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

- **Product Identifier**
- **Product Name:** BD SurePath™ Preservative Fluid
- **Catalog Number:** 490507

- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
  BD Diagnostics - TriPath
  780 Plantation Drive
  Burlington, NC  27215
  Telephone: (336) 290 - 8300 or 866 - TriPath (option #1)
- **Information Department:** Technical Service
- **Emergency telephone number:** (336) 290-8300 or (866) TriPath (option #1), or ChemTrec at (800) 424-9300.

2 Composition/information on ingredients

- **Chemical characterization:** Mixture
- **Description:** Mixture consisting of the following components.

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5</td>
<td>21.7%</td>
</tr>
<tr>
<td>67-56-1</td>
<td>1.2%</td>
</tr>
<tr>
<td>67-63-0</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

3 Hazards identification

- **Classification of the substance or mixture**
- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - **Xn; Harmful**
  - **R40:** Limited evidence of a carcinogenic effect.
  - **R10:** Flammable.

**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

- **Hazard-determining components of labelling:**
  - ethanol
  - formaldehyde

- **Risk phrases:**
  - 10 Flammable.
  - 40 Limited evidence of a carcinogenic effect.

- **Safety phrases:**
  - 7 Keep container tightly closed.
  - 16 Keep away from sources of ignition - No smoking.
  - 23 Do not breathe gas/fumes/vapour/spray.

(Contd. on page 2)
4 First aid measures

- **General information** Immediately remove contaminated clothing.
- **After inhalation**
  - Supply fresh air and seek medical advice.
  - In case of unconsciousness place patient on side position for transportation.
- **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**
  - Do not induce vomiting; immediately call for medical help.
  - Drink copious amounts of water and provide fresh air. Immediately call a doctor.
- **Information for doctor** Show this product label or this MSDS.

5 Firefighting measures

- **Suitable extinguishing agents**
  - CO₂, ABC multipurpose dry chemical or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **For safety reasons unsuitable extinguishing agents** Water with full jet.
- **Protective equipment**
  - Wear fully protective suit.
  - Wear self-contained respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**
  - Use respiratory protective device.
  - Wear protective clothing.
- **Environmental precautions**
  - Wipe up with damp sponge or mop.
- **Methods and material for containment and cleaning up**
  - Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
  - Dispose contaminated material as waste according to item 13.
  - Ensure adequate ventilation.
- **Reference to other sections**
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
7 Handling and storage

· Handling
· Precautions for safe handling
  Ensure good ventilation/exhaustion at the workplace.
  Prevent formation of aerosols.
· Information about protection against explosions and fires:
  Keep ignition sources away - Do not smoke.
  Protect against electrostatic charges.
· Storage
  · Requirements to be met by storerooms and receptacles: 15 - 30 °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/personal protection

· Additional information about design of technical systems: No further data; see Section 7.
· Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component</th>
<th>PEL</th>
<th>REL</th>
<th>TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
<td>1900</td>
<td>1900</td>
<td>1880</td>
</tr>
<tr>
<td>67-56-1 methanol</td>
<td>260</td>
<td>260</td>
<td>260</td>
</tr>
<tr>
<td>67-63-0 isopropanol</td>
<td>980</td>
<td>984</td>
<td>492</td>
</tr>
</tbody>
</table>

· 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.
· Breathing equipment:
  In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator.
Product Name: BD SurePath™ Preservative Fluid

9 Physical and chemical properties

- **General Information**
- **Appearance:**
  - Form: Liquid
  - Color: Clear
  - Colorless
- **Odor:** Alcohol-like
- **pH-value at 20°C (68 °F):** 7.2
- **Change in condition**
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: 86°C (187 °F)
- **Flash point:** 35°C (95 °F)
- **Ignition temperature:** 425.0°C (797 °F)
- **Auto igniting:** Product is not self igniting.
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
- **Explosion limits:**
  - Lower: 3.5 Vol %
  - Upper: 15.0 Vol %
- **Vapor pressure at 20°C (68 °F):** 59.0 hPa (44 mm Hg)
- **Density:** Not determined
- **Solubility in / Miscibility with**
  - Water: Soluble
- **Solvent content:**
  - Organic solvents: 24.2 %
  - Water: 74.7 %
- **Solids content:** 0.9 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Incompatible materials:** Incompatible material: strong oxidizers.
11 Toxicological information

