &amp; Cleanup</b>	Absorb with inert material. Collect in appropriate waste container. Dispose per applicable regulations.

#### 7. HANDLING AND STORAGE

<b>Safe Handling</b>	Use with adequate ventilation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling. Keep container closed when not in use.
<b>Safe Storage</b>	Store in a cool, dry, well-ventilated area. Use corrosion-resistant containers. Keep away from incompatible materials (see Section 10). Keep containers tightly closed.

#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering Controls:** Use adequate ventilation. Provide eyewash stations and quick-drench showers accessible to areas of use.

**Occupational Exposure Limits:**

No established occupational exposure limits.

<b>Eyes</b>	Wear chemical safety goggles or face shield.
<b>Skin</b>	Wear chemical-resistant gloves and protective clothing.
<b>Inhalation</b>	Use NIOSH-approved respirator if exposure limits are exceeded or irritation occurs.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Dark brown liquid, metallic luster, fuming
Odor	Characteristic
pH	Not Available
Melting Point	37°C (99°F)
Boiling Point	280°C (536°F)
Flash Point	Not Available
Vapor Pressure	Not Available
Specific Gravity	1.43
Solubility	Highly water soluble, compatible with alcohols
Molecular Formula	FeCl <sub>3</sub>
Molecular Weight	162.21 g/mol

## 10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Hazardous Reactions	None under normal processing conditions.
Conditions to Avoid	Heat, sparks, open flame, and incompatible materials.
Incompatible Materials	Strong acids, strong bases, reactive metals, water (for some concentrated forms).
Decomposition Products	May produce carbon oxides and other toxic fumes when heated to decomposition.

## 11. TOXICOLOGICAL INFORMATION

Acute Toxicity: See Section 2 for GHS hazard classification.

IARC	Not listed as carcinogen.
NTP	Not listed as carcinogen.
OSHA	Not listed as carcinogen.

## 12. ECOLOGICAL INFORMATION

Ecotoxicity	Data not available. Avoid release to the environment.
Persistence	Not Available
Bioaccumulation	Not Available
Mobility in Soil	Not Available

## 13. DISPOSAL CONSIDERATIONS

Dispose of contents/container in accordance with applicable federal, state, and local regulations. Do not dispose of into drains or waterways.

## 14. TRANSPORT INFORMATION

US DOT	UN2582, FERRIC CHLORIDE SOLUTION, 8, PG III
IMDG	UN2582, FERRIC CHLORIDE SOLUTION, 8, PG III, Tunnel (E)
IATA/ICAO	UN2582, FERRIC CHLORIDE SOLUTION, 8, PG III Passenger: 5 L (PI 852); Cargo only: 60 L (PI 856)
Marine Pollutant	No

## 15. REGULATORY INFORMATION

<b>TSCA Inventory</b>	All ingredients are listed on the TSCA Active inventory.
<b>California Prop 65</b>	Refer to California Proposition 65 list for current status.
<b>SARA 311/312</b>	See Section 2 for hazard classifications.
<b>SARA 313</b>	Refer to EPA Toxic Release Inventory for current listing status.

## 16. OTHER INFORMATION

**Revision Date:** 03/31/2026

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