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SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product No.:	Product name:	Common name(s), synonym(s)
226540	Difco™ Triple Sugar Iron Agar	No data available

Recommended restrictions

Recommended use: Laboratory Chemicals

Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: BD, Integrated Diagnostic Solutions

Address: 7 Loveton Circle
Sparks, MD 21152
USA

Telephone: 1 844 823 5433

Fax: not available

Contact Person: Business Unit Product Stewardship Team

E-mail: IDS_SDS@bd.com

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

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Hazards for the product as supplied

Not classified

Hazard(s) not otherwise classified (HNOC): None.

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable

Precautionary Statements Not applicable

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS No./Unique ID	Content in percent (%)*	Trade Secret
D(+)-Sucrose	No data available.	57-50-1*	15.4145%	
Sulfuric acid, iron(2+) salt (1:1)	No data available.	7720-78-7*	0.3083%	

* Indicates that the identifier is a CAS No.
* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Description of first aid measures

General information: Get medical attention if symptoms occur.

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Inhalation:	Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.
Skin Contact:	Wash contact areas with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse.
Eye contact:	Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion:	Get medical attention if symptoms occur.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	No specific symptoms noted.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	IF exposed or concerned: Get medical advice/attention.

5. Fire-fighting measures

General Fire Hazards:	Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Use water spray to keep fire-exposed containers cool.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Water spray, foam, dry powder or carbon dioxide. Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Avoid water in straight hose stream; will scatter and spread fire.
Special hazards arising from the substance or mixture:	None known.

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Special protective equipment and precautions for fire-fighters

Special fire-fighting procedures:	No unusual fire or explosion hazards noted.
Special protective equipment for fire-fighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No special precautionary health measures should be needed under anticipated conditions of use.
Accidental release measures:	No data available.
Methods and material for containment and cleaning up:	No specific clean-up procedure noted.
Environmental Precautions:	Avoid release to the environment.

7. Handling and storage

Handling

Technical measures:	No data available.
Local/Total ventilation:	No data available.
Safe handling advice:	When using do not eat, drink or smoke. Read and follow manufacturer's recommendations. Use personal protective equipment as required.
Contact avoidance measures:	No data available.

Storage

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Safe storage conditions: Store in a cool, dry place. Keep container tightly closed.

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Components	Type	Form of exposure	Exposure Limit Values		Source
D(+)-Sucrose	TWA	Respirable fraction.		5 mg/m3	OSHA Z1A (1989)
	TWA	Total dust.		15 mg/m3	OSHA Z1A (1989)
	TWA	Respirable fraction.		5 mg/m3	TN OEL (06 2008)
	TWA	Total dust.		15 mg/m3	TN OEL (06 2008)
	AN ESL	Particulate.		5 µg/m3	TX ESL (12 2010)
	ST ESL	Particulate.		50 µg/m3	TX ESL (12 2010)
	TWA			10 mg/m3	ACGIH (12 2010)
	REL	Total		10 mg/m3	NIOSH (2005)
	REL	Respirable.		5 mg/m3	NIOSH (2005)
	PEL	Total dust.		15 mg/m3	OSHA Z1 (02 2006)
	PEL	Respirable fraction.		5 mg/m3	OSHA Z1 (02 2006)
	TWA PEL	Total dust.		10 mg/m3	US CA OEL (12 2017)
	TWA PEL	Respirable fraction.		5 mg/m3	US CA OEL (12 2017)
	TWA	Respirable fraction.		15 millions of particles per cubic foot of air	Z3 (09 2016)
	TWA	Total dust.		50 millions of particles per cubic foot of air	Z3 (09 2016)
	TWA	Total dust.		15 mg/m3	Z3 (09 2016)
	TWA	Respirable fraction.		5 mg/m3	Z3 (09 2016)
Sulfuric acid, iron(2+) salt (1:1)	TWA	- as Fe		1 mg/m3	OSHA Z1A (1989)
	TWA	- as Fe		1 mg/m3	TN OEL (06 2008)
	AN ESL	Particulate.		5 µg/m3	TX ESL (12 2010)
	ST ESL	Particulate.		50 µg/m3	TX ESL (12 2010)
	TWA	- as Fe		1 mg/m3	US CA OEL (08 2010)

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	PEL				
	TWA	- as Fe		1 mg/m3	ACGIH (12 2010)
	REL	- as Fe		1 mg/m3	NIOSH (2005)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls — No special requirements under ordinary conditions of use and with adequate ventilation.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection: — Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: — Material: Chemical resistant gloves

Skin and Body Protection: — Wear a lab coat or similar protective clothing.

Respiratory Protection: — Respiratory protection not required.

Hygiene measures: — Observe good industrial hygiene practices.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

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Physical state:	solid
Form:	Solid
Color:	According to product specification.
Odor:	Characteristic
Odor Threshold:	No data available.
Melting Point:	No data available.
Boiling Point:	No data available.
Flammability:	No data available.
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	Not applicable
Auto-ignition temperature:	No data available.
Decomposition Temperature:	No data available.
pH:	No data available.
Viscosity	
Dynamic viscosity:	Not determined.
Kinematic viscosity:	Not determined.
Flow Time:	No data available.
Solubility(ies)	
Solubility in Water:	Completely Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Vapor pressure:	No data available.
Relative density:	No data available.
Density:	No data available.
Bulk density:	No data available.
Vapor density (air=1):	No data available.
Particle characteristics:	No data available.

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Other information

Metal Corrosion:	Non-corrosive per US Department of Transportation testing protocol.

10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Not known.
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight.
Incompatible Materials:	Strong oxidizer.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

General information: No information about adverse effects due to exposure.

