



Material Safety Data Sheet

Ferric chloride oxidizing solution

Section 1 - Chemical Product and Company Identification

MSDS Name:

Ferric chloride oxidizing solution

Catalog Numbers:

LC14330

Synonyms:**Company Identification:**

LabChem, Inc.
200 William Pitt Way
Pittsburgh, PA 15238

Company Phone Number:

(412) 826-5230

Emergency Phone Number:

(800) 424-9300

CHEMTREC Phone Number:

(800) 424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	Percent
7732-18-5	Water	balance
10025-77-1	Ferric chloride, hexahydrate	1
5329-14-6	Sulfamic acid	1.6

Section 3 - Hazards Identification

Emergency Overview

Appearance: *Light amber***Caution!** *May be harmful if swallowed.***Target Organs:** *None known.***Potential Health Effects****Eye:**

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

Ingestion can result in abdominal pain, vomiting with blood, diarrhea, dehydration, shock, pallor, cyanosis, hypothermia, acidosis, coagulation defects, respiratory and cardiac involvement, vasomotor instability leading to coma and death. Survivors may develop reversible liver damage, gastric scarring and pyloric obstruction.



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Inhalation:

May cause respiratory tract irritation.

Chronic:

May cause dermatitis and conjunctivitis. Repeated ingestion may cause hemosiderosis, possible liver and pancreatic damage.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids until no evidence of chemical remains. Get medical aid at once.

Skin:

Get medical aid. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Remove contaminated clothing and shoes.

Ingestion:

(QUALIFIED MEDICAL PERSONNEL ONLY)...if not in shock or coma, induce emesis and follow with gastric lavage using deferoxamine, 2 grams/liter solution containing 20gram/liter sodium bicarbonate in water. Leave 10 grams deferoxamine in 50ml of 5% sodium bicarbonate in stomach. Treat for shock, maintain airway and blood pressure.

Inhalation:

Give artificial respiration if necessary. Get medical aid. Keep victim warm, at rest. Move victim to fresh air.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

Negligible fire and explosion hazard when exposed to heat or flame. Move container if possible, avoid breathing vapors or dust. Avoid corrosive vapors or hydrogen chloride formed by thermal decomposition.

Extinguishing Media:

For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam.

Autoignition Temperature:

No information found.

Flash Point:

No information found.

NFPA Rating:

CAS# 7732-18-5: Not published.

CAS# 10025-77-1: Not published.

CAS# 5329-14-6: Not published.

Explosion Limits:

Lower: Upper:



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Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spills with absorbent (vermiculite, sand, fuller's earth) and place in plastic bags for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas.

Storage:

Do not store in metal containers. Protect from heat and water reactive substance (sodium, oleum). Store in glass or approved plastic containers only, keep capped.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Provide local exhaust or general dilution ventilation.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Ferric chloride, hexahydrate	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.
Sulfamic acid	None of the components are on this list.	None of the components are on this list.	None of the components are on this list.

OSHA Vacated PELs:

Personal Protective Equipment

Eyes:

Do not wear contact lenses when working with chemicals. An eye wash fountain should be available in the immediate work area. Wear splash-proof safety goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29CFR 1910.134. Always use a NIOSH-approved respirator when necessary.



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Section 9 - Physical and Chemical Properties

Physical State: Liquid
Color: Light amber
Odor: Slight hydrogen chloride
pH: Acidic

Vapor Pressure: No information found.
Vapor Density: No information found.
Evaporation Rate: No information found.
Viscosity: No information found.
Boiling Point: No information found.
Freezing/Melting Point: No information found.
Decomposition Temperature: No information found.
Solubility in water: Soluble.
Specific Gravity/Density: No information found.
Molecular Formula: No information found.
Molecular Weight: No information found.

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Metals.

Hazardous Decomposition Products:

Hydrogen chloride.

Hazardous Polymerization:

Has not been reported

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.

CAS# 10025-77-1: NO5425000.

CAS# 5329-14-6: WO5950000.

LD50/LC50:

CAS# 7732-18-5: Oral, rat: LD50 = >90 mL/kg.

CAS# 10025-77-1: No information found.

CAS# 5329-14-6: Oral, mouse: LD50 = 1312 mg/kg.

Oral, rat: LD50 = 3160 mg/kg.

Carcinogenicity:

CAS# 7732-18-5: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 10025-77-1: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 5329-14-6: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.



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Epidemiology:

Ferric chloride hexahydrate is an eye, mucous membrane, and skin irritant; poisoning affects digestive tract, respiratory, cardiovascular, and central nervous systems, liver and kidneys.

Teratogenicity:**Reproductive:****Mutagenicity:****Neurotoxicity:**

Section 12 - Ecological Information

No information found.

Section 13 - Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

Section 14 - Transport Information

US DOT

Shipping Name: Not regulated.

Hazard Class:

UN Number:

Packing Group:

Section 15 - Regulatory Information

US Federal**TSCA:**

CAS# 7732-18-5 is listed on the TSCA Inventory.

CAS# 10025-77-1 is not on the TSCA Inventory, however, its anhydrous form is on the inventory and so this hydrate is exempt from TSCA Inventory requirements (40CFR270.3(u)(2)).

CAS# 5329-14-6 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

None of the components are on this list.

CERCLA/SARA Section 313:

None of the components are on this list.

OSHA - Highly Hazardous:

None of the components are on this list.

US State**State Right to Know:**

Sulamic acid can be found on the following state Right-to-Know lists: New Jersey.

California Regulations:



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European/International Regulations

Canadian DSL/NDSL:

CAS# 7732-18-5 is listed on Canada's DSL List.

CAS# 5329-14-6 is listed on Canada's DSL List.

Canada Ingredient Disclosure List:

CAS# 7732-18-5 is not listed on Canada's Ingredient Disclosure List.

CAS# 10025-77-1 is not listed on Canada's Ingredient Disclosure List.

CAS# 5329-14-6 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: March 19, 2004

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