

Date Prepared: 04/02/2013

Reviewed On: 04/02/2013

## 1 Identification of the substance/mixture and of the company/undertaking

- · Product Identifier
- · Product Name: Azide Dextrose Broth
- · Catalog Number: 238710
- Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the preparation In-vitro Diagnostics
- · Details of the supplier of the safety data sheet
- Manufacturer/Supplier: BD Diagnostic Systems
   7 Loveton Circle
   Sparks, MD 21152
   Telephone: (410) 771 - 0100 or (800) 638 – 8663
   Email Address: Technical\_Services@bd.com
   Information Department: Technical Service
- Emergency telephone number: 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 Hazards identification

· Classification of the substance or mixture

STOT SE 3 H335 May cause respiratory irritation.

- Classification according to Directive 67/548/EEC or Directive 1999/45/EC
   Xn; Harmful
   R22: Harmful if swallowed.
   Xi; Irritant
   R36/37/38: 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.
   Label elements
   Labelling according to EU guidelines: The product has been classified and marked in accordance with regulations on hazardous materials.
  - Code letter and hazard designation of product:



Xn Harmful

(Contd. on page 2)



Date Prepared: 04/02/2013

## Reviewed On: 04/02/2013

Product Name: Azide Dextrose Broth	
	(Contd. of page 1)
<ul> <li>Hazard-determining components of labelling: sodium azide sodium chloride</li> </ul>	
<ul> <li>Risk phrases:</li> <li>22 Harmful if swallowed.</li> <li>36/37/38 Irritating to eyes, respiratory system and skin.</li> </ul>	
<ul> <li>Safety phrases:</li> <li>22 Do not breathe dust.</li> <li>36 Wear suitable protective clothing.</li> <li>24/25 Avoid contact with skin and eyes.</li> <li>7 Keep container tightly closed.</li> <li>NFPA ratings (scale 0-4)</li> </ul>	
Health = 2 $Flammability = 0$ $Reactivity = 0$	
· HMIS ratings (scale 0-4)	
HEALTH2FIRE0REACTIVITY0Reactivity0	
<ul> <li>Other hazards</li> <li>Results of PBT and vPvB assessment</li> <li>PBT: Not applicable.</li> <li>vPvB: Not applicable.</li> </ul>	

# 3 Composition/information on ingredients

· Chemical characterization: Mixture

· **Description:** Mixture consisting of the following components.

•		
<ul> <li>Dangerous Component</li> </ul>	nents:	
CAS: 7647-14-5 EINECS: 231-598-3	sodium chloride	21.6%
CAS: 26628-22-8 EINECS: 247-852-1	sodium azide	0.58%

# 4 First aid measures

- · Description of 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.

(Contd. on page 3)

US



Date Prepared: 04/02/2013

Reviewed On: 04/02/2013

### Product Name: Azide Dextrose Broth

(Contd. of page 2)

- 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.
- *Most important symptoms and effects, both acute and delayed* No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

# 5 Firefighting measures

- · Extinguishing media
- Suitable extinguishing agents CO2, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- Special hazards arising from the substance or mixture Nitrogen oxides (NOx)
- Advice for firefighters
- · Protective equipment: No special measures required.

## 6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures Not required.

• Environmental precautions: Wipe up with damp sponge or mop.

- Methods and material for containment and cleaning up: No special measures required.
- · Reference to other sections

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
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.

• Information about protection against explosions and fires: No special measures required.

- · Conditions for safe storage, including any incompatibilities
- · Storage
- · Requirements to be met by storerooms and receptacles: < 30  $^{\circ}C$
- 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.

(Contd. on page 4)

US



Date Prepared: 04/02/2013

## Reviewed On: 04/02/2013

#### Product Name: Azide Dextrose Broth

(Contd. of page 3)

• **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- · Additional information about design of technical systems: No further data; see Section 7.
- Control parameters

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

#### 26628-22-8 sodium azide

- REL Short-term value: C 0.3\*\* mg/m<sup>3</sup>, C 0.1\* ppm \*as HN3 vapor; \*\*as NaN3
- TLV Short-term value: C 0.29\*\* mg/m³, C 0.11\* ppm \*as HN3 vapor; \*\*as NaN3

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

#### Exposure controls

- 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.
- · 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).

