

1. Product and Company Identification

Product Code:
Product Name: IRON MANGANESE
Trade Name: IRON MANGANESE
Company Name: Stanford Advanced Materials
Address : 23661 Birtcher Dr.,
Lake Forest, CA 92630 U.S.A.
Phone Number: (949) 407-8904
Emergency Contact: (949) 407-8904
Synonyms: N/A. Mixture.

2. Hazards Identification

Serious Eye Damage/Eye Irritation, Category 2B
Acute Toxicity: Skin, Category 5
Acute Toxicity: Inhalation, Category 5
Specific Target Organ Toxicity (single exposure), Category 3
Acute Toxicity: Oral, Category 4
Specific Target Organ Toxicity (repeated exposure), Category 2
Aquatic Toxicity (Chronic), Category 4



GHS Signal Word: **Warning**

GHS Hazard Phrases: H302 - Harmful if swallowed.
H313 - May be harmful in contact with skin.
H320 - Causes eye irritation.
H333 - May be harmful if inhaled.
H335 - May cause respiratory irritation.
H373 - May cause damage to through prolonged or repeated exposure.
H413 - May cause long lasting harmful effects to aquatic life.

GHS Precaution Phrases: P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P103 - Read label before use.
P264 - Wash hands thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection.
P281 - Use personal protective equipment as required.
P101 - If medical advice is needed, have product container or label at hand.

GHS Response Phrases: P301+330+331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P310 - Immediately call a POISON CENTER or doctor/physician.
P302+352 - IF ON SKIN: Wash with plenty of soap and water.
P332+313 - If skin irritation occurs, get medical advice/attention.
P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P342+311 - If experiencing respiratory symptoms call a POISON CENTER or doctor/physician.
P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+313 - If eye irritation persists, get medical advice/attention.
P370+378 - In case of fire, use water, carbon dioxide or dry chemicals to extinguish.

SAFETY DATA SHEET

IRON MANGANESE

GHS Storage and Disposal Phrases:	P391 - Collect spillage. P390 - Absorb spillage to prevent material damage. P405 - Store locked up. P501 - Dispose of contents/container to treatment at a permitted facility or as advised by your local regulatory authority.
Potential Health Effects (Acute and Chronic):	Chronic: Not known.
Inhalation:	Causes chemical burns to the respiratory tract. May be irritating to respiratory tract.
Skin Contact:	May be irritating. Prolonged or repeated exposure may produce burns.
Eye Contact:	May be irritating. May cause severe eye damage.
Ingestion:	Burning pain in mouth and throat, nausea, possible vomiting, diarrhea, possible bloody stools, somnolence, tremors.

3. Composition/Information on Ingredients

CAS #	Hazardous Components (Chemical Name)	Concentration	RTECS #
7758-94-3	Ferrous chloride	~42.0 %	NO5400000

4. First Aid Measures

Emergency and First Aid

Procedures:

In Case of Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Remove from exposure area. If irritation exists from mists, or in the event of massive inhalation, seek medical attention.

In Case of Skin Contact: Wash with soap and water. Rinse thoroughly. Seek medical attention if inflammation occurs. Do not attempt to neutralize with chemicals.

In Case of Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes. Get immediate medical attention. Seek medical attention, preferably an ophthalmologist.

In Case of Ingestion: Give at least two (2) glasses of milk or water. DO NOT INDUCE VOMITING. If vomited, repeat liquids, continue until condition is stable. Get medical attention.

Note to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

Flash Pt: N.A.

Explosive Limits: LEL: N.E. UEL: N.E.

Autoignition Pt: N.A.

Suitable Extinguishing Media: Water, CO2 or dry chemicals.

Fire Fighting Instructions: Wear self contained breathing apparatus.

Flammable Properties and Hazards: Toxic fumes may be generated at elevated temperatures.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled: Collect and contain for salvage or disposal. Absorb waste on inert media and dispose of as solid waste.

7. Handling and Storage

Precautions To Be Taken in Handling: Since emptied packages retain product residue, follow label warnings even after package is emptied.

Precautions To Be Taken in Storing: Store in a cool, dry place, away from food, feed, clothing materials and living quarters. Whenever possible, place chemicals on secondary containers or diked area. Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Keep containers tightly closed when not in use. Store in a tightly closed container.

8. Exposure Controls/Personal Protection

CAS #	Partial Chemical Name	OSHA TWA	ACGIH TWA	Other Limits
7758-94-3	Ferrous chloride		TLV: 1 mg/m ³ as Fe	

Respiratory Equipment (Specify Type): Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/OSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

As required by conditions. Use an OSHA or NIOSH approved respirator, if required.

Eye Protection: Safety glasses should be worn in any type of operation with chemicals.

Protective Gloves: Protective gloves should be worn as good hygiene dictates.

Other Protective Clothing:

Engineering Controls (Ventilation etc.): General ventilation is usually adequate. Local exhaust should be used if needed for safe, comfortable working conditions. An eye bath and washing facilities should be readily available.

Work/Hygienic/Maintenance Practices: Wash thoroughly after handling. Do not smoke when handling chemicals.

