SINGLETRACK

Safety Data Sheet

Ferric Sulfate

SECTION 1 – PRODUCT AND SUPPLIER IDENTIFICATION

Product:	Ferric Sulfate
Supplier:	SingleTrack Solutions Corp.
Address:	4838 Richard Road SW, Calgary, Alberta, Canada T3E 6L1
Office:	1-587-353-4119

Product detail

Product Name: Ferric Sulfate
Synonyms: Ferric sulphate, iron hydroxide sulfate, Iron Sulfate, Ferric persulfate
CAS No.: 10028-22-5

SECTION 2 – HAZARD(S) IDENTIFICATION

Caution: May be harmful if swallowed. May cause irritation to the skin, eyes, and respiratory tract.

SAF-T-DATA(tm) Ratings

Health Rating: 1 - Slight risk
Flammability Rating: 0 - None
Reactivity Rating: 0 - None
Contact Rating: 2 - Moderate risk

Recommended Lab Protective Equipment:

- Goggles
- Lab coat
- Ventilation hood
- Appropriate gloves

Storage Color Code: Orange (General Storage)

Potential Health Effects

Inhalation: May cause irritation to the respiratory tract.
Ingestion: Low toxicity in small quantities. Larger doses may lead to nausea, vomiting, diarrhea, and black stool.
Skin Contact: Generally, not expected to cause adverse effects.
Eye Contact: Eye splashes may cause irritation.
Chronic Exposure: No information available.

Disclaimer: This Data Sheet provides information without warranty or guarantee. "Physical Properties" are representative values, not specifications. Users must assess product suitability for their applications.

SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients	CAS #	Percent	Hazardous
Ferric Sulfate	10028-22-5	75%	No
Water	7732-18-5	25%	No

Note: "Water" includes free and bound water

SECTION 4 – FIRST-AID MEASURES

Inhalation: Move the affected individual to fresh air immediately. Seek medical attention if breathing difficulties persist.
Ingestion: Induce vomiting only when instructed by medical personnel. Do not give anything by mouth to an unconscious person.
Skin Contact: Rinse the affected area with soap and water. Consult a healthcare provider if irritation occurs.
Eye Contact: Rinse eyes thoroughly with running water. If irritation persists, seek medical advice.

SECTION 5 – FIRE-FIGHTING MEASURES

Fire Hazard: Not considered to be a fire hazard.
Explosion Hazard: Not considered to be an explosion hazard.
Fire Extinguishing Media: Use any appropriate methods to extinguish fires in the surrounding area.
Special Information: In case of a fire, wear full protective gear including a NIOSH-approved self-contained breathing apparatus with a full facepiece operated in pressure demand or another positive pressure mode.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Ventilate the area of the leak or spill. Wear the appropriate personal protective equipment as specified in Section 8. For spills, carefully pick up and place the material in a suitable container for reclamation or disposal, ensuring to use methods that do not generate dust.

SECTION 7 – HANDLING AND STORAGE

Ferric sulfate is mildly hygroscopic and should be stored in a dry place. When feeding ferric sulfate, it is important to maintain the correct water ratio, which is the quantity of water to the weight of the material in the dissolving tank. Always follow the feeding equipment manufacturer's instructions. Additionally, observe all warnings and precautions listed for the product.

SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits:
ACGIH Threshold Limit Value (TLV): 1 mg/m3 (TWA) for soluble iron salts as Fe.

Ventilation System
A local and/or general exhaust system is recommended to keep employee exposures below the Airborne Exposure Limits. Local exhaust ventilation is typically preferred as it controls the emissions of the contaminant at its source, preventing its spread into the general work area. For more detailed guidelines, refer to the ACGIH document, Industrial Ventilation: A Manual of Recommended Practice, most recent edition.

Disclaimer: This Data Sheet provides information without warranty or guarantee. "Physical Properties" are representative values, not specifications. Users must assess product suitability for their applications.