Information on likely routes of exposure

Inhalation:	Under normal conditions of intended use, this material is not expected to be an inhalation hazard.
Skin Contact:	Negligible irritation to skin at ambient temperatures.
Eye contact:	Do not get in eyes.
Ingestion:	In the event of inhalation (ingestion), seek medical attention immediately

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.

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Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

Acute toxicity (list all possible routes of exposure)

Oral

Components:

D(+)-Sucrose	LD 50, Rat, 29,700 mg/kg

Dermal

Not classified based on available data.

Inhalation

Not classified based on available data.

Repeated dose toxicity

Not classified based on available data.

Skin Corrosion/Irritation

Components:

Sulfuric acid, iron(2+) salt (1:1)	Not irritant, in vivo, Rabbit, Experimental result, Supporting study Irritating, in vivo, Rabbit, Experimental result, Key study

Serious Eye Damage/Eye Irritation

Not classified based on available data.

Respiratory or Skin Sensitization

Not classified based on available data.

Carcinogenicity

No experimental data available.

Carcinogenicity - Assessment

Not classified based on available data.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

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US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity
In vitro
Not classified based on available data.

In vivo
Not classified based on available data.

Reproductive toxicity
Effects on fertility
No experimental data available.

Effects on fetal development
No experimental data available.

Reproductive toxicity - Assessment
Not classified based on available data.

Specific Target Organ Toxicity - Single Exposure
Not classified based on available data.

Specific Target Organ Toxicity - Repeated Exposure
Not classified based on available data.

Aspiration Hazard
Not classified based on available data.

Information on health hazards

Other hazards
Product: No data available.

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12. Ecological information

General information: This material has not been tested for environmental effects.

Ecotoxicity:

Toxicity to Aquatic Plants
Not classified based on available data.

Toxicity to microorganisms
Not classified based on available data.

Acute hazards to the aquatic environment:

Fish
Not classified based on available data.

Aquatic Invertebrates
Not classified based on available data.

Chronic hazards to the aquatic environment:

Fish
Not classified based on available data.

Aquatic Invertebrates
Not classified based on available data.

Persistence and Degradability
Not classified based on available data.

Bioaccumulative potential

Bioconcentration Factor (BCF)
Not classified based on available data.

Partition Coefficient n-octanol / water (log Kow)

Product:	No data available.
Components:	
D(+)-Sucrose	-3.70

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Mobility in soil:
Not classified based on available data.

Results of PBT and vPvB assessment:
Not classified based on available data.

Other adverse effects:

Additional ecological information

Product: The dangerous properties of the product cannot be evaluated from the available data. Avoid release to the environment.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements. The solid and liquid waste should be handled according to their nature and degree of hazardousness.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements.

Contaminated Packaging: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

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14. Transport information

DOTUN number or ID number:	Not Regulated.
UN Proper Shipping Name:	Not Regulated.
Transport Hazard Class(es)	
Class:	Not Regulated.
Label(s):	Not Regulated.
Packing Group:	Not Regulated.
Marine Pollutant:	Not Regulated.
Limited quantity	Not Regulated.
Excepted quantity	Not Regulated.
Special precautions for user:	Not Regulated.

IMDG

UN number or ID number:	Not Regulated.
UN Proper Shipping Name:	Not Regulated.
Transport Hazard Class(es)	
Class:	Not Regulated.
Subsidiary risk:	Not Regulated.
EmS No.:	Not Regulated.
Packing Group:	Not Regulated.
Environmental Hazards	
Marine Pollutant:	Not Regulated.
Special precautions for user:	Not Regulated.

IATA

UN number or ID number:	Not Regulated.
Proper Shipping Name:	Not Regulated.
Transport Hazard Class(es):	
Class:	Not Regulated.
Subsidiary risk:	Not Regulated.
Packing Group:	Not Regulated.
Environmental Hazards	
Marine pollutant:	Not Regulated.
Special precautions for user:	Not Regulated.

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15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)
None present or none present in regulated quantities.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721 and 725, Subpt E)
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
FERROUS SULFATE

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not classified

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities.

US. EPCRA (SARA Title III) Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Chemical Identity
FERROUS SULFATE

US State Regulations

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US. California Proposition 65
No ingredient requiring a warning under CA Prop 65.

International regulations

Montreal protocol
Not applicable

Stockholm convention
Not applicable

Rotterdam convention
Not applicable

Kyoto protocol
Not applicable

16.Other information, including date of preparation or last revision

Version #:	1.2
Revision Date:	06/17/2026
Date of first report version:	04/18/2014

Abbreviations and acronyms:

ACGIH:	US. ACGIH Threshold Limit Values, as amended
NIOSH/GUIDE:	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
OSHA_TRANS:	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended
TN OEL:	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
TX ESL:	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
US CA OEL:	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
Z1A:	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended

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Z3:	US. OSHA Table Z-3 (29 CFR 1910.1000), as amended
ACGIH / TWA:	Time Weighted Average (TWA):
NIOSH/GUIDE / REL:	Recommended exposure limit (REL):
OSHA_TRANS / PEL:	Permissible exposure limit:
TN OEL / TWA:	Time Weighted Average (TWA):
TX ESL / ST ESL:	Short-Term ESL:
TX ESL / AN ESL:	Annual ESL:
US CA OEL / TWA PEL:	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):
Z1A / TWA:	Time Weighted Average (TWA):
Z3 / TWA:	Time Weighted Average (TWA):

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

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Source of information: European Chemicals Agency (ECHA): Information on Chemicals.

European Chemicals Agency (ECHA): Information on Chemicals.

Further Information: No data available.

Disclaimer:

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