

Last revised date: 08/24/2022

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)
261197	BD BBL™ Nitrate A Reagent	No data available
201197	Droppers	

#### **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

#### **Hazard Classification**

### **Health Hazards**

Skin Corrosion/Irritation Category 1
Serious Eye Damage/Eye Category 1

Irritation

Skin sensitizer Category 1

**Environmental Hazards** 

Acute hazards to the aquatic Category 3

environment

Chronic hazards to the aquatic Category 3

environment

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# **Label Elements**

# **Hazard Symbol:**



Signal Word: Danger

**Hazard Statement:** H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

**Prevention:** P260: Do not breathe dust/fume/gas/mist/vapors/spray.

P264: Wash face, hands and any exposed skin thoroughly after

handling.

P280: Wear protective gloves/protective clothing/eye

protection/face protection.

P272: Contaminated work clothing should not be allowed out of

the workplace.

P273: Avoid release to the environment.

**Response:** P304+P340: IF INHALED: Remove person to fresh air and keep

comfortable for breathing.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to

do. Continue rinsing.

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all

contaminated clothing. Rinse skin with water [or shower]. P333+P313: If skin irritation or rash occurs: Get medical

advice/attention.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.

P310: Immediately call a POISON CENTER/doctor.

P321: Specific treatment (see supplemental first aid instructions

on this label).

P363: Wash contaminated clothing before reuse.

**Storage:** P405: Store locked up.

**Disposal:** P501: Dispose of contents/ container to an approved facility in

accordance with local, regional, national and international



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regulations.

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 (%)*
Acetic acid	No data available.	64-19-7	29.6%
Benzenesulfonic acid, 4-amino-	No data available.	121-57-3	0.8%

<sup>\*</sup> All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

# 4. First-aid measures

	Descripti	on of	necessary	y first-aid	measures
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General information: Causes severe skin burns and eye damage. Get immediate

medical advice/attention. May cause an allergic skin reaction.

**Inhalation:** Move to fresh air. Get medical attention if any discomfort

continues.

**Skin Contact:** Take off immediately all contaminated clothing. Rinse skin with

water [or shower]. Get medical attention promptly if symptoms

occur after washing.

Eye contact: Important! Immediately rinse with water for 60 minutes. Get

medical attention immediately. Continue to rinse.

**Ingestion:** Call a physician or poison control center immediately. Rinse

mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the

lungs.

**Personal Protection for First-aid** 

Responders:

No data available.

Most important symptoms and effects, both acute and delayed

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**Symptoms:** Symptoms may be delayed.

Hazards: Causes severe skin burns and eye damage. May cause an

allergic skin reaction.

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 to keep fire exposed

containers cool and disperse vapors.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use water fog, alcohol-resistant foam, dry chemical or

carbon dioxide (CO2) to extinguish flames.

**Unsuitable extinguishing media:** Do not use water jet as an extinguisher, as this will spread

the fire.

Special hazards arising from the

substance or mixture:

Fire or excessive heat may produce hazardous

decomposition products.

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:

Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area. Ventilate closed spaces before entering them. Avoid breathing mists or vapors. Keep unauthorized personnel away.

Accidental release measures: Methods and material for containment and cleaning up:

No data available.

Stop leak if possible without any risk. Prevent runoff from entering drains, sewers, or streams. Dike far ahead of larger spills for later disposal. Absorb in vermiculite, dry sand or earth and place into containers. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see

section 13 of the SDS.

**Environmental Precautions:** Do not contaminate water sources or sewer.

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# 7. Handling and storage

# Handling

Technical measures (e.g. Local and general ventilation):

Adequate ventilation should be provided so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available when handling this product.

Safe handling advice: Avoid contact with eyes and prolonged or repeated contact

with skin. Avoid inhalation of vapors and spray mists.

Observe good industrial hygiene practices. Wear

appropriate personal protective equipment. Provide good

ventilation.

Contact avoidance measures: No data available.

**Storage** 

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

place with adequate ventilation. Keep away from

incompatible materials, open flames, and high temperatures.

Safe packaging materials: No data available.

# 8. Exposure controls/personal protection

#### **Control Parameters**

#### **Occupational Exposure Limits**

Chemical Identity	Туре	<b>Exposure Limit Values</b>	Source
Acetic acid	AN ESL	10 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	100 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL	25 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	250 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	STEL	15 ppm	US. ACGIH Threshold Limit Values, as amended
	TWA	10 ppm	US. ACGIH Threshold Limit Values, as amended
	REL	10 ppm 25 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
	STEL	15 ppm 37 mg/m3	US. NIOSH: Pocket Guide to Chemical