# 9 Physical and chemical properties

- Information on basic physical and chemical properties
- · General Information
- · Appearance:

Form:	Solid. Powder
Color: · Odor:	Beige Characteristic
· pH-value:	7.2 +/- 0.2

7.2 +/- 0.2

(Contd. on page 5)

US



Date Prepared: 04/02/2013

Reviewed On: 04/02/2013

	(Contd. of page 4)
<ul> <li>Change in condition</li> <li>Melting point/Melting range:</li> <li>Boiling point/Boiling range:</li> </ul>	
· Flash point:	Not applicable
· Auto igniting:	Product is not self igniting.
· Danger of explosion:	Forms very sensitive explosive metallic compounds.
· Density:	Not determined
<ul> <li>Solubility in / Miscibility with Water:</li> <li>Other information</li> </ul>	Soluble No further relevant information available.

# 10 Stability and reactivity

- · Possibility of hazardous reactions No dangerous reactions known
- · Conditions to avoid No further relevant information available.
- · Incompatible materials: No further relevant information available.
- Hazardous decomposition products: 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.

# 11 Toxicological information

### · Information on toxicological effects

- · 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.
- Other information (about experimental toxicology):

This product has a TDLo of 118mg/kg (Or-human) based upon sodium azide content.

• **Subacute to chronic toxicity:** Target organs: cardiovascular system, respiratory system, central nervous system.

(Contd. on page 6)



Date Prepared: 04/02/2013

## Reviewed On: 04/02/2013

#### Product Name: Azide Dextrose Broth

(Contd. of page 5)

#### · Additional toxicological information:

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

Harmful Irritant

#### · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

#### · NTP (National Toxicology Program)

None of the ingredients is listed.

# 12 Ecological information

- · Toxicity
- · Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Other information:

The ecological effects have not been thoroughly investigated, but currently none have been identified.

- · Additional ecological information:
- · General notes: Water hazard class 1 (Self-assessment): slightly hazardous for water.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

### **13 Disposal considerations**

- · Waste treatment methods
- · Recommendation

Smaller quantities can be disposed of with solid waste.

Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements. This product is not considered a RCRA hazardous waste.

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

(Contd. on page 7)

US



Date Prepared: 04/02/2013

## Reviewed On: 04/02/2013

#### Product Name: Azide Dextrose Broth

(Contd. of page 6)

· UN-Number		
· DOT, ADR, ADN, IMDG, IATA	Void	
· UN proper shipping name		
· DOT, ADR, ADN, IMDG, IATA	Void	
· Transport hazard class(es)		
· DOT, ADR, ADN, IMDG, IATA		
· Class	Void	
· Packing group		
· DOT, ADR, IMDG, IATA	Void	
· Environmental hazards: · Marine pollutant:	No	
· Special precautions for user	Not applicable.	
· Transport in bulk according to Annex	ll of	

# 15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture
- · 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
- · California Proposition 65 Chemicals known to cause cancer
  - None of the ingredients is listed.
- California Proposition 65 Chemicals known to cause reproductive toxicity for females:
- None of the ingredients is listed.

(Contd. on page 8)

US



Date Prepared: 04/02/2013

## Reviewed On: 04/02/2013

#### Product Name: Azide Dextrose Broth

(Contd. of page 7)

- California Proposition 65 Chemicals known to cause reproductive toxicity for males:
- None of the ingredients is listed.
- · California Proposition 65 Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

· Carcinogenic categories

- · TLV (Threshold Limit Value established by ACGIH)
- 26628-22-8 sodium azide

Α4

- Product related hazard information:
- The product has been classified and marked in accordance with regulations on hazardous materials.

· Hazard symbols:



Xn Harmful

• Hazard-determining components of labeling: sodium azide

sodium chloride

· Risk phrases:

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

#### Safety phrases:

22 Do not breathe dust.

36 Wear suitable protective clothing.

- 24/25 Avoid contact with skin and eyes.
- 7 Keep container tightly closed.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

# **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:

Environmental, Health & Safety Created by Michael J. Spinazzola **Contact:** Technical Service Representative

(Contd. on page 9)

US



Date Prepared: 04/02/2013

#### Reviewed On: 04/02/2013

#### Product Name: Azide Dextrose Broth

(Contd. of page 8)

US

 Abbreviations and acronyms: RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA) ICAO: International Civil Aviation Organization ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO) ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) IMDG: International Maritime Code for Dangerous Goods DOT: US Department of Transportation IATA: International Air Transport Association ACGIH: American Conference of Governmental Industrial Hygienists NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA) LC50: Lethal concentration, 50 percent LD50: Lethal dose, 50 percent