- **Acute toxicity:**
  - **LD/LC50 values that are relevant for classification:**
    - 64-17-5 ethanol
    - Oral LD50: 3450 mg/kg (MOU) 7060 mg/kg (rat)
  
  - **Primary irritant effect:**
    - on the skin: No irritating effect.
    - on the eye: No irritating effect.
  
  - **Sensitization:** No sensitizing effects known.
  
  - **Subacute to chronic toxicity:**
    - Target organs: thyroid, kidney, ureter or bladder tumors.
    - Target organ: liver
  
  - **Additional toxicological information:**
    - The product shows the following dangers according to internally approved calculation methods for preparations:

12 Ecological information

- **Acquatic toxicity:** This material is not expected to be toxic to aquatic life.
- **Ecotoxic 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.

13 Disposal considerations

- **Waste treatment methods**
  - **Recommendation:** Must not be disposed of with solid waste.
  - Dispose of material in accordance with federal (40 CFR 261.3), state and local requirements.
  - RCRA hazardous waste - RCRA # D001 (ignitable).

- **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:** -

(Contd. of page 4)
Product Name: BD SurePath™ Preservative Fluid

- Remarks: 49CFR 173.150(e)(2) - States that aqueous solution of alcohol containing 24 percent or less alcohol by volume and no other hazardous material can be re-class as a combustible liquid and is not subject to the requirements.

- Land transport ADR/RID (cross-border)
- ADR/RID class: -

- Maritime transport IMDG:
- IMDG Class: -
- Marine pollutant: No
- Remarks: IMDG Special Provision 144 - An aqueous solution containing not more than 24% alcohol by volume is not subject to the provisions of this code.

- Air transport ICAO-TI and IATA-DGR:
- ICAO/IATA Class: -
- Remarks: IATA Special Provision A58 - Aqueous solutions containing 24% or less alcohol by volume is not subject to these regulations.

Transport/Additional information:
49 CFR §173.150 Exceptions For Class 3 (Flammable) and Combustible Liquids being used.

15 Regulatory information

- SARA Section 355 (extremely hazardous substances)
  None of the ingredients is listed.

- SARA Section 313 (specific toxic chemical listings)
  64-17-5 ethanol
  67-56-1 methanol
  67-63-0 isopropanol

- TSCA (Toxic Substances Control Act)
  7732-18-5 water
  64-17-5 ethanol
  67-56-1 methanol
  67-63-0 isopropanol
  7647-14-5 sodium chloride
  7758-11-4 potassium phosphate, dibasic
  50-00-0 formaldehyde

- California Proposition 65 - Chemicals known to cause cancer
  Formaldehyde is toxic, allergenic, and is known to the state of California to cause cancer. Note: Formaldehyde poses a cancer threat through inhalation of the gas or vapor.

- 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:
  64-17-5 ethanol
Product Name: BD SurePath™ Preservative Fluid

<table>
<thead>
<tr>
<th>Carcinogenic categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTP (National Toxicology Program)</td>
</tr>
<tr>
<td>50-00-0 formaldehyde</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TLV (Threshold Limit Value established by ACGIH)</th>
</tr>
</thead>
<tbody>
<tr>
<td>64-17-5 ethanol</td>
</tr>
<tr>
<td>67-63-0 isopropanol</td>
</tr>
<tr>
<td>50-00-0 formaldehyde</td>
</tr>
</tbody>
</table>

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