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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)
222641	BD Difco™ Salmonella O Antiserum Poly A-I & Vi, 3 mL	No data available
228141	Vial Sal O Antiserum Factor 2 Group A	No data available
226591	Vial Sal O Antiserum Factor 4 Grp B 3Ml	No data available
228151	Vial Sal O Antiserum Factors 4& 5 Grp B	No data available
226601	Vial Sal O Antiserum Factor 5 Grp B 3Ml	No data available
228161	Vial Sal O Antiserum Factor 7 Grp C1	No data available
228171	Vial Sal O Antiserum Factor 8 Grp C2&C3	No data available
228181	Vial Sal O Antiserum Factor 9 Group D	No data available
222571	Vial Sal O Antis Factor 10 Grp E1 3Ml	No data available
227791	Vial Sal O Antiserum Factor 12	No data available
226611	Vial Sal O Antiserum Factor 14 3Ml	No data available
222581	Vial Sal O Antis Factor 15 Lyophilized	No data available
222591	Vial Sal O Antis Factor 19 Grp E4 3Ml	No data available
226621	Vial Sal O Antiserum Factor 20 3Ml	No data available
226631	Vial Sal O Antiserum Factor 22 Grp G1 3M	No data available
226641	Vial Sal O Antiserum Factor 23 Grp G2 3M	No data available
226661	Vial Sal O Antiserum Factor 25 3Ml	No data available

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226671	Vial Sal O Antiserum Factor 27 3Ml	No data available
211778	Vial Sal O Antiserum Factor 34 Group E3	No data available
229471	Salmonella O Antiserum Group A Factors 1,2,12	No data available
229481	Salmonella O Antiserum Group B Factors 1, 4	No data available
229731	Vial Sal O Antis Grp B Ftr 1/4/12/27 Lyo	No data available
229491	Salmonella O Antiserum Group C1 Factors 6,7	No data available
229501	Salmonella O Antiserum Group C2 Factors 6,8	No data available
230161	Vial Sal O Antiserum Grp C3 Ftr 8/20 Lyo	No data available
229511	Salmonella O Antiserum Group D1 Factor 1,9,12	No data available
230171	Salmonella O Antiserum Group D2 Factors 9 (46)	No data available
228191	Salmonella O Antiserum Group E Factors 1,3,10	No data available
229521	Vial Sal O Antis Group E1 Ftr 3/10 Lyo	No data available
229541	Vial Sal O Antis Group E2 Ftr 3/15 Lyo	No data available
230181	Vial Sal O Antis Grp E3 Factor 3/15/34	No data available
230191	Vial Sal O Antis Group E4 Ftr 1/3/19 Lyo	No data available
222601	Vial Sal O Antiserum Group F Lyophilized	No data available
230291	Vial Sal O Antis Group G Fact 1/13/22/23	No data available
222611	Vial Sal O Antis Group G1 Fact 1/13/22	No data available
230201	Vial Sal O Antis Group G2 Fact 1/13/23	No data available
222621	Vial Sal O Antiserum Group H Lyophilized	No data available
222631	Vial Sal O Antiserum Group I Lyophilized	No data available
211780	Vial Sal O Antiserum Group J Lyophilized	No data available

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225181	Vial Sal O Antiserum Group K Lyophilized	No data available
225191	Vial Sal O Antiserum Group L Lyophilized	No data available
211781	Vial Sal O Antiserum Group M Lyophilized	No data available
211783	Vial Sal O Antiserum Group N Lyophilized	No data available
225221	Vial Sal O Antiserum Group O Lyophilized	No data available
225341	Vial Sal O Antiserum Poly A Lyophilized	No data available
225351	Vial Sal O Antiserum Poly B Lyophilized	No data available
225361	Vial Sal O Antiserum Poly C Lyophilized	No data available
225371	Vial Sal O Antiserum Poly D Lyophilized	No data available
225381	Vial Sal O Antiserum Poly E Lyophilized	No data available
226451	Vial Sal O Antiserum Poly F Lyophilized	No data available
226461	Vial Sal O Antiserum Poly G Lyophilized	No data available
228271	Salmonella Vi Antiserum	No data available

Recommended restrictions

Recommended use: Scientific and industrial laboratory use. For In Vitro Diagnostic Use.

Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: BD, Integrated Diagnostic Solutions

Address: 7 Loveton Circle

Sparks, MD 21152

USA

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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.

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

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P330: Rinse mouth.

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(N3))	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 immediate medical advice/attention.

Inhalation: No specific precautions due to the small quantities handled.

Skin Contact: Flush contaminated area with plenty of water.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Ingestion: If swallowed, rinse mouth with water (only if the person is conscious). Call a physician or poison control center immediately.

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

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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 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 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. Contact local authorities in case of spillage to drain/aquatic environment.

Accidental release measures: No data available.

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Methods and material for containment and cleaning up:	Sweep up and place in a clearly labeled container for chemical waste. See Section 8 of the SDS for Personal Protective Equipment. For waste disposal, see section 13 of the SDS. Do not allow product to reach sewage system or any water course.
Environmental Precautions:	Do not release into the environment. Environmental manager must be informed of all major spillages.

7. Handling and storage

Handling

Technical measures:	No data available.
Local/Total ventilation:	No data available.
Safe handling advice:	Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, on clothing. Do not eat, drink or smoke when using the product. Read and follow manufacturer's recommendations. Wash promptly with soap and water if skin becomes contaminated. 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

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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
	Ceiling	0.3 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Sodium azide (Na(N3)) - as HN3	Ceiling	0.1 ppm	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A, as amended
Sodium azide (Na(N3))	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/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	ST ESL	2 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality), as amended
	Ceiling	0.1 ppm 0.3 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants, as amended
Sodium azide (Na(N3)) - as hydrazoic acid vapor	Ceiling	0.11 ppm	US. ACGIH Threshold Limit Values, as amended
Sodium azide (Na(N3)) - as NaN3	Ceiling	0.29 mg/m3	US. ACGIH Threshold Limit Values, as amended
	Ceil_Time	0.3 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards, as amended
Sodium azide (Na(N3)) - as HN3	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.

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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.

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 reasonably probable 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.

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Hygiene measures:	Do not eat, drink or smoke when using the product. Do not get this material in contact with skin.Wash promptly if skin becomes contaminated.Wash at the end of each work shift and before eating, smoking and using the toilet.Do not handle until all safety precautions have been read and understood.Avoid breathing dust/fume/gas/mist/vapors/spray.

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

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

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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.

Other information
No data available

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	No data available.
Possibility of hazardous reactions:	Not known.
Conditions to avoid:	Not known.
Incompatible Materials:	Strong acids. Strong oxidizing agents. Metals. 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.

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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: No data available.

Components:

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:

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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:
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

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Product: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

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: The product contains a substance which is toxic to aquatic organisms.

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 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 data available.

Components:

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

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Aquatic Invertebrates

Product: The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

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: No data available.

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

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.

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Results of PBT and vPvB assessment:

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

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. Smaller quantities can be disposed of with household waste
Disposal methods:	Dispose of waste and residues in accordance with local authority requirements.
Contaminated Packaging:	Water, if necessary with cleansing agents.

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.

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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

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.

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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

Acute toxicity (any route of exposure)

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.

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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

Kyoto protocol
Not applicable

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

Issue Date: 10/17/2022

Version #: 2.4

Further Information: No data available.

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