



Material Safety Data Sheet

Iron Standard Solution, 50 ug/mL (50 ppm)

Section 1 - Chemical Product and Company Identification

MSDS Name:

Iron Standard, 50 ppm

Catalog Numbers:

LC15730

Synonyms:

Ferrous ammonium sulfate solution

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
7783-85-9	Ferrous ammonium sulfate, hexahydrate	0.035
7664-93-9	Sulfuric acid	0.05

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear colorless to pale-green**Caution!** May cause eye and skin irritation. May cause digestive tract irritation.**Target Organs:** None known.**Potential Health Effects****Eye:**

May cause moderate eye irritation.

Skin:

May cause moderate skin irritation.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation.



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Chronic:

Prolonged or repeated skin contact may cause dermatitis. Sulfuric acid - repeated exposure to mist may cause chronic tracheobronchitis, erosion and discoloration of teeth. May cause conjunctivitis and lacrimation.

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. Cover burns with loose sterile non-medicated bandages.

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. Cover burns with a dry sterile bandage (secure, not tight).

Ingestion:

Do NOT induce vomiting. Get medical aid at once. Give conscious victim large quantities of water to dilute acid. Give oxygen if respiration is depressed.

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, cool with fog or spray. Do not scatter contents with excess water.

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# 7783-85-9: Not published.

CAS# 7664-93-9: Not published.

Explosion Limits:

Lower: Upper:

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 plastic bags for later disposal.

Section 7 - Handling and Storage

Handling:

Wash thoroughly after handling. Avoid prolonged or repeated contact with skin.

Storage:

Store capped at room temperature.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls:

Local exhaust ventilation may be necessary to control any air contaminants to within their TLVs during the use of this product.

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.
Ferrous ammonium sulfate, 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.
Sulfuric acid	1 mg/m ³ TWA; 3 mg/m ³ STEL	1 mg/m ³ TWA	1 mg/m ³ TWA

OSHA Vacated PELs:

Sulfuric acid: 1 mg/m³ TWA

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 acid protective clothing and gloves.

Clothing:

Wear acid protective clothing and gloves.

Respirators:

Sulfuric acid-- 50 mg/M³ - gas mask with acid gas canister and high efficiency particulate filter.
Self contained breathing apparatus with full facepiece. 100 mg/M³ - Type C supplied-air respirator with full facepiece, helmet or hood operated in continuous-flow mode.

Section 9 - Physical and Chemical Properties

Physical State: Clear liquid



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Color: Clear colorless to pale-green

Odor: Odorless

pH: Acidic

Vapor Pressure: No information found.

Vapor Density: No information found.

Evaporation Rate: >1 (ether=1)

Viscosity: No information found.

Boiling Point: > 100°C (> 212.00°F)

Freezing/Melting Point: < 0°C (< 32.00°F)

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, strong oxidizing agents, alkalies.

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# 7783-85-9: BR6500000.

CAS# 7664-93-9: WS5600000.

LD50/LC50:

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg.

CAS# 7783-85-9:

Oral, rat: LD50 = 3250 mg/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.

Carcinogenicity:

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

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

CAS# 7664-93-9:



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ACGIH: A2 - Suspected Human Carcinogen (contained in strong inorganic acid mists)
California: Not listed.
NIOSH: Not listed.
NTP: Not listed.
OSHA: Select carcinogen
IARC: Group 1 carcinogen

Epidemiology:

Sulfuric acid is a severe eye, skin, and mucous membrane irritant.

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

SARA Reportable Quantities (RQ):

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

CERCLA/SARA Section 313:

This material contains Sulfuric acid (CAS# 7664-93-9, 1.5%), 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 components are on this list.



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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.

California Regulations:

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.

Canada Ingredient Disclosure List:

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

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

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

Section 16 - Other Information

MSDS Creation Date: November 6, 2007

Revision Date: November 26, 2007

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