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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)
224061	Vial Sal H Antis Poly 3MI	No data available
228201	BD Difco™ Salmonella H Antiserum a, 3 mL	No data available
228211	BD Difco™ Salmonella H Antiserum b, 3 mL	No data available
228221	BD Difco™ Salmonella H Antiserum c, 3 mL	No data available
228231	BD Difco™ Salmonella H Antiserum d, 3 mL	No data available
222731	BD Difco™ Salmonella H Antiserum eh, 3 mL	No data available
225441	BD Difco™ Salmonella H Antiserum Single Factor f, 3 mL	No data available
225451	BD Difco™ Salmonella H Antiserum Single Factor h, 3 mL	No data available
228241	BD Difco™ Salmonella H Antiserum i, 3 mL	No data available
222741	BD Difco™ Salmonella H Antiserum k, 3 mL	No data available
225461	BD Difco™ Salmonella H Antiserum Single Factor m, 3 mL	No data available
225481	BD Difco™ Salmonella H Antiserum Single Factor p, 3 mL	No data available
222751	BD Difco™ Salmonella H Antiserum r, 3 mL	No data available
225501	BD Difco™ Salmonella H Antiserum Single Factor s, 3 mL	No data available
225511	BD Difco™ Salmonella H Antiserum Single Factor t, 3 mL	No data available



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225541	BD Difco™ Salmonella H Antiserum Single Factor w, 3 mL	No data available
225551	BD Difco™ Salmonella H Antiserum Single Factor x, 3 mL	No data available
222761	BD Difco™ Salmonella H Antiserum y, 3 mL	No data available
222771	BD Difco™ Salmonella H Antiserum z, 3 mL	No data available
224731	BD Difco™ Salmonella H Antiserum z6, 3 mL	No data available
222791	BD Difco™ Salmonella H Antiserum z10, 3 mL	No data available
225571	BD Difco™ Salmonella H Antiserum Single Factor z15, 3 mL	No data available
225581	BD Difco™ Salmonella H Antiserum Single Factor z23, 3 mL	No data available
225611	BD Difco™ Salmonella H Antiserum Single Factor z28, 3 mL	No data available
222801	BD Difco™ Salmonella H Antiserum z29, 3 mL	No data available
225621	BD Difco™ Salmonella H Antiserum Single Factor z32, 3 mL	No data available
222701	BD Difco™ Salmonella H Antiserum EN Complex, 3 mL	No data available
222691	BD Difco™ Salmonella H Antiserum G Complex, 3 mL	No data available
222711	BD Difco™ Salmonella H Antiserum L Complex, 3 mL	No data available
222781	BD Difco™ Salmonella H Antiserum Z4 Complex, 3 mL	No data available
225391	BD Difco™ Salmonella H Antiserum Poly A, 3 mL	No data available
225401	BD Difco™ Salmonella H Antiserum Poly B, 3 mL	No data available
225411	BD Difco™ Salmonella H Antiserum Poly C, 3 mL	No data available



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225421	BD Difco™ Salmonella H Antiserum Poly D, 3 mL	No data available
225431	BD Difco™ Salmonella H Antiserum Poly E, 3 mL	No data available
224741	BD Difco™ Salmonella H Antiserum Single Factor 2, 3 mL	No data available
224751	BD Difco™ Salmonella H Antiserum Single Factor 5, 3 mL	No data available
224761	BD Difco™ Salmonella H Antiserum Single Factor 6, 3 mL	No data available
224771	BD Difco™ Salmonella H Antiserum Single Factor 7, 3 mL	No data available
222651	BD Difco™ Salmonella H Antiserum Spicer-Edwards 1, 3 mL	No data available
222661	BD Difco™ Salmonella H Antiserum Spicer-Edwards 2, 3 mL	No data available
222671	BD Difco™ Salmonella H Antiserum Spicer-Edwards 3, 3 mL	No data available
222681	BD Difco™ Salmonella H Antiserum Spicer-Edwards 4, 3 mL	No data available
222721	BD Difco™ Salmonella H Antiserum 1 Complex, 3 mL	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



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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

Acute toxicity (Oral) Category 4

Label Elements

Hazard Symbol:



Signal Word: Warning
Hazard Statement: H302: Harmful if swallowed.

