1 Identification

- **Product Identifier**
  - **Product Name:** BD ProbeTec Qx Collection Kit for Endocervical and Lesion Specimens
  - **Catalog Number:** 441357

- **Relevant identified uses of the substance or mixture and uses advised against**
  No further relevant information available.

- **Application of the substance / the mixture**
  - In-vitro Diagnostics

- **Details of the supplier of the safety data sheet**
  - **Manufacturer/Supplier:** BD Diagnostic Systems
    7 Loveton Circle
    Sparks, MD 21152
  - **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 Hazard(s) identification

- **Classification of the substance or mixture**

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**
  - Xn; Harmful
  - **R20/21/22:** Harmful by inhalation, in contact with skin and if swallowed.

**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:**
  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.

- **Code letter and hazard designation of product:**

  Xn Harmful

- **Hazard-determining components of labeling:**
  - potassium hydroxide
  - dimethyl sulfoxide

- **Risk phrases:**
  Dimethylsulfoxide freely penetrates the skin and may carry dissolved chemicals into the body.

(Contd. on page 2)
20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- **Safety phrases:**
  23 Do not breathe gas/fumes/vapour/spray.
  25 Avoid contact with eyes.
  26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  28 After contact with skin, wash immediately with plenty of water
  36/37 Wear suitable protective clothing and gloves.
  60 This material and its container must be disposed of as hazardous waste.

- **Classification system**
  - **NFPA ratings (scale 0-4):**
    - Health = 2
    - Flammability = 0
    - Reactivity = 0
  - **HMIS ratings (scale 0-4):**
    - Health = 2
    - Flammability = 0
    - Reactivity = 0

- **Other hazards**
  - **Results of PBT and vPvB assessment**
    - PBT: Not applicable.
    - vPvB: Not applicable.

### 3 Composition/information on ingredients

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

- **Dangerous Components:**
  - 67-68-5 dimethyl sulfoxide Xn R22; Xi R36/37/38 12.0%
  - 56-81-5 glycerol Xi R36/38 10.82%
  - 1310-58-3 potassium hydroxide C R35; Xn R22 1.65%

- **Additional information** Risk phrases refer to section 15.

### 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**
  Supply fresh air. If required, provide artificial respiration. Keep patient warm. Seek medical advice.
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 arising from the substance or mixture
  No further relevant information available.
· 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:
  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.
  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: 2 - 33C
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: |
|---------------------------------|------------------|
| **67-68-5 dimethyl sulfoxide**  | **56-81-5 glycerol** |
| WEEL (USA)                      | 250 ppm          |
| **EL (Canada (English))**       | **PEL (USA)**    |
| 10* 3** mg/m³                  | 15* 5** mg/m³    |
| *mist; **mist, respirable       | **total dust ** respirable fraction |
| **TLV (USA)**                   | **TWA (USA)**    |
| 10 ppm                          | Short-term value: 10 mg/m³ |

<table>
<thead>
<tr>
<th><strong>1310-58-3 potassium hydroxide</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>EL (Canada (English))</strong></td>
</tr>
<tr>
<td>Short-term value: C 2 mg/m³</td>
</tr>
<tr>
<td><strong>REL (USA)</strong></td>
</tr>
<tr>
<td>2 mg/m³</td>
</tr>
<tr>
<td><strong>TLV (USA)</strong></td>
</tr>
<tr>
<td>Short-term value: C 2 mg/m³</td>
</tr>
</tbody>
</table>

· 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.
   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

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Material Safety Data Sheet
acc. to ISO/DIS 11014

Date Prepared: 03/08/2014
Reviewed On: 07/24/2013

Product Name: BD ProbeTec Qx Collection Kit for Endocervical and Lesion Specimens

