



Material Safety Data Sheet Iron Standard, 1 mL=0.2 mg Fe

Section 1 - Chemical Product and Company Identification

MSDS Name:

Iron Standard, 1 mL=0.2 mg Fe

Catalog Numbers:

LC15720

Synonyms:

None

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
7664-93-9	Sulfuric acid	3.5
7783-85-9	Ferrous ammonium sulfate hexahydrate	0.14
7722-64-7	Potassium permanganate	0.06

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear, slight pink solution**Caution!** May cause eye irritation and possible burns. May cause respiratory tract irritation. May cause skin irritation.**Target Organs:** Eyes, skin, respiratory tract, teeth**Potential Health Effects****Eye:**

May cause moderate eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause gastrointestinal irritation.



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Inhalation:

May cause mucous membrane irritation.

Chronic:

May cause dermatitis and conjunctivitis. Repeated exposure to mist may cause chronic tracheobronchitis, erosion and discoloration of teeth.

Section 4 - First Aid Measures

Eyes:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid at once. Do NOT allow victim to rub or keep eyes closed.

Skin:

Get medical aid at once. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion:

Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid at once.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation.

Notes to Physician:

Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Extinguishing Media:

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

Autoignition Temperature:

Not applicable.

Flash Point:

Not applicable.

NFPA Rating:

Health- 1, Flammability- 0, Instability- 0.

Explosion Limits:

Lower: n/a Upper: n/a

Section 6 - Accidental Release Measures

General Information:

Use proper personal protective equipment as indicated in Section 8.



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Spills/Leaks:

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

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid breathing dust, vapor, mist, or gas. Do not ingest or inhale. Avoid contact with eyes, skin, and clothing.

Storage:

Store capped at room temperature. Protect from heat and incompatibles.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits:

Chemical Name:	ACGIH	NIOSH	OSHA
Water	None listed	None listed	None listed
Sulfuric acid	0.2 mg/m ³ (thoracic fraction)	1 mg/m ³ TWA 15 mg/m ³ IDLH	1 mg/m ³ TWA
Ferrous ammonium sulfate	1 mg/m ³ TWA (as Fe) (listed under Iron salts, soluble)	1 mg/m ³ TWA (as Fe) (listed under Iron salts, soluble)	None listed
Potassium permanganate	0.2 mg/m ³ TWA (as Mn) (listed under Manganese, inorganic compounds)	1 mg/m ³ TWA (as Mn) (listed under Manganese compounds, nos) 500 mg/m ³ TWA (as Mn) (listed under Manganese compounds, nos)	5 mg/m ³ Ceiling (as Mn) (listed under Manganese compounds, nos)

OSHA Vacated PELs:

Sulfuric acid: 1 mg/m³ TWA

Ferrous ammonium sulfate hexahydrate: 1 mg/m³ TWA (as Fe) (listed under Iron salts (soluble))

Personal Protective Equipment

Eyes:

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin:

Wear appropriate gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.



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Section 9 - Physical and Chemical Properties

Physical State:	Liquid
Color:	Slight pink
Odor:	Odorless
pH:	Acidic
Vapor Pressure:	Not available
Vapor Density:	Not available
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not available
Freezing/Melting Point:	Not available
Decomposition Temperature:	Not available
Solubility in water:	Soluble
Specific Gravity/Density:	1.05
Molecular Formula:	Not applicable
Molecular Weight:	Not applicable

Section 10 - Stability and Reactivity

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials.

Incompatibilities with Other Materials:

Alkalis, metals, strong oxidizing agents.

Hazardous Decomposition Products:

Oxides of nitrogen, oxides of sulfur, ammonia.

Hazardous Polymerization:

Has not been reported.

Section 11 - Toxicological Information

RTECS:

CAS# 7732-18-5: ZC0110000.
CAS# 7664-93-9: WS5600000.
CAS# 7783-85-9: BR6500000.
CAS# 7722-64-7: SD6475000.

LD50/LC50:

CAS# 7732-18-5:
Oral, rat: LD50 = >90 mL/kg.
CAS# 7664-93-9:
Inhalation, mouse: LC50 = 320 mg/m³/2H
Inhalation, rat: LC50 = 510 mg/m³/2H
Oral, rat: LD50 = 2140 mg/kg.
CAS# 7783-85-9:
Oral, rat: LD50 = 3250 mg/kg.



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CAS# 7722-64-7:

Oral, rat: LD50 = 1090 mg/kg.

Carcinogenicity:

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

CAS# 7664-93-9: ACGIH: A2 - Suspected Human Carcinogen (contained in strong inorganic acid mists) California: carcinogen, initial date 3/14/03 (Strong inorganic acid mists containing sulfuric acid). NTP: Known carcinogen (Strong inorganic acid mists containing sulfuric acid). IARC: Group 1 carcinogen

CAS# 7783-85-9: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

CAS# 7722-64-7: Not listed as a carcinogen by ACGIH, IARC, NIOSH, NTP, OSHA, or CA Prop 65.

Epidemiology:

No information found

Teratogenicity:

No information found

Reproductive:

No information found

Mutagenicity:

No information found

Neurotoxicity:

No information found

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: Corrosive liquid, acidic, inorganic, n.o.s. (Sulfuric acid)

Hazard Class: 8

UN Number: UN3264

Packing Group: PG II

Section 15 - Regulatory Information

US Federal

TSCA:

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

CAS# 7664-93-9 is listed on the TSCA Inventory.



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CAS# 7783-85-9 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# 7722-64-7 is listed on the TSCA Inventory.

SARA Reportable Quantities (RQ):

CAS# 7664-93-9: final RQ = 1000 pounds (454 kg)

CAS# 7722-64-7: final RQ = 100 pounds (45.4 kg)

CERCLA/SARA Section 313:

This material contains Sulfuric acid (CAS# 7664-93-9, 3.5%), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

OSHA - Highly Hazardous:

None of the chemicals in this product are considered highly hazardous by OSHA.

US State

State Right to Know:

Sulfuric acid can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

Potassium permanganate can be found on the following state Right-to-Know lists: California, New Jersey, Florida, Pennsylvania, Massachusetts.

Ferrous ammonium sulfate hexahydrate can be found on the following state right to know lists: California, (listed as Iron salts (soluble)), Pennsylvania, (listed as Iron salts (soluble)), Minnesota, (listed as Iron salts (soluble)).

California Regulations:

WARNING! This product contains Sulfuric acid, a chemical known to the state of California to cause cancer.

European/International Regulations

Canadian DSL/NDSL:

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

CAS# 7664-93-9 is listed on Canada's DSL List.

CAS# 7783-85-9 is not listed on Canada's DSL or NDSL List.

CAS# 7722-64-7 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# 7664-93-9 is listed on Canada's Ingredient Disclosure List.

CAS# 7783-85-9 is not listed on Canada's Ingredient Disclosure List.

CAS# 7722-64-7 is listed on Canada's Ingredient Disclosure List.

Section 16 - Other Information

MSDS Creation Date: April 8, 1998

Revision Date: September 15, 2009

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