Precautionary Statements

Prevention: P264: Wash face, hands and any exposed skin thoroughly after handling.
P270: Do not eat, drink or smoke when using this product.



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Response: P330: Rinse mouth.
P301+P312: IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

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

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
Sodium azide (Na(N ₃))	No data available.	26628-22-8	0.2%

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

4. First-aid measures

Description of first aid measures

General information: 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.



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Ingestion: Get medical attention if symptoms occur.

Personal Protection for First-aid Responders: No data available.

Most important symptoms and effects, both acute and delayed Symptoms: No data available.

Hazards: Harmful if swallowed.

Indication of immediate medical attention and special treatment needed

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.

Special hazards arising from the substance or mixture: None known.

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: No special precautionary health measures should be needed under anticipated conditions of use.



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Accidental release measures: No data available.

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

Environmental Precautions: Avoid release to the environment.

7. Handling and storage

Handling

Technical measures: No data available.

Local/Total ventilation: No data available.

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.

Storage

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

Safe packaging materials: No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Sodium azide (Na(N3)) - as HN3	Ceiling	0.1 ppm	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended
Sodium azide (Na(N3)) - as NaN3	Ceiling	0.3 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000), as amended



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	Ceiling	0.3 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Sodium azide (Na(N ₃)) - as HN ₃	Ceiling	0.1 ppm	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Sodium azide (Na(N ₃))	AN ESL	0.07 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	0.7 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	AN ESL	0.2 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	2 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	Ceiling	0.1 ppm 0.3 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
Sodium azide (Na(N ₃)) - as hydrazoic acid vapor	Ceiling	0.11 ppm	US. ACGIH Threshold Limit Values, as amended
Sodium azide (Na(N ₃)) - as NaN ₃	Ceiling	0.29 mg/m ³	US. ACGIH Threshold Limit Values, as amended
	Ceil_Time	0.3 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Sodium azide (Na(N ₃)) - as HN ₃	Ceil_Time	0.1 ppm	US. NIOSH: Pocket Guide to Chemical Hazards, 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).



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Appropriate Engineering Controls

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

Individual protection measures, such as personal protective equipment**Eye/face protection:**

Wear safety glasses with side shields (or goggles).

Skin Protection**Hand Protection:**

Material: Chemical resistant gloves

Skin and Body Protection:

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
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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.



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Boiling Point:	No data available.
Flammability:	No data available.
Upper/lower limit on flammability or explosive limits	
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.
Relative vapor density:	No data available.

Other information
No data available

10. Stability and reactivity

Reactivity:	Material is stable under normal conditions.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	Not known.



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Conditions to avoid:	Avoid exposure to high temperatures or direct sunlight.
Incompatible Materials:	Strong oxidizers. Sodium azide is present in this product. Contact with acidic solutions and metal compounds over time may form potentially explosive metal azides. Should any of this material be introduced into a sanitary sewer system, flush with copious amounts of water.
Hazardous Decomposition Products:	Not known.

11. Toxicological information

General information: Harmful if swallowed.

Information on toxicological effects

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	Harmful if swallowed.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

Product:	Harmful if swallowed.
Components:	
Sodium azide (Na(N3))	LD 50 (Rat): 27 mg/kg LD 50 (Mouse): 27 mg/kg

Dermal

Product:	Not classified for acute toxicity based on available data.
Components:	
Sodium azide (Na(N3))	No data available.

Inhalation

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



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Sodium azide (Na(N3)) No data available.

Repeated dose toxicity

Product: No data available.

Components:
Sodium azide (Na(N3)) No data available.

Skin Corrosion/Irritation

Product: No data available.

