



Becton, Dickinson and
Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

SAFETY DATA SHEET

Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier

Product No.:	Product name:	Common name(s), synonym(s)
211687	BD Difco™ Violet Red Bile Agar 2Kg	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: Tech Services

Emergency telephone number: CHEMTREC 1 800 424 9300

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin sensitizer Category 1

Label Elements

Hazard Symbol:



Becton, Dickinson and
Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com



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: P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P363: Wash contaminated clothing before reuse.
P333+P313: If skin irritation or rash occurs: Get medical
advice/attention.
P321: Specific treatment (see supplemental first aid instructions
on this label).

Disposal: P501: Dispose of contents/ container to an approved facility in
accordance with local, regional, national and international
regulations.

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

3. Composition/information on ingredients
--



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Bile, extract	No data available.	8008-63-7	3.63%
Sulfurous acid, sodium salt (1:1)	No data available.	7631-90-5	0.121%

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

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:	No data available.
Most important symptoms and effects, both acute and delayed Symptoms:	Symptoms may be delayed.
Hazards:	May cause an allergic skin reaction.

Indication of immediate medical attention and special treatment needed



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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.

Special hazards arising from the substance or mixture:

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

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.

Accidental release measures:

Methods and material for containment and cleaning up:

No data available.
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.



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Sulfurous acid, sodium salt (1:1)	TWA	5 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
	TWA	5 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Sulfurous acid, sodium salt (1:1) - Particulate.	AN ESL	5 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	50 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
Sulfurous acid, sodium salt (1:1)	TWA PEL	5 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
	TWA	5 mg/m ³	US. ACGIH Threshold Limit Values, as amended
	REL	5 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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	Adequate ventilation should be provided whenever the material is heated or mists are generated.
---	---

Individual protection measures, such as personal protective equipment

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

Skin Protection

Hand Protection:	Material: Use suitable protective gloves if risk of skin contact.
-------------------------	---

Skin and Body Protection:	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:	No data available.
-----------------------	--------------------

Boiling Point:	No data available.
-----------------------	--------------------

Flammability:	No data available.
----------------------	--------------------

Upper/lower limit on flammability or explosive limits



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

Explosive limit - upper:	No data available.
Explosive limit - lower:	No data available.
Flash Point:	Not applicable
Self 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	
Particle Size:	No data available.
Particle Size Distribution:	No data available.
Specific surface area:	No data available.
Surface charge/Zeta potential:	No data available.
Shape:	No data available.
Crystallinity:	No data available.
Surface treatment:	No data available.
Other information	
Metal Corrosion:	Non-corrosive per US Department of Transportation testing protocol.



Becton, Dickinson and
Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

10. Stability and reactivity

Reactivity:	Stable
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 toxicological effects

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 likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix: 6,295.87 mg/kg
Components:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	LD 50 (Rat): 3,200 mg/kg Read-across from supporting substance (structural analogue or surrogate), Supporting study LD 50 (Rat): > 2,150 - < 2,610 mg/kg



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

Read-across from supporting substance (structural analogue or surrogate), Key study LD 50 (Rat): > 2,000 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Supporting study LD 50 (Rat): 2,746 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Key study LD 50 (Rat): 2,610 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Key study

Dermal

Product:

ATEmix: 15,843 mg/kg

Components:

Bile, extract
Sulfurous acid, sodium salt (1:1)

No data available.
LD 50 (Rat): > 2,000 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Key study LD 50 (Rat): > 2,000 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Key study LD 50 (Rat): > 2,000 mg/kg
Read-across from supporting substance (structural analogue or surrogate), Key study

Inhalation

Product:

No data available.

Components:

Bile, extract
Sulfurous acid, sodium salt (1:1)

No data available.
LC 50 (Rat, 4 h): > 22 mg/l Aerosolized dust; 2 = reliable with restrictions; Read-across from supporting substance (structural analogue or surrogate), Key study, Aerosolized dust LC 50 (Rat, 4 h): > 5.5 mg/l Aerosolized dust; 2 = reliable with restrictions; Read-across from supporting substance (structural analogue or surrogate), Key study, Aerosolized dust LC 50 (Rat, 4 h): > 5.5 mg/l Aerosolized dust; 2 = reliable with restrictions; Read-across from supporting substance (structural analogue or surrogate), Key study, Aerosolized dust LC 50 (Rat, 4 h): > 5.5 mg/l Aerosolized dust; 2 = reliable with restrictions; Read-across from supporting substance (structural analogue or surrogate), Key study, Aerosolized dust

Repeated dose toxicity

Product:

No data available.