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			Hazards, as amended
IDLH	50 ppm		US. NIOSH. Immediately Dangerous to Life or
			Health (IDLH) Values, as amended
PEL	10 ppm	25 mg/m3	US. OSHA Table Z-1 Limits for Air
			Contaminants (29 CFR 1910.1000), as
			amended
TWA	10 ppm	25 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000),
			as amended
TWA	10 ppm	25 mg/m3	US. Tennessee. OELs. Occupational Exposure
			Limits, Table Z1A, as amended
Ceiling	40 ppm		US. California Code of Regulations, Title 8,
			Section 5155. Airborne Contaminants, as
			amended
TWA PEL	10 ppm	25 mg/m3	US. California Code of Regulations, Title 8,
			Section 5155. Airborne Contaminants, as
			amended
STEL	15 ppm	37 mg/m3	US. California Code of Regulations, Title 8,
			Section 5155. Airborne Contaminants, as
			amended
LEL		4.0 %	US. NIOSH. Immediately Dangerous to Life or
			Health (IDLH) Values, as amended

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 so that exposure limits are not exceeded. Eye wash facilities and emergency shower must be available

when handling this product.

Individual protection measures, such as personal protective equipment

**Eye/face protection:** Wear safety glasses with side shields (or goggles) and a face shield.

**Skin Protection** 

Hand Protection: Material: Suitable gloves can be recommended by the glove supplier.

**Skin and Body Protection:** Chemical resistant clothing

**Respiratory Protection:** In case of inadequate ventilation use suitable respirator.

**Hygiene measures:** Observe good industrial hygiene practices. Wash at the end of each work

shift and before eating, smoking and using the toilet.

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# 9. Physical and chemical properties

# Information on basic physical and chemical properties

Appearance

Physical state: liquid Form: liquid

**Color:** According to product specification.

Odor: Characteristic
Odor Threshold: No data available.
Freezing point: No data available.
Boiling Point: No data available.
Flammability: No data available.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:

Explosive limit - lower:

No data available.

No data available.

Not applicable

No data available.

Pecomposition Temperature:

No data available.

No data available.

**pH:** 1.4 - 1.8

**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- No data available.

octanol/water):

Vapor pressure:No data available.Relative density:No data available.Density:No data available.Bulk density:No data available.Relative vapor density:No data available.

Particle characteristics

Particle Size: No data available.
Particle Size Distribution: No data available.
Specific surface area: No data available.

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Surface charge/Zeta potential: No data available.

Shape:No data available.Crystallinity:No data available.Surface treatment:No data available.

# 10. Stability and reactivity

**Reactivity:** Material is stable under normal conditions.

Chemical Stability: No data available.

Possibility of hazardous

reactions:

Stable; however, may decompose if heated.

**Conditions to avoid:** Avoid exposure to high temperatures or direct sunlight.

Do not freeze.

Incompatible Materials: Avoid contact with oxidizers or reducing agents.

**Hazardous Decomposition** 

**Products:** 

By heating and fire, corrosive vapors/gases may be

formed.

# 11. Toxicological information

#### Information on toxicological effects

**Inhalation:** No data available.

**Skin Contact:** No data available.

**Eye contact:** No data available.

**Ingestion:** No data available.

#### Information on likely routes of exposure

#### Acute toxicity (list all possible routes of exposure)

Oral

**Product:** ATEmix: 11,182.43 mg/kg

Components:

Acetic acid LD 50 (Rat): 3,310 - 3,530 mg/kg

Benzenesulfonic acid, 4-

amino-

No data available.

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Dermal

**Product:** ATEmix: 3,581.08 mg/kg

Components:

Acetic acid LD 50 (Rabbit): 1,060 mg/kg

Benzenesulfonic acid, 4- No data available.

amino-

Inhalation

**Product:** Not classified for acute toxicity based on available data.

Components:

Acetic acid LC Lo (Rat): 16000 ppm Vapor; Vapor

Benzenesulfonic acid, 4- No data available.

amino-

Repeated dose toxicity

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Skin Corrosion/Irritation

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Serious Eye Damage/Eye Irritation

**Product:** No data available.

Components:

Acetic acid Irritating in vivo Rabbit, 24 - 72 hrs:

Category 1 in vivo Rabbit, 1 d:

Benzenesulfonic acid, 4- Category 1 In vitro Chicken, egg: EU

amino- Category 2A in vivo Rabbit, 24 - 72 hrs: OECD GHS

Category 2A in vivo Rabbit, 24 - 72 hrs: OECD GHS

Category 1 In vitro Chicken, egg: EU Category 1 In vitro Chicken, egg: EU

Category 2A in vivo Rabbit, 24 - 72 hrs: OECD GHS Category 2A in vivo Rabbit, 24 - 72 hrs: OECD GHS

Respiratory or Skin Sensitization

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Carcinogenicity

**Product:** No data available.

Components:

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Acetic acid Benzenesulfonic acid, 4- No data available.