Components:
Sodium azide (Na(N3)) No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:
Sodium azide (Na(N3)) No data available.

Respiratory or Skin Sensitization

Product: No data available.

Components:
Sodium azide (Na(N3)) Not a skin sensitizer.

Carcinogenicity

Product: No data available.

Components:
Sodium azide (Na(N3)) No data available.

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:
Sodium azide (Na(N3)) No data available.

In vivo

Product: No data available.

Components:
Sodium azide (Na(N3)) No data available.

Reproductive toxicity

Product: No data available.

Components:



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Sodium azide (Na(N3)) No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Components:

Sodium azide (Na(N3)) No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Components:

Sodium azide (Na(N3)) No data available.

Aspiration Hazard

Product: No data available.

Components:

Sodium azide (Na(N3)) No data available.

Information on health hazards

Other hazards

Product: None known.;

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

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

Components:

Sodium azide (Na(N3)) LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 5.46 mg/l Mortality
LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 96 h): 4.6 mg/l Mortality
LC 50 (Northern squawfish (*Ptychocheilus oregonensis*), 24 h): < 10 mg/l Mortality
LC 50 (Trout family (*Salmonidae*), 24 h): < 10 mg/l Mortality
LC 50 (Rainbow trout, donaldson trout (*Oncorhynchus mykiss*), 24 h): 1 mg/l Mortality

Aquatic Invertebrates

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

Components:

Sodium azide (Na(N3)) LC 50 (Water flea (*Simocephalus serrulatus*), 48 h): 6.4 mg/l
LC 50 (Water flea (*Daphnia pulex*), 48 h): 4.2 mg/l



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LC 50 (Crayfish (*Orconectes rusticus*), 96 h): < < 1 mg/l
LC 50 (Red swamp crayfish (*Procambarus clarkii*), 48 h): 0.4 - 0.6 mg/l
LC 50 (Scud (*Gammarus lacustris*), 24 h): 13 - 15 mg/l Mortality

Toxicity to Aquatic Plants

Product: No data available.
Components:
Sodium azide (Na(N3)) EC 50 (Green algae (*Chlorococcum*), 24 h): 176 mg/l

Toxicity to microorganisms

Product: No data available.
Components:
Sodium azide (Na(N3)) No data available.

Chronic hazards to the aquatic environment:

Fish

Product: No negative effects on the aquatic environment are known.
Components:
Sodium azide (Na(N3)) No data available.

Aquatic Invertebrates

Product: No negative effects on the aquatic environment are known.
Components:
Sodium azide (Na(N3)) No data available.

Toxicity to Aquatic Plants

Product: No data available.
Components:
Sodium azide (Na(N3)) No data available.

Toxicity to microorganisms

Product: No data available.
Components:
Sodium azide (Na(N3)) No data available.

Persistence and Degradability

Biodegradation

Product: Expected to be readily biodegradable.
Components:
Sodium azide (Na(N3)) No data available.

BOD/COD Ratio

Product: No data available.
Components:
Sodium azide (Na(N3)) No data available.

Bioaccumulative potential



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Bioconcentration Factor (BCF)

Product: No data available.

Components:
Sodium azide (Na(N3)) No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: Log Kow: No data available.

Components:
Sodium azide (Na(N3)) No data available.

Mobility in soil:

Product No data available.

Components:
Sodium azide (Na(N3)) No data available.

Results of PBT and vPvB assessment:

Product No data available.

Components:
Sodium azide (Na(N3)) No data available.

Other adverse effects:

Other hazards

Product: 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 methods: No specific disposal method required.

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.



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14. Transport information

DOTUN 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.

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



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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 AZIDE

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Not classified



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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)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable



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Kyoto protocol
Not applicable

16. Other information, including date of preparation or last revision
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Issue Date: 10/17/2022

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 easily accessed. Due to the possibility of errors during transmission, BD makes no representations as to the completeness or accuracy of the information.