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SAFETY DATA SHEET

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
245122	BD BBL™ MGIT™ Mycobacteria Growth Indicator Tubes	No data available

Other means of identification

SDS number: 088100179162

Recommended use and restriction on use

Recommended use: Laboratory Chemicals

Restrictions on use: None known.

Manufacturer/Importer/Supplier/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

Not classified

Label Elements

Hazard Symbol: No symbol

Signal Word: No signal word.

Hazard Statement: Not applicable



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Precautionary Statements Not applicable

Other hazards which do not result in GHS classification: None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Ammonium iron(III) citrate	No data available.	1185-57-5	0.0179%
Sulfuric acid copper(2+) salt (1:1)	No data available.	7758-98-7	0.0004%

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

4. First-aid measures

General information: Get medical attention if symptoms occur.

Ingestion: Get medical attention if symptoms occur.

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.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed



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Treatment: No data available.

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, fog, CO₂, dry chemical, or alcohol resistant foam.

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical: None known.

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

Personal precautions, protective equipment and emergency procedures: No special precautionary health measures should be needed under anticipated conditions of use.

Methods and material for containment and cleaning up: No specific clean-up procedure noted.



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Environmental Precautions: Avoid release to the environment.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): No special requirements under ordinary conditions of use and with adequate ventilation.

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.

Hygiene measures: Observe good industrial hygiene practices.

Storage

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

Safe packaging materials: No data available.

Storage Temperature: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Ammonium iron(III) citrate - as Fe	TWA	1 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended (1989)
	TWA	1 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended (06 2008)
Ammonium iron(III) citrate	ST ESL	10 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental



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			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)
Sulfuric acid copper(2+) salt (1:1) - Dust.	AN ESL	1 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
	ST ESL	10 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010)
Sulfuric acid copper(2+) salt (1:1) - Dust and mist. - as Cu	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 (03 2014)
Sulfuric acid copper(2+) salt (1:1) - Fume. - as Cu	TWA	0.2 mg/m3	US. ACGIH Threshold Limit Values, as amended (03 2014)
Sulfuric acid copper(2+) salt (1:1) - Dust and mist. - as Cu	REL	1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2005)
Sulfuric acid copper(2+) salt (1:1) - Fume. - as Cu	REL	0.1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended (2016)

Appropriate Engineering Controls

No special requirements under ordinary conditions of use and with adequate ventilation.

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: Chemical resistant gloves

Other: Wear a lab coat or similar protective clothing.



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07417 USA
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Respiratory Protection: Respiratory protection not required.

Hygiene measures: Observe good industrial hygiene practices.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: According to product specification.

Odor: Characteristic
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.
Initial boiling point and boiling range: No data available.

Flash Point: Not applicable
Evaporation rate: No data available.
Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits
Flammability limit - upper (%): No data available.
Flammability limit - lower (%): No data available.
Explosive limit - upper: No data available.
Explosive limit - lower: No data available.

Vapor pressure: No data available.
Vapor density: No data available.
Relative density: No data available.

Solubility(ies)
Solubility in water: Completely Soluble
Solubility (other): No data available.
Partition coefficient (n-octanol/water): No data available.
Auto-ignition temperature: No data available.



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Decomposition temperature: No data available.
Viscosity: Not determined.

10. Stability and reactivity

Reactivity: Stable under normal temperature conditions and recommended use.

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 oxidizers.

Hazardous Decomposition Products: Not known.

11. Toxicological information

General information: No data on possible toxicity effects have been found.

Information on likely routes of exposure

Ingestion: No harmful effects expected in amounts likely to be ingested by accident.

Inhalation: Limited inhalation hazard at normal work temperatures.

Skin Contact: Negligible irritation to skin at ambient temperatures.

Eye contact: Do not get in eyes.

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No specific symptoms noted.

Inhalation: No specific symptoms noted.



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Skin Contact: No specific symptoms noted.

Eye contact: No specific symptoms noted.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Sulfuric acid
copper(2+) salt (1:1) NOAEL (Rat(Female, Male), Oral, 92 d): 1,000 ppm(m) Oral
Experimental result, Key study
LOAEL (Rat(Female, Male), Oral, 92 d): 2,000 ppm(m) Oral
Experimental result, Key study
LOAEL (Rat(Female, Male), Inhalation): 0.2 mg/m³ Inhalation
Experimental result, Key study
LOAEL (Mouse(Female, Male), Oral, 92 d): 2,000 ppm(m) Oral
Experimental result, Key study
NOAEL (Mouse(Female, Male), Oral, 92 d): 1,000 ppm(m) Oral
Experimental result, Key study

Skin Corrosion/Irritation

Product: No data available.



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Specified substance(s):

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

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050), as amended:

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.



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Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: None known.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No negative effects on the aquatic environment are known.

Aquatic Invertebrates

Product: No negative effects on the aquatic environment are known.

Chronic hazards to the aquatic environment:

Fish

Product: No negative effects on the aquatic environment are known.

Aquatic Invertebrates

Product: No negative effects on the aquatic environment are known.

Toxicity to Aquatic Plants

Product: No negative effects on the aquatic environment are known.

Persistence and Degradability

Biodegradation

Product: Expected to be readily biodegradable.

BOD/COD Ratio

Product: No data available.



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Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Sulfuric acid Eisenia andrei, Bioconcentration Factor (BCF): 0.3 - 1 Terrestrial
copper(2+) salt (1:1) Experimental result, Weight of Evidence study

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available.

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Ammonium iron(III) No data available.
citrate
Sulfuric acid copper(2+) No data available.
salt (1:1)

Other adverse effects: The product is not expected to be hazardous to the environment.

13. Disposal considerations

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

Disposal instructions: No specific disposal method required.

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

SODIUM PHOSPHATE, DIBASIC
FERRIC AMMONIUM CITRATE
CUPRIC SULFATE
ZINC SULFATE
ZINC COMPOUNDS

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

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

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)

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Phosphoric acid, sodium salt (1:2)
Ammonium iron(III) citrate
Sulfuric acid copper(2+) salt (1:1)
Zinc sulphate

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

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

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

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

Issue Date:	09/23/2020
Version #:	1.3
Revision Information:	No data available.
Further Information:	No data available.



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