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SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
278850	BD Difco™ XLD Agar	No data available

Other means of identification

SDS number: 088100176441

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: Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer Category 1

Label Elements

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Hazard Symbol:

Signal Word:	Warning
Hazard Statement:	H317: May cause an allergic skin reaction.
Precautionary Statements	
Prevention:	P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P272: Contaminated work clothing should not be allowed out of the workplace. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response:	P362+P364: Take off contaminated clothing and wash it before reuse. P333+P313: If skin irritation or rash occurs: Get medical advice/attention. P302+P352: IF ON SKIN: Wash with plenty of water. P321: Specific treatment (see on this label).
Disposal:	P501: 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.
Other hazards which do not result in GHS classification:	None.

3. Composition/information on ingredients

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Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
D(+)-Sucrose	No data available.	57-50-1	13.3191%
Bile, extract	No data available.	8008-63-7	3.5518%
Ammonium iron(III) citrate	No data available.	1185-57-5	1.7759%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of necessary first-aid measures

General information: Get medical attention if symptoms occur.

Inhalation: Provide fresh air, warmth and rest, preferably in comfortable upright sitting position. Get medical attention if symptoms persist.

Skin Contact: Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water. Get medical attention if symptoms occur. Wash contaminated clothing before reuse.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing.

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Do NOT induce vomiting. Get medical attention immediately.

Personal Protection for First-aid Responders: Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

Most important symptoms/effects, acute and delayed

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Symptoms: Symptoms may be delayed.

Hazards: May cause an allergic skin reaction.

Indication of immediate medical attention and special treatment needed

Treatment: Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.

5. Fire-fighting measures

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

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Water spray, fog, CO2, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Fire or excessive heat may produce hazardous decomposition products.

Special protective equipment and precautions for firefighters

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

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Personal precautions, protective equipment and emergency procedures:	Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Contact local authorities in case of spillage to drain/aquatic environment.
Methods and material for containment and cleaning up:	Stop leak if possible without any risk. Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Collect for salvage or disposal. Prevent runoff from entering drains, sewers, or streams. Report spills as required to appropriate authorities. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS.
Environmental Precautions:	Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation):	Adequate ventilation should be provided whenever the material is heated or mists are generated.
Safe handling advice:	Wash promptly with soap and water if skin becomes contaminated. 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

Safe storage conditions:	Store in tightly closed original container in a dry, cool and well-ventilated place.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection

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Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
D(+)-Sucrose - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
D(+)-Sucrose - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
D(+)-Sucrose - Respirable fraction.	TWA	5 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
D(+)-Sucrose - Total dust.	TWA	15 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
D(+)-Sucrose - Particulate.	AN ESL	5 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	ST ESL	50 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
D(+)-Sucrose	TWA	10 mg/m3	US. ACGIH Threshold Limit Values, as amended (12 2010)
D(+)-Sucrose - Total	REL	10 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
D(+)-Sucrose - Respirable.	REL	5 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
D(+)-Sucrose - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
D(+)-Sucrose - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000), as amended (02 2006)
Ammonium iron(III) citrate - as Fe	TWA	1 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	1 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Ammonium iron(III) citrate	ST ESL	10 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	AN ESL	1 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
Ammonium iron(III) citrate - as Fe	TWA PEL	1 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended (08 2010)
	TWA	1 mg/m3	US. ACGIH Threshold Limit Values, as amended (12 2010)
	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)

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Appropriate Engineering Controls	Adequate ventilation should be provided whenever the material is heated or mists are generated.

Individual protection measures, such as personal protective equipment

General information:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.
Eye/face protection:	Wear safety glasses with side shields (or goggles).
Skin Protection	
Hand Protection:	Use suitable protective gloves if risk of skin contact.
Other:	Wear appropriate clothing to prevent repeated or prolonged skin contact.
Respiratory Protection:	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Hygiene measures:	Do not eat, drink or smoke when using the product. Wash promptly if skin becomes contaminated. Wash at the end of each work shift and before eating, smoking and using the toilet. Avoid contact with skin.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	
Physical state:	solid
Form:	solid
Color:	According to product specification.
Odor:	Characteristic
Odor Threshold:	No data available.
Melting Point:	Not determined.

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Boiling Point:	Not determined.
Flammability:	Not applicable
Upper/lower limit on flammability or explosive limits	
Explosive limit - upper:	Not applicable
Explosive limit - lower:	Not applicable
Flash Point:	Not applicable
Self Ignition Temperature:	Not determined.
Decomposition Temperature:	Not applicable
pH:	Not applicable
Viscosity	
Dynamic viscosity:	Not determined.
Kinematic viscosity:	Not determined.
Flow Time:	Not applicable
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:	Not applicable
Vapor density (air=1):	Not applicable
Particle characteristics	
Particle Size:	Not applicable
Particle Size Distribution:	Not applicable
Specific surface area:	Not applicable
Surface charge/Zeta potential:	Not applicable
Assessment:	Not applicable
Shape:	Not applicable
Crystallinity:	Not applicable
Surface treatment:	Not applicable

Other information

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

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10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	None under normal conditions.
Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight.
Incompatible Materials:	Strong oxidizing agents.
Hazardous Decomposition Products:	By heating and fire, harmful vapors/gases may be formed.

11. Toxicological information

General information: May cause allergic skin reaction based on human experience.

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:	Prolonged or repeated contact may cause skin sensitization in susceptible individuals.
Eye contact:	Avoid contact with eyes.
Ingestion:	Ingestion may cause irritation and malaise.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix: 10,805.61 mg/kg
Components:	
D(+)-Sucrose	LD 50 (Rat): 29,700 mg/kg

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Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Dermal

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Inhalation

Product:	No data available.
Components:	
D(+)-Sucrose	
Bile, extract	
Ammonium iron(III) citrate	

Repeated dose toxicity

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Skin Corrosion/Irritation

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Serious Eye Damage/Eye Irritation

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Respiratory or Skin Sensitization

Product:	No data available.
Components:	

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D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Carcinogenicity

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

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

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

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:
No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

In vivo

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Reproductive toxicity

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

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Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Aspiration Hazard

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Information on health hazards

Other hazards

Product:	No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	

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D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Toxicity to microorganisms

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Chronic hazards to the aquatic environment:

Fish

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Aquatic Invertebrates

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Toxicity to Aquatic Plants

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III)	No data available.

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citrate

Toxicity to microorganisms

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Persistence and Degradability

Biodegradation

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

BOD/COD Ratio

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Partition Coefficient n-octanol / water (log Kow)

Product:	Log Kow: No data available.
Components:	
D(+)-Sucrose	Log Kow: -3.70
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Mobility in soil:

Product	No data available.

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Components:

D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Results of PBT and vPvB assessment:

Product	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

Other adverse effects:

Other hazards

Product:	No data available.
Components:	
D(+)-Sucrose	No data available.
Bile, extract	No data available.
Ammonium iron(III) citrate	No data available.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

Contaminated Packaging: No data available.

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14. Transport information

DOTUN 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:	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:	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, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended
None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity
Ammonium iron(III) citrate

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Respiratory or Skin Sensitization

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. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required
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
Ammonium iron(III) citrate

US State Regulations

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

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

Chemical Identity
Ammonium iron(III) citrate

US. Massachusetts RTK - Substance List

Chemical Identity
D(+)-Sucrose
Ammonium iron(III) citrate

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
D(+)-Sucrose
Ammonium iron(III) citrate

US. Rhode Island RTK

Chemical Identity
D(+)-Sucrose
Ammonium iron(III) citrate

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

Issue Date:	06/01/2021
Version #:	2.1
Further Information:	No data available.

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