21.6%

0.6%



Material Safety Data Sheet `acc. to ISO/DIS 11014

Date Prepared: 10/15/2008

Reviewed On: 10/06/2008

1 Identification of substance:

- · Product name: <u>Azide Dextrose Broth</u>
- Catalog number: 238710

• Manufacturer/Supplier: BD Diagnostic Systems 7 Loveton Circle Sparks, MD 21152 Telephone: (410) 771 - 0100 or (800) 638 - 8663

· Emergency information:

In case of a chemical emergency, spill, fire, exposure, or accident contact BD Diagnostic Systems (410) 771-0100 or (800)-638-8663, or ChemTrec at (800) 424-9300.

2 Composition/Data on components:

· Chemical characterization

· Description: Mixture consisting of the following components.

· Dangerous components:

7647-14-5 sodium chloride

26628-22-8 sodium azide

3 Hazards identification

• Hazard description:



Xn Harmful

- · Information pertaining to particular dangers for man and environment
- R 22 Harmful if swallowed.
- R 36/37/38 Irritating to eyes, respiratory system and skin.
- · Classification system

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

• NFPA ratings (scale 0-4)



· HMIS ratings (scale 0-4)

HEALTH2Health = 2FIRE0Fire = 0REACTIVITY0Reactivity = 0

4 First aid measures

· General information

Symptoms of poisoning may even occur after several hours; therefore provide medical observation for at least 48 hours after the accident.

• After inhalation Seek medical treatment in case of complaints.

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- After skin contact Immediately wash with water and soap and rinse thoroughly.
- After eye contact Rinse opened eye for 15 minutes under running water. Then consult a doctor.
- · After swallowing Immediately call a doctor.
- · Information for doctor Show this product label or this MSDS.

5 Fire fighting measures

· Suitable extinguishing agents

CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.

- Special hazards caused by the material, its products of combustion or resulting gases: Nitrogen oxides (NOx)
- · Protective equipment: No special measures required.

6 Accidental release measures

· Person-related safety precautions: Not required.

- *Measures for environmental protection:* Wipe up with damp sponge or mop.
- · Measures for cleaning/collecting: No special measures required.
- Additional information:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and storage

· Handling

- · Information for safe handling: Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires: No special measures required.
- · Storage
- \cdot Requirements to be met by storerooms and receptacles: < 30 C

· Information about storage in one common storage facility:

- Do not store together with oxidizing and acidic materials as well as heavy-metal compounds.
- Further information about storage conditions: Store in cool, dry conditions in well sealed containers.

8 Exposure controls and personal protection

• Additional information about design of technical systems: No further data; see item 7.

· Components with limit values that require monitoring at the workplace:

26628-22-8 sodium azide

TLV 0.26 mg/m3, 0.1 ml/m3

• Additional information: The lists that were valid during the creation were used as basis.

· Personal Protective Equipment

• General protective and hygienic measures Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

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• Breathing equipment:

In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.

· Protection of hands:



Chemical resistant gloves (i.e. nitrile, or equivalent).

· Eye protection: Safety glasses

· Body protection: Protective work clothing (lab coat).

· General Information		
Form:	Solid.	
	Powder	
Color:	Beige	
Odor:	Characteristic	
Change in condition		
Melting point/Melting ran		
Boiling point/Boiling rang	ge: Not determined	
Flash point:	Not applicable	
Auto igniting:	Product is not self igniting.	
Danger of explosion:	Forms very sensitive explosive metallic compounds.	
Density:	Not determined	
Solubility in / Miscibility wi	th	
Water:	Soluble	
pH-value:	7.2 +/- 0.2	

10 Stability and reactivity

· Dangerous products of decomposition:

Chlorine (Cl)

Carbon monoxide (CO) and carbon dioxide (CO2) Nitrogen oxides (NOx)

• Additional information:

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.

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Product name: Azide Dextrose Broth

11 Toxicological information

• Acute toxicity:

· LD/LC50 values that are relevant for classification:

26628-22-8 sodium azide

Oral LD50 27 mg/kg (rat)

- · Primary irritant effect:
- on the skin: Irritant to skin and mucous membranes.
- on the eye: Irritating effect.
- · Sensitization: No sensitizing effects known.
- \cdot Additional toxicological information:

The product shows the following dangers according to internally approved calculation methods for preparations: Harmful

Irritant

12 Ecological information:

- · Ecotoxical effects:
- Other information:

The ecological effects have not been thoroughly investigated, but currently none have been identified. • *General notes:* Water hazard class 1 (Self-assessment): slightly hazardous for water.

13 Disposal considerations

· Product:

· Recommendation

Smaller quantities can be disposed of with solid waste. Must adhere to official regulations.

· Uncleaned packagings:

- · Recommendation: Disposal must be made according to state and federal regulations.
- · Recommended cleansing agent: Water, if necessary with cleansing agents.

14 Transport information

- · DOT regulations:
- · Hazard class:
- · TDG (Transport dangerous goods):
- · TDG class:
- Maritime transport IMDG:
- · IMDG Class:
- Marine pollutant: No

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• Air transport ICAO-TI and IATA-DGR:

· ICAO/IATA Class: -

15 Regulations

· SARA Section 355 (extremely hazardous substances)

26628-22-8 sodium azide

• SARA Section 313 (specific toxic chemical listings)

26628-22-8 sodium azide

· TSCA (Toxic Substances Control Act)

50-99-7 dextrose

7647-14-5 sodium chloride

26628-22-8 sodium azide

· Carcinogenicity categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

26628-22-8 sodium azide

· Canadian Substance Listing

· Canadian Domestic Substance List (DSL)

50-99-7 dextrose

7647-14-5 sodium chloride

26628-22-8 sodium azide

· Canadian Ingredient Disclosure List (limit 0.1%)

None of the ingredients is listed.

· Canadian Ingredient Disclosure List (limit 1%)

None of the ingredients is listed.

· Product related hazard information:

This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR), and the MSDS contains all of the information required by the CPR.

• Hazard symbols: Xn Harmful

• *Hazard-determining components of labeling:* sodium azide sodium chloride

· Risk phrases:

Harmful if swallowed.36/37/38 Irritating to eyes, respiratory system and skin.

• Safety phrases:

22 Do not breathe dust.

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- 36 Wear suitable protective clothing.
- 24/25 Avoid contact with skin and eyes. 7
 - Keep container tightly closed.

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton, Dickinson and Company or any of its subsidiaries assumes any liabilities whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability 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 can not guarantee that these are the only hazards that exist.

· Department issuing MSDS:

Safety and Environment Department MSDS created by Michael J. Spinazzola · Contact: Technical Service Representative