Personal Respirators (NIOSH Approved)
If exposure limits are exceeded and engineering controls are not feasible, a half-facepiece particulate respirator (NIOSH type N95 or better filters) may be worn for up to ten times the exposure limit or the maximum use concentration specified by the appropriate regulatory agency or respirator supplier, whichever is lower.
A full-facepiece particulate respirator (NIOSH type N100 filters) may be worn up to 50 times the exposure limit, or the maximum use concentration specified by the regulatory agency or respirator supplier, whichever is lower.
If oil particles are present (e.g., lubricants, cutting fluids, glycerine), use a NIOSH type R or P filter.
In emergencies or when exposure levels are unknown, use a full-facepiece positive-pressure, air-supplied respirator.

WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear protective gloves and clean body-covering clothing.
Eye Protection: Use chemical safety goggles and maintain eye wash fountain and quick-drench facilities in the work area.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Light yellow, available in powder or granular form.
Odor:	Mild.
Solubility:	Dissolves well in water.
Bulk Density:	Ranges from 600 to 700 g/L.
pH:	Acidic reaction to litmus. Typically, the pH of a 1% solution is between 2 and 3.
Melting Point:	No information available.
Vapor Density (Air=1):	No information available.
Vapor Pressure (mm Hg):	No information available.
Evaporation Rate (BuAc=1):	No information available.
Volatilization Value (at 210°C):	The liquid product may volatilize; the solid product does not.

SECTION 10 – STABILITY AND REACTIVITY

Stability: Stable in dry and cool environments.
Hazardous Decomposition Products: May produce oxides of sulfur and the metal contained within when decomposed.
Hazardous Polymerization: Will not occur.
Conditions to Avoid: Avoid high temperatures and damp conditions to prevent degradation or hazardous reactions.

Disclaimer: This Data Sheet provides information without warranty or guarantee. "Physical Properties" are representative values, not specifications. Users must assess product suitability for their applications.

SECTION 11 – TOXICOLOGICAL INFORMATION

LD50/LC50: No information has been found regarding LD50 (lethal dose) or LC50 (lethal concentration) related to normal routes of occupational exposure.

		NTP Carcinogen	
Ingredient	**Known**	**Anticipated**	**IARC category**
Ferric Sulfate (10028-22-5)	No	No	None
Water (7732-18-5)	No	No	None

SECTION 12 – ECOLOGICAL INFORMATION

Environmental Fate: No specific information is available regarding the environmental fate of this substance.
Environmental Toxicity: No data is available concerning the environmental toxicity of this product.

SECTION 13 – DISPOSAL CONSIDERATIONS

Materials that cannot be salvaged for recovery or recycling should be disposed of at an approved waste disposal facility. It's important to note that the processing, use, or contamination of this product could alter the methods available for waste management. Always ensure waste is handled and disposed of in accordance with applicable regulations and standards.

SECTION 14 – TRANSPORATION INFORMATION

Shipping Information According to IATA Regulations

Proper Shipping Name: Ferric Sulfate
Hazard Class (IMDG): Non-hazardous for air, sea, and road freight.
Packing Group: Not Applicable (N/A)
Marine Pollutants: Not Applicable (N/A)

SECTION 15 – REGULATORY INFORMATION

Canadian Regulations: This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no) *
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product are listed on the inventory administered by the governing country(s) or are exempt.
A "No" indicates that one or more components of the product are not listed on the inventory administered by the governing country(s)

Disclaimer: This Data Sheet provides information without warranty or guarantee. "Physical Properties" are representative values, not specifications. Users must assess product suitability for their applications.

SECTION 16 – OTHER INFORMATION

These SDS summaries at the date of issue our best knowledge of the health and safety hazard information of the product, and how to safely handle and use the product in the workplace. Since SingleTrack Solutions cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, review this SDS in the context of how the user intends to handle and use the product in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact this company. Our responsibility for product as sold is subject to our standard term and conditions, a copy of which is sent to our customers and is also available upon request.

Last Revision Date: 9/14/2023

Disclaimer: This Data Sheet provides information without warranty or guarantee. "Physical Properties" are representative values, not specifications. Users must assess product suitability for their applications.