1 Identification of substance:

- **Product name:** Urea Broth
- **Catalog number:** 227210
- **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 at (410)771-0100 or (800) 638-8663, or ChemTrec at (800) 424-9300.

2 Composition/Data on components:

- **Chemical characterization**
  - **Description:** Mixture of the substances listed below with nonhazardous additions.
- **Dangerous components:**

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<tbody>
<tr>
<td>57-13-6</td>
<td>urea</td>
<td>51.7%</td>
</tr>
<tr>
<td>7558-79-4</td>
<td>sodium phosphate, dibasic</td>
<td>25.0%</td>
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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)**

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<tbody>
<tr>
<td>Health</td>
<td>Fire</td>
<td>Reactivity</td>
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<tr>
<td>1</td>
<td>0</td>
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</table>

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.
- **After swallowing** If symptoms persist consult doctor.
Product name: Urea Broth

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.
- 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/collection: 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
  Requirements to be met by storerooms and receptacles: 2 - 8 C
  Information about storage in one common storage facility: Store away from oxidizing agents.
  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.
Material Safety Data Sheet
acc. to ISO/DIS 11014

Date Prepared: 07/31/2007
Reviewed On: 07/31/2007

Product name: Urea Broth

- 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
  - Form: Solid, Powder
  - Color: Light red
  - Odor: Characteristic

- Change in condition
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: Not determined

- Flash point: Not applicable
- Auto igniting: Product is not self igniting.
- Danger of explosion: Product does not present an explosion hazard.
- Density: Not determined

- Solubility in / Miscibility with
  - Water: Soluble

- pH-value: 6.8 +/- 0.1

- Solvent content:

- Solids content: 100.0 %

10 Stability and reactivity

- Thermal decomposition / conditions to be avoided:
  No decomposition if used according to specifications.
- Materials to be avoided: Incompatible materials: strong acids and oxidizers.
- Dangerous products of decomposition:
  Carbon monoxide (CO) and carbon dioxide (CO2)
  Nitrogen oxides (NOx)
  Ammonia (NH4)
  Phosphorus oxides (POx)

(Contd. of page 2)
11 Toxicological information

- Acute toxicity:
  - Primary irritant effect:
    - on the skin: Irritant to skin and mucous membranes.
    - on the eye: Irritating effect.
  - Sensitization: No sensitizing effects known.
- Additional toxicological information:
  - Irritant
    The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information:

- Ecotoxicological effects:
- Other information:
  - The ecological effects have not been thoroughly investigated, but currently none have been identified.
  - General notes: Generally not hazardous for water.

13 Disposal considerations

- Product:
  - Recommendation
    Smaller quantities can be disposed of with solid waste.
    This product is not considered a RCRA hazardous waste.
    Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.
- 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:
- Land transport ADR/RID (cross-border)
  - ADR/RID 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)**
  None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act)**
  All ingredients are listed.

- **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.

- **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.

- **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)**
    None of the ingredients is listed.

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

  - **Hazard symbols:**
    Xi Irritant

  - **Hazard-determining components of labeling:**
    urea
    sodium phosphate, dibasic

- **Risk phrases:**
  36/37/38 Irritating to eyes, respiratory system and skin.

- **Safety phrases:**
  7 Keep container tightly closed.
  22 Do not breathe dust.
  24/25 Avoid contact with skin and eyes.
  36 Wear suitable protective clothing.
Material Safety Data Sheet
acc. to ISO/DIS 11014

Date Prepared: 07/31/2007
Reviewed On: 07/31/2007

Product name: Urea Broth

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

USA