

## 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Ferric Chloride 10%

**Synonyms:** Ferric Chloride

**CAS Number:** 7705-08-0

**Grade/Purity:** Technical

**Product Type:** Salts

**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:**

|      |                                                   |
|------|---------------------------------------------------|
| H290 | May be corrosive to metals                        |
| H302 | Harmful if swallowed                              |
| H314 | Causes severe skin burns and eye damage           |
| H315 | Causes skin irritation                            |
| H318 | Causes serious eye damage                         |
| H412 | Harmful to aquatic life with long lasting effects |

**Precautionary Statements:**

|                |                                                                                                                                  |
|----------------|----------------------------------------------------------------------------------------------------------------------------------|
| P234           | Keep only in original packaging.                                                                                                 |
| P260           | Do not breathe dust, fume, gas, mist, vapours or spray.                                                                          |
| P264           | Wash hands and face thoroughly after handling.                                                                                   |
| P270           | Do not eat, drink or smoke when using this product.                                                                              |
| P273           | Avoid release to the environment.                                                                                                |
| P280           | Wear protective gloves, protective clothing, and eye/face protection.                                                            |
| P301+P312      | IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell.                                                                 |
| P301+P330+P331 | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.                                                                               |
| P302+P352      | IF ON SKIN: Wash with plenty of water and soap.                                                                                  |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.                           |
| P304+P340      | IF INHALED: Remove person to fresh air and keep comfortable for breathing.                                                       |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P310           | Immediately call a POISON CENTER or doctor.                                                                                      |
| P313           | Get medical advice or attention.                                                                                                 |

|           |                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------|
| P321      | Specific treatment (see first-aid information on this label).                                                  |
| P330      | Rinse mouth.                                                                                                   |
| P332+P313 | If skin irritation occurs: Get medical advice or attention.                                                    |
| P362      | Take off contaminated clothing and wash before reuse.                                                          |
| P363      | Wash contaminated clothing before reuse.                                                                       |
| P390      | Absorb spillage to prevent material damage.                                                                    |
| P405      | Store locked up.                                                                                               |
| P406      | Store in a corrosion resistant container with a resistant inner liner.                                         |
| P501      | Dispose of contents and container in accordance with local, regional, national, and international regulations. |

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

| COMPONENT       | % MIN | % MAX | CAS #     | EINECS# / ELINCS# | FORMULA           | MOLECULAR WEIGHT |
|-----------------|-------|-------|-----------|-------------------|-------------------|------------------|
| Ferric Chloride | 10    | 10    | 7705-08-0 | 231-729-4         | FeCl <sub>3</sub> | 162.20 g/mol     |
| Water           | 90    | 90    | 7732-18-5 | 231-791-2         | H <sub>2</sub> O  | 18.02 g/mol      |

### 4. FIRST-AID MEASURES

|                   |                                                                                                                                                                                        |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>       | Rinse with plenty of water for at least 15 minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.                             |
| <b>Skin</b>       | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing. Wash with soap. Get medical attention immediately.                                |
| <b>Inhalation</b> | Move person to fresh air and keep comfortable for breathing. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately. |
| <b>Ingestion</b>  | Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.                             |

### 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> | For mist or aerosol applications (e.g., spray, atomization, pressure washing), use a NIOSH-approved half-face air-purifying respirator with combination acid gas / P100 cartridges. For dust exposure, an N95 or P100 particulate filter is acceptable. Ensure local exhaust ventilation. |

Exposure limits sourced from NIOSH Pocket Guide and OSHA 29 CFR 1910.1000. Hazard classification from ECHA Classification and Labelling Inventory (CLP Annex VI).

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|                                   |                         |
|-----------------------------------|-------------------------|
| <b>Appearance</b>                 | Yellow-brown liquid     |
| <b>Odor</b>                       | Characteristic          |
| <b>Median Particle Size</b>       | Not Applicable          |
| <b>Particle Size Distribution</b> | Not Applicable          |
| <b>Particle Shape</b>             | Not Applicable          |
| <b>Surface Area</b>               | Not Applicable          |
| <b>Dustiness</b>                  | Not Applicable          |
| <b>Hygroscopicity</b>             | Not Applicable          |
| <b>pH</b>                         | Not Available           |
| <b>Melting Point</b>              | 37°C (pure)             |
| <b>Boiling Point</b>              | 280°C (pure)            |
| <b>Flash Point</b>                | Not Available           |
| <b>Vapor Pressure</b>             | Not Available           |
| <b>Specific Gravity</b>           | 1.092                   |
| <b>Solubility</b>                 | Highly soluble in water |
| <b>Molecular Formula</b>          | FeCl <sub>3</sub>       |
| <b>Molecular Weight</b>           | 162.20 g/mol            |

## 10. STABILITY AND REACTIVITY

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

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** See Section 2 for GHS hazard classification.

|             |                           |
|-------------|---------------------------|
| <b>IARC</b> | Not listed as carcinogen. |
| <b>NTP</b>  | Not listed as carcinogen. |
| <b>OSHA</b> | Not listed as carcinogen. |

## 12. ECOLOGICAL INFORMATION

|                    |                                                                                                                                                                                                                                                        |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Ecotoxicity</b> | Daphnia EC50: 30.06 mg/L (48 h, Ceriodaphnia dubia — pH/hydrolysis-driven; 95% CI 28.20–31.72; cf. Daphnia 96-h TLM 15 mg/L (USCG CHRIS)); Fish LC50: > 26 mg/L (96 h, Gambusia affinis — pH/hydrolysis-driven (hydrolyzes to ferric hydroxide + HCl)) |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                         |                                                                                                         |
|-------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Persistence</b>      | Not applicable (inorganic salt; hydrolyzes, toxicity driven by acidification and ferric hydroxide floc) |
| <b>Bioaccumulation</b>  | Not Available                                                                                           |
| <b>Mobility in Soil</b> | 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

|                         |                                              |
|-------------------------|----------------------------------------------|
| <b>US DOT</b>           | UN2582, Ferric chloride, solution, 8, PG III |
| <b>IMDG</b>             | UN2582, Ferric chloride, solution, 8, PG III |
| <b>IATA/ICAO</b>        | UN2582, Ferric chloride, solution, 8, PG III |
| <b>Marine Pollutant</b> | No                                           |

### 15. REGULATORY INFORMATION

|                                                                                                                       |                                           |
|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------|
| Regulatory listings not yet on file in this system; consult OSHA, EPA TSCA, EPCRA TRI, and California OEHHA directly. |                                           |
| <b>SARA 311/312</b>                                                                                                   | See Section 2 for hazard classifications. |

### 16. OTHER INFORMATION

**Revision Date:** 07/22/2026

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