Components:

Bile, extract
Sulfurous acid, sodium salt (1:1)

No data available.
NOAEL (Pig(Female, Male), Oral, 48 Weeks): 0.35 %(m) Read-across from supporting substance (structural analogue or surrogate), Supporting study Oral
NOAEL (Rat, Oral, 1 - 2 yr): 0.05 %(m) Experimental result, Supporting study Oral
NOAEL (Rat(Female, Male), Oral, 10 - 730 d): 108 mg/kg Read-across



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

from supporting substance (structural analogue or surrogate),
Supporting study Oral
NOAEL (Rat(Female, Male), Oral, 21 - 104 Weeks): 108 mg/kg Read-across from supporting substance (structural analogue or surrogate),
Key study Oral
NOAEL (Rat(Female, Male), Oral, 21 - 104 Weeks): > 955 mg/kg Read-across from supporting substance (structural analogue or surrogate),
Key study Oral

Skin Corrosion/Irritation

Product: No data available.
Components:
Bile, extract No data available.
Sulfurous acid, sodium salt (1:1) No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.
Components:
Bile, extract No data available.
Sulfurous acid, sodium salt (1:1) No data available.

Respiratory or Skin Sensitization

Product: No data available.
Components:
Bile, extract No data available.
Sulfurous acid, sodium salt (1:1) No data available.

Carcinogenicity

Product: No data available.
Components:
Bile, extract No data available.
Sulfurous acid, sodium salt (1:1) 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



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	No data available.

In vivo

Product:	No data available.
Components:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	No data available.

Reproductive toxicity

Product:	No data available.
Components:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	No data available.

Specific Target Organ Toxicity - Single Exposure

Product:	No data available.
Components:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product:	No data available.
Components:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	No data available.

Aspiration Hazard

Product:	No data available.
Components:	
Bile, extract	No data available.
Sulfurous acid, sodium salt (1:1)	No data available.



Becton, Dickinson and
Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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:

Bile, extract

No data available.

Sulfurous acid, sodium
salt (1:1)

LC 50 (Leuciscus idus, 96 h): 316 mg/l Read-across from supporting
substance (structural analogue or surrogate), Key study

LC 50 (Oncorhynchus mykiss, 96 h): 177.8 mg/l Read-across from
supporting substance (structural analogue or surrogate), Supporting
study

LC 50 (Oncorhynchus mykiss, 96 h): 147 - 215 mg/l Read-across from
supporting substance (structural analogue or surrogate), Supporting
study

LC 50 (Danio rerio, 96 h): 464 - 1,000 mg/l Read-across from supporting
substance (structural analogue or surrogate), Supporting study

NOAEL (Danio rerio, 96 h): 215 mg/l Read-across from supporting
substance (structural analogue or surrogate), Supporting study

Aquatic Invertebrates

Product: No data available.

Components:

Bile, extract

No data available.

Sulfurous acid, sodium
salt (1:1)

ED 0 (Daphnia magna, 48 h): 62.5 mg/l Read-across from supporting
substance (structural analogue or surrogate), Key study

EC 50 (Daphnia magna, 48 h): 89 mg/l Read-across from supporting
substance (structural analogue or surrogate), Key study

EC 100 (Daphnia magna, 48 h): 125 mg/l Read-across from supporting
substance (structural analogue or surrogate), Key study

Toxicity to Aquatic Plants

Product: No data available.

Components:

Bile, extract

No data available.

Sulfurous acid, sodium
salt (1:1)

No data available.



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

Toxicity to microorganisms

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) NOAEL (Danio rerio, 34 d): ≥ 316 mg/l (flow-through) Read-across from supporting substance (structural analogue or surrogate), Key study

Aquatic Invertebrates

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) LC 0 (Daphnia magna, 21 d): > 10 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study
NOAEL (Daphnia magna, 21 d): > 10 mg/l (semi-static) Read-across from supporting substance (structural analogue or surrogate), Key study

Toxicity to Aquatic Plants

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Toxicity to microorganisms

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

BOD/COD Ratio

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Mobility in soil:

Product No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Results of PBT and vPvB assessment:

Product No data available.

Components:

Bile, extract No data available.

Sulfurous acid, sodium salt (1:1) No data available.

Other adverse effects:

Other hazards

Product: No data available.



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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:	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.

14. Transport information

DOT UN 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.



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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.

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

Sulfurous acid, sodium salt (1:1)

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.



Becton, Dickinson and Company
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

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

Sulfurous acid, sodium salt (1:1)

US State Regulations

US. California Proposition 65



WARNING: This product can expose you to chemicals including, Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (1:1) which is [are] known to the State of California to cause cancer.
For more information go to www.P65Warnings.ca.gov.

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

Chemical Identity

Bile, extract

Sulfurous acid, sodium salt (1:1)

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.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable



**Becton, Dickinson and
Company**
BD, Franklin Lakes, NJ
07417 USA
www.bd.com

Kyoto protocol
Not applicable

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

Issue Date: 11/23/2021

Version #: 2.1

Further Information: No data available.

Disclaimer: Disclaimer:
The information contained herein has been obtained from various sources and is believed to be correct as of the date issued. However, neither BD nor any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability for a particular use of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. BD provides SDS in electronic form so the information may be more easily accessed. Due to the possibility of errors during transmission, BD makes no representations as to the completeness or accuracy of the information.