1 Identification of substance:

- **Product details:**
  - **Trade name:** Annexin V-Biotin
  - **Article number:** 556417, 65872H

- **Manufacturer/Supplier:**
  BD PharMingen
  10975 Torreyana Road
  San Diego, CA 92121-1106
  Tel. (858) 812-8800

- **Information department:** Technical Services

- **Emergency information:**
  For a chemical emergency, spill, fire, exposure, or accident call PharMingen at (858)812-8800 or (800)638-8663, or ChemTrec at (800)424-9300

2 Composition/Data on components:

- **Chemical characterization:**
  - **CAS No. Description:** Not applicable

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

- **Dangerous components:**
  Void

3 Hazards identification

- **Hazard description:** This product contains no hazardous constituents, or the concentration of all chemical constituents are below the regulatory threshold limits described by Occupational Safety Health Administration Hazard Communication Standard 29 CFR 1910.1200 and the European Directive 91/155/EEC, and 93/112/EC.

- **NFPA ratings (scale 0-4)**
  - Health = 0
  - Fire = 0
  - Reactivity = 0

4 First aid measures

- **General information** No special measures required.
- **After inhalation** Seek medical treatment in case of complaints.
- **After skin contact**
  - Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

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### Trade name: Annexin V-Biotin

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- **After swallowing** If symptoms persist consult doctor.
- **Information for doctor** Show this label

### 5 Fire fighting measures

- **Suitable extinguishing agents**
  CO2, extinguishing powder or water spray. Fight larger fires with water or alcohol resistant foam.
- **Protective equipment**: No special measures required.

### 6 Accidental release measures

- **Person-related safety precautions**:
  Wear protective equipment. Keep unprotected persons away.
- **Measures for environmental protection**: Wipe up with damp sponge or mop.
- **Measures for cleaning/collecting**:
  Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).

### 7 Handling and storage

- **Handling**
  - **Information for safe handling**: No special measures required.
  - **Information about protection against explosions and fires**:
    No special measures required.

- **Storage**
  - **Requirements to be met by storerooms and receptacles**: 4 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**: None.

### 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**
  The usual precautionary measures for handling chemicals should be followed.

- **Breathing equipment**:
  In case of brief exposure, use a chemical fume hood or a NIOSH/MSHA-approved respirator. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
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- **Protection of hands:** Protective gloves.
- **Eye protection:** Safety glasses
- **Body protection:** Protective work clothing (lab coat).

### 9 Physical and chemical properties:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value/Range</th>
<th>Unit</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form:</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color:</td>
<td>Clear</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor:</td>
<td>Odorless</td>
<td></td>
<td></td>
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<tr>
<td>Change in condition</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Melting point/Melting range:</td>
<td>Undetermined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boiling point/Boiling range:</td>
<td>Undetermined</td>
<td></td>
<td></td>
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<tr>
<td>Flash point:</td>
<td>Not applicable</td>
<td></td>
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<tr>
<td>Danger of explosion:</td>
<td>Forms very sensitive explosive metallic compounds.</td>
<td></td>
<td></td>
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<tr>
<td>Vapor pressure:</td>
<td>Not applicable</td>
<td></td>
<td></td>
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<tr>
<td>Density:</td>
<td>Not determined</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in / Miscibility with</td>
<td>Soluble</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Water:</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
  No decomposition if used according to specifications.
- **Materials to be avoided:**
  Incompatible materials: acidic material and metals
  Incompatible material: strong oxidizers.
- **Dangerous reactions:** No dangerous reactions known
- **Dangerous products of decomposition:**
  No dangerous decomposition products known
- **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

- **Acute toxicity:**
- **Primary irritant effect:**
  - on the skin: No irritant effect.
  - on the eye: No irritating effect.
- **Sensitization:** No sensitizing effects known.
Trade name: Annexin V-Biotin

- Additional toxicological information:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:

- Ecotoxicological effects:
- Other information:
  The ecological effects have not been thoroughly investigated, but currently none have been identified.
- General notes: Not known to be hazardous to water.

13 Disposal considerations

- Product:
  Recommendation
  Must adhere to state and federal regulations.
  Smaller quantities can be disposed of with solid waste.
  Disposal must be made according to the regulations found in 40 CFR 261.
  This product is not considered a RCRA hazardous waste. Follow local and state regulations.

- Uncleaned packagings:
  Recommendation: Disposal must be made according to official 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

- Product related hazard informations:
  Observe the general safety regulations when handling chemicals
  The product is not subject to identification regulations pertaining to regulations on hazardous materials.

- National regulations
  Additional classification according to Decree on Hazardous Materials:
  CERCLA: This product does not contain chemicals having a Reportable Quantity (RQ).
  SARA 311/312: May be subject to reporting.
  313: Not subject to reporting.
Trade name: Annexin V-Biotin

TSCA: This product is exempt under TCSA.

16 Other information:

To the best of our knowledge, the information contained herein is accurate. However, neither Becton Dickinson 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 cannot guarantee that these are the only hazards that exist.

- **Department issuing MSDS:** Safety & Environment Department
- **Contact:** Technical Service Representative