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SAFETY DATA SHEET

1. Identification

Product identifier

| Product No.: | Product name: | Common name(s), synonym(s) |
|--------------|-----------------------------------|----------------------------|
| 273300 | BD Difco™ Bismuth Sulfite Agar | No data available |

Other means of identification

SDS number: 088100178641

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 (%)* |
|------------------------------------|--------------------------|------------|-------------------------|
| Sulfuric acid, iron(2+) salt (1:1) | No data available. | 7720-78-7 | 0.749% |

* 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

Treatment: No data available.



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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.

Environmental Precautions: Avoid release to the environment.



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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 |
|---|--------|-----------------------|---|
| Sulfuric acid, iron(2+) salt (1:1) - 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) |
| Sulfuric acid, iron(2+) salt (1:1) - Particulate. | AN ESL | 5 µg/m ³ | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010) |
| | ST ESL | 50 µg/m ³ | US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended (12 2010) |



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| | | | |
|--|---------|---------|--|
| Sulfuric acid, iron(2+) salt (1:1) - 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) |

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.

Respiratory Protection: Respiratory protection not required.

Hygiene measures: Observe good industrial hygiene practices.

9. Physical and chemical properties

Appearance

Physical state: solid
Form: solid
Color: According to product specification.
Odor: Characteristic
Odor threshold: No data available.
pH: No data available.
Melting point/freezing point: No data available.



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| | |
|--|--------------------|
| 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. |
| 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. |



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Hazardous Decomposition Products: Not known.

11. Toxicological information

Information on likely routes of exposure

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

Symptoms related to the physical, chemical and toxicological characteristics

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

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: ATEmix: 11,904.52 mg/kg
Dermal
Product: ATEmix: 14,660.28 mg/kg
Inhalation
Product: No data available.

Repeated dose toxicity
Product: No data available.



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Specified substance(s):

Sulfuric acid, iron(2+) salt (1:1) NOAEL (Rat(Male), Oral, 14 d): 125 mg/kg Oral Experimental result, Supporting study
NOAEL (Rat(Female, Male), Oral, 42 - 49 d): 100 mg/kg Oral Experimental result, Supporting study
NOAEL (Rat(Female, Male), Oral, 13 Weeks): 0.5 %(m) Oral Read-across based on grouping of substances (category approach), Key study
NOAEL (Rat(Female, Male), Oral, 42 - 49 d): >= 1,000 mg/kg Oral Experimental result, Supporting study

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

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

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Sulfuric acid, iron(2+) salt (1:1) in vivo (Rabbit): Slightly irritating
in vivo (Rabbit, 1 hrs): Not irritating
in vivo (Rabbit, 2 d): Not irritating
in vivo (Rabbit): Slightly irritating
in vivo (Rabbit, 1 d): Not irritating
in vivo (Rabbit): Slightly irritating
in vivo (Rabbit, 3 d): Not irritating

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.



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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.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:



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Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):



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Sulfuric acid, iron(2+) salt (1:1) Cyprinus carpio, Bioconcentration Factor (BCF): <= 20 Aquatic sediment Experimental result, Key study
Salmo trutta, Bioconcentration Factor (BCF): 13.5 - 91.7 Aquatic sediment Experimental result, Supporting study
Salmo trutta, Bioconcentration Factor (BCF): 38.2 - 663 Aquatic sediment Experimental result, Supporting study
Salmo trutta, Bioconcentration Factor (BCF): 0.8 - 3 Aquatic sediment Experimental result, Supporting study
Cyprinus carpio, Bioconcentration Factor (BCF): 2 - 2.9 Aquatic sediment Experimental result, Key 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

Sulfuric acid, iron(2+) salt (1:1) No data available.

Other adverse effects: No data available.

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

FERROUS SULFATE

SODIUM PHOSPHATE, TRIBASIC

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. 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



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Phosphoric acid, sodium salt (1:2)
Sulfuric acid, iron(2+) salt (1:1)
sodium phosphate tribasic

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

Chemical Identity

Phosphoric acid, sodium salt (1:2)

US. Massachusetts RTK - Substance List

Chemical Identity

Phosphoric acid, sodium salt (1:2)

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Phosphoric acid, sodium salt (1:2)

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: 05/06/2021

Version #: 2.1

Revision Information: No data available.

Further Information: No data available.



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