9. Physical and Chemical Properties

Physical States: [] Gas [X] Liquid [] Solid

Appearance and Odor: Clear.

pH: 7.8

Melting Point: N.A.

Boiling Point: ~ 212.00 F (100.0 C)

Flash Pt: N.A.

Evaporation Rate: < 1 (Ether=1)

Flammability (solid, gas):

Explosive Limits: LEL: N.E. UEL: N.E.

Vapor Pressure (vs. Air or mm Hg): ~ 30 mm

Vapor Density (vs. Air = 1): > 1

Specific Gravity (Water = 1): 1.24

Solubility in Water: 99%

Percent Volatile: N.A.
Autoignition Pt: N.A.

10. Stability and Reactivity

Stability: Unstable [] Stable [X]
Conditions To Avoid - Instability:
Incompatibility - Materials To Avoid: Oxidizers.
Hazardous Decomposition or Byproducts: CL2 above 300° C.
Possibility of Hazardous Reactions: Will occur [] Will not occur [X]
Conditions To Avoid - Hazardous Reactions:

11. Toxicological Information

Toxicological Information: CAS# 7758-94-3: Acute toxicity, LD50, Intraperitoneal, Mouse, 59.00 MG/KG. Result: Behavioral: Changes in psychophysiological tests. ; Naunyn-Schmiedeberg's Archiv fuer Experimentelle Pathologie und Pharmakologie., Vol/p/yr: 244,17, 1962
Carcinogenicity/Other Information: CAS# 7758-94-3: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS #	Hazardous Components (Chemical Name)	NTP	IARC	ACGIH	OSHA
7758-94-3	Ferrous chloride	n.a.	n.a.	n.a.	n.a.

12. Ecological Information

General Ecological Information: This product has not been tested for environmental effects. The available data on the raw materials does not indicate any undue hazard to the environment under anticipated conditions of storage and use. If discharged into the marine environment it may be toxic to fish or other marine organisms, and due to its nutrient value may contribute to eutrophication in bodies of water.

13. Disposal Considerations

Waste Disposal Method: Landfill in compliance with all Federal, State and Local laws concerning health and environment.

14. Transport Information

GHS Classification: Serious Eye Damage/Eye Irritation, Category 2B - Warning! Causes eye irritation
 Acute Toxicity: Skin, Category 5 - Warning! May be harmful in contact with skin
 Acute Toxicity: Inhalation, Category 5 - Warning! May be harmful if inhaled
 Specific Target Organ Toxicity (single exposure), Category 3 - Warning! May cause respiratory irritation, or may cause drowsiness and dizziness
 Acute Toxicity: Oral, Category 4 - Warning! Harmful if swallowed
 Specific Target Organ Toxicity (repeated exposure), Category 2 - Warning! May cause damage to {<target organs>} through prolonged or repeated exposure
 Aquatic Toxicity (Chronic), Category 4 - May cause long lasting harmful effects to aquatic life

SAFETY DATA SHEET IRON MANGANESE

LAND TRANSPORT (US DOT):

DOT Proper Shipping Name: Not Regulated. Trade Name: TRUE-FULLY IRON WITH MANGANESE

DOT Hazard Class:

UN/NA Number:

15. Regulatory Information

EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists

CAS #	Hazardous Components (Chemical Name)	S. 302 (EHS)	S. 304 RQ	S. 313 (TRI)
7758-94-3	Ferrous chloride	No	Yes 100 LB	No

This material meets the EPA 'Hazard Categories' defined for SARA Title III Sections 311/312 as indicated:

<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Acute (immediate) Health Hazard
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Chronic (delayed) Health Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Fire Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Sudden Release of Pressure Hazard
<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Reactive Hazard

CAS #	Hazardous Components (Chemical Name)	Other US EPA or State Lists
7758-94-3	Ferrous chloride	CAA HAP,ODC: No; CWA NPDES: No; TSCA: Yes - Inventory; CA PROP.65: No; CA TAC, Title 8: Title 8

CAS #	Hazardous Components (Chemical Name)	International Regulatory Lists
7758-94-3	Ferrous chloride	Canadian DSL: Yes; Canadian NDSL: No; Mexico INSQ: Yes; REACH: Yes - (R), (P)

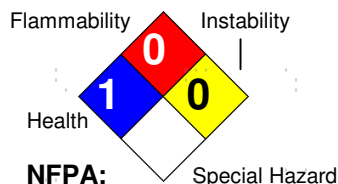
Regulatory Information Statement:

If this product contains components designated as CERCLA Reportable Quantity (RQ) Substance, Section 103 of CERCLA requires the "person in charge" of a facility or vessel, as soon as he or she has knowledge of a release of a hazardous substance in an amount equal to or greater than an RQ, to report the release immediately to the National Response Center in Washington, DC.

16. Other Information

Revision Date: 06/01/2015

Hazard Rating System:



Additional Information About This Product:

Company Policy or Disclaimer:

The information contained herein is furnished without warranty of any kind. Users should consider these data only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers.