

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name Iron, Electrolytic Powder

CAS number 7439-89-6

Synonyms N/A

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses Laboratory Chemicals

1.3 Details of the supplier of the safety data sheet

Company Lab Alley, LLC
12501 Pauls Valley Road
Austin, Texas 78737
U.S.A.

Telephone 512-668-9918

Fax 512-886-4008

1.4 Emergency telephone

Emergency Phone #	US & Canada: 1-800-535-5053	INFOTRAC
	International 1-352-323-3500	INFOTRAC

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Self-heating substances and mixtures Category 1
Combustible dust

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal Word

Danger

Hazard statements

May form combustible dust concentrations in air
Self-heating; may catch fire

Precautionary statements

Keep cool. Protect from sunlight.
Wear protective gloves/protective clothing/eye protection/face protection.
Maintain air gap between stacks/pallets.
Store away from other materials.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

May form combustible dust concentrations in air.

SECTION 3: Composition/information on ingredients

3.1 Components

Chemical name	Common name and synonyms	CAS number	Concentration
Iron, powder, reduced	-	7439-89-6	<=100%

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

If symptoms persist, call a physician.

If inhaled

Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

In case of skin contact

Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

In case of eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
If swallowed	Get medical attention if symptoms occur. Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

None reasonably foreseeable.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media Dry sand; approved class D extinguishers.

Unsuitable extinguishing media DO NOT USE WATER, FOAM OR CO2.

5.2 Specific hazards arising from the substance or mixture

Risk of ignition. Dust can form an explosive mixture in air. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition. Self-heating; exposure to air may cause substance to self-heat without an energy supply.

5.3 Special protective equipment and precautions for firefighters

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

5.4 Further information

Flash Point No information available.

Autoignition Temperature No information available.

Explosion limits

Upper No information available.

Lower No information available.

Sensitivity to Mechanical Impact No information available.

Sensitivity to Static Discharge No information available.

NFPA

Health	Flammability	Instability	Physical hazards
0	3	1	N/A

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Ensure adequate ventilation.

6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

6.3 Methods and materials for containment and cleaning up

Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep insuitable, closed containers for disposal.

6.4 Reference to other sections

Refer to protective measures listed in Sections 7 and 8. See section 13 for proper disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatibilities

No information available.

SECTION 8: Exposure controls/personal protection

8.1 Occupational exposure limits

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

8.2 Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment

Eye/face protection

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 protection

Long sleeved clothing.

Body Protection

Long sleeved clothing.

Respiratory protection

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.

Control of environmental exposure

Handle in accordance with good industrial hygiene and safety practice.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Powder Solid
Appearance	Grey
Odor	Odorless
Odor Threshold	No data available
pH	No data available
Melting Point/Range	1535 °C / 2795 °F
Boiling Point/Range	3000 °C / 5432 °F @ 760 mmHg
Evaporation Rate	No data available
Flammability (solid)	No data available
Flammability or explosive limit	
Upper	No data available
Lower	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Density	No data available
Solubility	Insoluble in water
Partition coefficient; n-octanol/water	No data available

Autoignition Temp	No data available
Decomposition Temp	No data available
Viscosity	No data available
Molecular Formula	Fe
Molecular Weight	55.84
VOC Content(%)	No data available
Oxidizing properties	No data available

9.2 Other safety information

No information available.

SECTION 10: Stability and reactivity

10.1 Reactivity

Yes.

10.2 Chemical stability

Moisture sensitive.

10.3 Possibility of hazardous reactions

None under normal processing.

10.4 Conditions to avoid

Avoid dust formation. Incompatible products. Excess heat. Exposure to moist air or water.

10.5 Incompatible materials

Strong oxidizing agents, Acids, Fluorine, halogenated agents, Halogens, oxygen, nitriles, Aldehydes.

10.6 Hazardous decomposition products

Hydrogen.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Product Information, Component Information

Acute toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Iron, powder, reduced	30 g/kg (Rat)	Not listed	Not listed

Skin corrosion/irritation

No information available.

Serious eye damage/eye irritation

No information available.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No components are listed as known or likely human carcinogens.

Specific target organ toxicity - single exposure

None known.

Specific target organ toxicity - repeated exposure

None known.

Reproductive toxicity

No information available.

Chronic effects

No information available.

11.2 Additional Information

Tumorigenic effects have been reported in experimental animals.

SECTION 12: Ecological information

12.1 Toxicity

Do not empty into drains. Contains a substance which is: Harmful to aquatic organisms. The product contains following substances which are hazardous for the environment.

Iron, powder, reduced - Freshwater fish: 13.6 mg/L LC50 96 h

12.2 Persistence and degradability

Insoluble in water.

12.3 Bio accumulative potential

No information available.

12.4 Mobility in soil

Is not likely mobile in the environment due its low water solubility.

12.5 Results of PBT and vPvB assessment

No information available.

12.6 Endocrine disrupting properties

No information available.

12.7 Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1 Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

SECTION 14: Transport information

DOT (US)

UN Number	UN3190
Proper Shipping name	SELF-HEATING SOLID, INORGANIC, N.O.S.
Hazard Class	4.2
Packaging Group	II
Technical name	Iron, powder, reduced

IMDG

UN Number	UN3190
Proper Shipping name	SELF-HEATING SOLID, INORGANIC, N.O.S.
Hazard Class	4.2
Packaging Group	II
Technical name	Iron, powder, reduced

IATA

UN Number	UN3190
Proper Shipping name	SELF-HEATING SOLID, INORGANIC, N.O.S.
Hazard Class	4.2
Packaging Group	II
Technical name	Iron, powder, reduced

SECTION 15: Regulatory information

**US federal
regulations**

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not applicable.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not applicable.

SARA 304 Emergency release notification

Not applicable.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not applicable.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 302 Extremely hazardous substance

Not applicable.

SARA 311/312 Hazardous

Acute Health Hazard Yes

Chronic Health Hazard No

Fire Hazard Yes

Sudden Release of Pressure Hazard No

Reactive Hazard Yes

SARA 313 (TRI reporting)

Not applicable.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not applicable.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not applicable.

Safe Drinking Water Act

Not applicable.

**FEMA Priority Substances Respiratory Health and Safety in the Flavor
Manufacturing Workplace**

Not applicable.

US state regulations

US. Massachusetts RTK - Substance List

Not applicable.

US. New Jersey Worker and Community Right-to-Know Act

Not applicable.

US. Pennsylvania Worker and Community Right-to-Know Law

Not applicable.

California Proposition 65

This product does not contain any Proposition 65 chemicals.

SECTION 16: Other information

Date of Issue: 6/12/2025

SECTION 17: Disclaimer

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.