No data available.

amino-

# IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

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:

Acetic acid No data available. Benzenesulfonic acid, 4-No data available.

amino-

In vivo

No data available. **Product:** 

Components:

No data available. Acetic acid Benzenesulfonic acid, 4-No data available.

amino-

Reproductive toxicity

Product: No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4-No data available.

amino-

**Specific Target Organ Toxicity - Single Exposure** 

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

**Specific Target Organ Toxicity - Repeated Exposure** 

Product: No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4-No data available.

amino-

**Aspiration Hazard** 

**Product:** No data available.

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Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

#### Information on health hazards

Other hazards

**Product:** No data available.

# 12. Ecological information

#### **Ecotoxicity:**

#### Acute hazards to the aquatic environment:

Fish

**Product:** Not expected to be harmful to aquatic organisms.

Components:

Acetic acid NOAEL (Danio rerio, 96 h): 300.82 mg/l Experimental result, Supporting

study

LC 100 (Oncorhynchus mykiss, 24 h): > 150 mg/l Experimental result,

Supporting study

LC 0 (Oncorhynchus mykiss, 24 h): 56 mg/l Experimental result,

Supporting study

LC 50 (Oncorhynchus mykiss, 24 h): > 150 mg/l Experimental result,

Supporting study

LC 0 (Oncorhynchus mykiss, 72 h): 63.4 mg/l Experimental result,

Supporting study

Benzenesulfonic acid, 4-

amino-

NOAEL (Danio rerio, 96 h): 100 mg/l Experimental result, Key study

LC 50 (Danio rerio, 96 h): > 100 mg/l Experimental result, Key study

**Aquatic Invertebrates** 

**Product:** No data available.

Components:

Acetic acid EC 50 (Daphnia magna, 48 h): 65,000 µg/l

Benzenesulfonic acid, 4- No da

amino-

No data available.

**Toxicity to Aquatic Plants** 

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Toxicity to microorganisms

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

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amino-

#### Chronic hazards to the aquatic environment:

Fish

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

**Aquatic Invertebrates** 

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

**Toxicity to Aquatic Plants** 

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Toxicity to microorganisms

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

# **Persistence and Degradability**

Biodegradation

**Product:** No data available.

Components:

Acetic acid 96 % (20 d) Experimental result, Key study Detected in water.

Benzenesulfonic acid, 4-

amino-

100 % (40 h) Experimental result, Weight of Evidence study Detected in

water.

100 % (72 h) Experimental result, Weight of Evidence study Detected in

water.

94.7 % (40 h) Experimental result, Weight of Evidence study Detected in

water.

**BOD/COD Ratio** 

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4-No data available.

amino-

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#### **Bioaccumulative potential**

**Bioconcentration Factor (BCF)** 

**Product:** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Partition Coefficient n-octanol / water (log Kow)

**Product:** Log Kow: No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4- No data available.

amino-

Mobility in soil:

**Product** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4-No data available.

amino-

Results of PBT and vPvB assessment:

**Product** No data available.

Components:

Acetic acid No data available. Benzenesulfonic acid, 4-No data available.

amino-

Other adverse effects:

Other hazards

**Product:** No data available.

# 13. Disposal considerations

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

requirements.

**Disposal methods:** This material and/or its container must be disposed of as hazardous

waste.

**Contaminated**Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product

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characteristics at time of disposal.

# 14. Transport information

DOT

UN number or ID number: UN 2790

UN Proper Shipping Name: ACETIC ACID SOLUTION

Transport Hazard Class(es)

Class: 8
Label(s): 8
Packing Group: III
Marine Pollutant: No

Special precautions for user: This package conforms to 49 CFR 173.4

This package conforms to 49 CFR 173.4

**IMDG** 

UN number or ID number: UN 2790

UN Proper Shipping Name: ACETIC ACID SOLUTION

Transport Hazard Class(es)

Class: 8 Subsidiary risk: 8

EmS No.: F-A, S-B

Packing Group: III

**Environmental Hazards** 

Marine Pollutant: No

Special precautions for user: EQEQ

**IATA** 

UN number or ID number: UN 2790

Proper Shipping Name: ACETIC ACID SOLUTION

Transport Hazard Class(es):

Class: 8
Subsidiary risk: 8
Packing Group: III

**Environmental Hazards** 

Marine pollutant: No

Special precautions for user: EQEQ

# 15. Regulatory information

# **US Federal Regulations**

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# 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.

None present or none present in regulated quantities

# CERCLA Hazardous Substance List (40 CFR 302.4):

#### **Chemical Identity**

Acetic acid

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

# **Hazard categories**

Skin Corrosion or Irritation, Serious eye damage or eye irritation, 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. 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**

Acetic acid

#### **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**

Acetic acid

#### US. Massachusetts RTK - Substance List

#### **Chemical Identity**

Acetic acid

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#### US. Pennsylvania RTK - Hazardous Substances

### **Chemical Identity**

Acetic acid

# US. Rhode Island RTK Chemical Identity

Acetic acid

#### 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:** 08/24/2022

Version #: 2.3

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

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transmission, BD makes no representations as to the completeness

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