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

### 9 Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information on basic physical and chemical properties</strong></td>
<td></td>
</tr>
<tr>
<td><strong>General Information</strong></td>
<td></td>
</tr>
<tr>
<td>Appearance:</td>
<td></td>
</tr>
<tr>
<td>Form</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Clear</td>
</tr>
<tr>
<td>Odor</td>
<td>Characteristic</td>
</tr>
<tr>
<td><strong>pH-value</strong></td>
<td>11.5 +/- 0.25</td>
</tr>
<tr>
<td><strong>Change in condition</strong></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range</td>
<td>Not determined</td>
</tr>
<tr>
<td>Boiling point/Boiling range</td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Auto igniting</strong></td>
<td>Product is not self igniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>Not determined</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water</strong></td>
<td>Soluble</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactivity</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Chemical stability</strong></td>
<td></td>
</tr>
<tr>
<td>Thermal decomposition / conditions to be avoided:</td>
<td>No decomposition if used according to specifications.</td>
</tr>
<tr>
<td><strong>Possibility of hazardous reactions</strong></td>
<td>No dangerous reactions known</td>
</tr>
<tr>
<td><strong>Conditions to avoid</strong></td>
<td>No further relevant information available.</td>
</tr>
<tr>
<td><strong>Incompatible materials</strong></td>
<td>Incompatible material: strong oxidizers.</td>
</tr>
<tr>
<td><strong>Hazardous decomposition products:</strong></td>
<td></td>
</tr>
<tr>
<td>Sulfur oxides (SOx)</td>
<td></td>
</tr>
<tr>
<td>Carbon monoxide (CO) and carbon dioxide (CO2)</td>
<td></td>
</tr>
</tbody>
</table>

(Contd. on page 6)
11 Toxicological information

- Information on toxicological effects
  - Acute toxicity:
    - LD/LC50 values that are relevant for classification:
      - 67-68-5 dimethyl sulfoxide
        - Oral LD50 14500 mg/kg (rat)
      - 1310-58-3 potassium hydroxide
        - Oral LD50 273 mg/kg (mou)
        - 365 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.
  - Additional toxicological information:
    The product shows the following dangers according to internally approved calculation methods for preparations:
    Harmful

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.
  - 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.
    - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation
    Must adhere to official regulations.
    Must not be disposed of with solid waste.
Product Name: BD ProbeTec Qx Collection Kit for Endocervical and Lesion Specimens

14 Transport information

- UN-Number
  - DOT, TDG, ADN, IMDG, IATA  Void

- UN proper shipping name
  - DOT, TDG, ADN, IMDG, IATA  Void

- Transport hazard class(es)
  - DOT, TDG, ADN, IMDG, IATA
    - Class  Void

- Packing group
  - DOT, TDG, IMDG, IATA  Void

- Environmental hazards:
  - Marine pollutant:  No

- Special precautions for user  Not applicable.

- Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code  Not applicable.

- Transport/Additional information:  If a "void" appears in the Hazard Class section for the type of transportation, this indicates the product is not regulated for transportation.

15 Regulatory information

- Safety, health and environmental regulations/legislation specific for the substance or mixture

  - TSCA (Toxic Substances Control Act)
    - 7732-18-5 water
    - 67-68-5 dimethyl sulfoxide
    - 56-81-5 glycerol
    - 1310-58-3 potassium hydroxide
    - 9005-64-5 Tween 20
    - 7758-11-4 potassium phosphate, dibasic
    - 7778-77-0 potassium phosphate, monobasic

(Contd. on page 8)
Product Name: BD ProbeTec Qx Collection Kit for Endocervical and Lesion Specimens

- **Canadian Substance Listing**
- **Canadian Domestic Substance List (DSL)**
  - 7732-18-5 water
  - 67-68-5 dimethyl sulfoxide
  - 56-81-5 glycerol
  - 1310-58-3 potassium hydroxide
  - 9005-64-5 Tween 20
  - 7758-11-4 potassium phosphate, dibasic
  - 7778-77-0 potassium phosphate, monobasic

- **Canadian Ingredient Disclosure List (limit 0.1%)**
  - None of the ingredients is listed.

- **Canadian Ingredient Disclosure List (limit 1%)**
  - 67-68-5 dimethyl sulfoxide
  - 1310-58-3 potassium hydroxide

- **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:**
  - potassium hydroxide
  - dimethyl sulfoxide

- **Risk phrases:**
  20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

- **Safety phrases:**
  23 Do not breathe gas/fumes/vapour/spray.
  25 Avoid contact with eyes.
  26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
  28 After contact with skin, wash immediately with plenty of water
  36/37 Wear suitable protective clothing and gloves.
  60 This material and its container must be disposed of as hazardous waste.

- **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
· **Date of preparation / last revision** 03/08/2014 / -