

Date Prepared: 11/10/2009

Reviewed On: 12/21/2007

### 1 Identification of substance:

- **Product name:** Middlebrook 7H9 Broth
- **Catalog number:** 271310
- **Manufacturer/Supplier:**  
 BD Diagnostic Systems  
 7 Loveton Circle  
 Sparks, MD 21152  
 Telephone: (410) 771 - 0100 or (800) 638 - 8663
- **Information department:** Technical Services
- **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:**

7558-79-4	sodium phosphate, dibasic	53.3%
7783-20-2	ammonium sulfate	10.7%

### 3 Hazards identification

- **Hazard description:**



Xi Irritant

- **Information pertaining to particular dangers for man and environment**

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)**



Health = 1

Fire = 0

Reactivity = 0

- **HMIS ratings (scale 0-4)**



HEALTH 1 Health = 1

FIRE 0 Fire = 0

REACTIVITY 0 Reactivity = 0

### 4 First aid measures

- **General information** No special measures required.
- **After inhalation** Supply fresh air; consult doctor in case of complaints.
- **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.

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- **After swallowing** If symptoms persist consult doctor.

### 5 Fire fighting measures

- **Suitable extinguishing agents**  
CO<sub>2</sub>, 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:**  
During heating or in case of fire toxic gases may be produced.
- **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.

### 7 Handling and storage

- **Handling**
- **Information for safe handling:** Prevent formation of dust.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage**
- **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.  
Do not store together with alkaline material.
- **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:**  
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **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.
- **Breathing equipment:**  
In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.

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**· 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:**
**· General Information**

<b>Form:</b>	Solid. Powder
<b>Color:</b>	Light beige
<b>Odor:</b>	Characteristic

**· Change in condition**

<b>Melting point/Melting range:</b>	Not determined
<b>Boiling point/Boiling range:</b>	Not determined

<b>· Flash point:</b>	Not applicable
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<b>· Auto igniting:</b>	Product is not self igniting.
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<b>· Danger of explosion:</b>	Product does not present an explosion hazard.
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<b>· Density:</b>	Not determined
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<b>· Solubility in / Miscibility with Water:</b>	Soluble
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<b>· pH-value:</b>	6.6 +/- 0.2
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<b>· Solvent content:</b>	
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<b>· Solids content:</b>	100.0 %
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**10 Stability and reactivity**
**· Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

**· Dangerous reactions** No dangerous reactions known

**· Dangerous products of decomposition:**

 Carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>)

 Ammonia (NH<sub>4</sub>)

Hydrogen chloride (HCl)

 Sulfur oxides (SO<sub>x</sub>)

 Phosphorus oxides (PO<sub>x</sub>)

**11 Toxicological information**
**· Acute toxicity:**
**· Primary irritant effect:**
**· on the skin:** Irritant to skin and mucous membranes.

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- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to internally approved calculation methods for preparations:  
Irritant

### 12 Ecological information:

- **Ecotoxicological 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.

### 14 Transport information

- **DOT regulations:**
- **Hazard class:** -
- **TDG (Transport dangerous goods):**
- **TDG class:** -
- **Maritime transport IMDG:**
- **IMDG Class:** -
- **Marine pollutant:** No
- **Air transport ICAO-TI and IATA-DGR:**
- **ICAO/IATA Class:** -

### 15 Regulations

- **SARA Section 355 (extremely hazardous substances)**  
None of the ingredients is listed.
- **SARA Section 313 (specific toxic chemical listings)**  
7783-20-2 | ammonium sulfate
- **TSCA (Toxic Substances Control Act)**  
7558-79-4 | sodium phosphate, dibasic  
7778-77-0 | potassium phosphate, monobasic

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7783-20-2	ammonium sulfate
56-86-0	glutamic acid
68-04-2	Sodium citrate
7487-88-9	magnesium sulfate
1185-57-5	ferric ammonium citrate
65-23-6	pyridoxine
7758-98-7	copper sulfate
58-85-5	biotin
10043-52-4	calcium chloride

**· Carcinogenicity categories**
**· NTP (National Toxicology Program)**

None of the ingredients is listed.

**· TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

**· Canadian Substance Listing**
**· Canadian Domestic Substance List (DSL)**

All ingredients are listed.

**· Canadian Ingredient Disclosure List (limit 0.1%)**

None of the ingredients is listed.

**· Canadian Ingredient Disclosure List (limit 1%)**

7783-20-2 ammonium sulfate

**· 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:**

Xi Irritant

**· Hazard-determining components of labeling:**

ammonium sulfate

sodium phosphate, dibasic

**· Risk phrases:**

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

**· Safety phrases:**

24/25 Avoid contact with skin and eyes.

36 Wear suitable protective clothing.

22 Do not breathe dust.

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.

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

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

CDN