Section 1. Identification

1.1 Product identifier

Product name : VariFlex N-Terminal SBP Vector Set, Part Number 240162
Part No. (Chemical Kit) : 240162
Part No. : pBEn-SBPa 240162-51
pBEn-SBPb 240162-52
pBEn-SBPC 240162-53

Validation date : 3/31/2017

1.2 Relevant identified uses of the substance or mixture and uses advised against

Material uses : Analytical reagent.

<table>
<thead>
<tr>
<th>Material</th>
<th>Amount</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>pBEn-SBPa</td>
<td>0.02 ml (20 µg 1 µg/µl)</td>
<td></td>
</tr>
<tr>
<td>pBEn-SBPb</td>
<td>0.02 ml (20 µg 1 µg/µl)</td>
<td></td>
</tr>
<tr>
<td>pBEn-SBPC</td>
<td>0.02 ml</td>
<td></td>
</tr>
</tbody>
</table>

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status : Not classified.

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

Classification of the substance or mixture

Not classified.

2.2 GHS label elements

Signal word : 

Date of issue : 03/31/2017
Section 2. Hazards identification

Hazard statements:
- pBEn-SBPa: No signal word.
- pBEn-SBPb: No signal word.
- pBEn-SBPc: No signal word.

Precautionary statements:

Prevention:
- pBEn-SBPa: Not applicable.
- pBEn-SBPb: Not applicable.
- pBEn-SBPc: Not applicable.

Response:
- pBEn-SBPa: Not applicable.
- pBEn-SBPb: Not applicable.
- pBEn-SBPc: Not applicable.

Storage:
- pBEn-SBPa: Not applicable.
- pBEn-SBPb: Not applicable.
- pBEn-SBPc: Not applicable.

Disposal:
- pBEn-SBPa: Not applicable.
- pBEn-SBPb: Not applicable.
- pBEn-SBPc: Not applicable.

Supplemental label elements:
- pBEn-SBPa: None known.
- pBEn-SBPb: None known.
- pBEn-SBPc: None known.

2.3 Other hazards:
- pBEn-SBPa: None known.
- pBEn-SBPb: None known.
- pBEn-SBPc: None known.

Section 3. Composition/information on ingredients

Substance/mixture:
- pBEn-SBPa: Mixture
- pBEn-SBPb: Mixture
- pBEn-SBPc: Mixture

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact:
- pBEn-SBPa: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pBEn-SBPb: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- pBEn-SBPc: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
### Section 4. First aid measures

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>pBEn-SBPa</th>
<th>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>pBEn-SBPa</td>
<td>Wash out mouth with water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Wash out mouth with water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Wash out mouth with water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>pBEn-SBPa</td>
<td>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.</td>
</tr>
</tbody>
</table>

#### 4.2 Most important symptoms/effects, acute and delayed

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>pBEn-SBPa</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>pBEn-SBPa</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>pBEn-SBPa</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>pBEn-SBPa</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Over-exposure signs/symptoms**

**Date of issue:** 03/31/2017
Section 4. First aid measures

Eye contact:
- pBEn-SBPa
- pBEn-SBPb
- pBEn-SBPc

Inhalation:
- pBEn-SBPa
- pBEn-SBPb
- pBEn-SBPc

Skin contact:
- pBEn-SBPa
- pBEn-SBPb
- pBEn-SBPc

Ingestion:
- pBEn-SBPa
- pBEn-SBPb
- pBEn-SBPc

Protection of first-aiders:
- pBEn-SBPa
- pBEn-SBPb
- pBEn-SBPc

No action shall be taken involving any personal risk or without suitable training.

Notes to physician:
- pBEn-SBPa
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pBEn-SBPb
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- pBEn-SBPc
  - Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments:
- pBEn-SBPa
  - No specific treatment.
- pBEn-SBPb
  - No specific treatment.
- pBEn-SBPc
  - No specific treatment.

Protection of first-aiders:
- pBEn-SBPa
  - No action shall be taken involving any personal risk or without suitable training.
- pBEn-SBPb
  - No action shall be taken involving any personal risk or without suitable training.
- pBEn-SBPc
  - No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- pBEn-SBPa
  - Use an extinguishing agent suitable for the surrounding fire.
- pBEn-SBPb
  - Use an extinguishing agent suitable for the surrounding fire.
- pBEn-SBPc
  - Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media:
- pBEn-SBPa
  - None known.
- pBEn-SBPb
  - None known.
- pBEn-SBPc
  - None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical:
- pBEn-SBPa
  - In a fire or if heated, a pressure increase will occur and the container may burst.
- pBEn-SBPb
  - In a fire or if heated, a pressure increase will occur and the container may burst.
- pBEn-SBPc
  - In a fire or if heated, a pressure increase will occur and the container may burst.
Section 5. Fire-fighting measures

Hazardous thermal decomposition products:
- **pBEn-SBPa**: No specific data.
- **pBEn-SBPb**: No specific data.
- **pBEn-SBPc**: No specific data.

**5.3 Advice for firefighters**

**Special protective actions for fire-fighters:**
- **pBEn-SBPa**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **pBEn-SBPb**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- **pBEn-SBPc**: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters:**
- **pBEn-SBPa**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **pBEn-SBPb**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
- **pBEn-SBPc**: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**6.1 Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel:**
- **pBEn-SBPa**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- **pBEn-SBPb**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
- **pBEn-SBPc**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Section 6. Accidental release measures

6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling
## Section 7. Handling and storage

### Protective measures

<table>
<thead>
<tr>
<th>pBEn-SBPa</th>
<th>Put on appropriate personal protective equipment (see Section 8).</th>
</tr>
</thead>
<tbody>
<tr>
<td>pBEn-SBPb</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>pBEn-SBPc</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
</tbody>
</table>

### Advice on general occupational hygiene

<table>
<thead>
<tr>
<th>pBEn-SBPa</th>
<th>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pBEn-SBPb</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
<tr>
<td>pBEn-SBPc</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
</tbody>
</table>

### 7.2 Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>pBEn-SBPa</th>
<th>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pBEn-SBPb</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</td>
</tr>
<tr>
<td>pBEn-SBPc</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.</td>
</tr>
</tbody>
</table>
Section 7. Handling and storage

7.3 Specific end use(s)

**Recommendations**

<table>
<thead>
<tr>
<th>pBen-SBPa</th>
<th>Industrial applications, Professional applications.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pBen-SBPb</td>
<td>Industrial applications, Professional applications.</td>
</tr>
<tr>
<td>pBen-SBPc</td>
<td>Industrial applications, Professional applications.</td>
</tr>
</tbody>
</table>

**Industrial sector specific solutions**

<table>
<thead>
<tr>
<th>pBen-SBPa</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>pBen-SBPb</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>pBen-SBPc</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

Section 8. Exposure controls/personal protection

8.1 Control parameters

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>None.</td>
<td></td>
</tr>
</tbody>
</table>

8.2 Exposure controls

**Appropriate engineering controls**

- Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Environmental exposure controls**

- Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Individual protection measures**

**Hygiene measures**

- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection**

- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**

**Hand protection**

- Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection**

- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection**

- Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection**

- Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Date of issue: 03/31/2017
### Section 9. Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Physical state</th>
<th>pBEn-SBPa</th>
<th>Liquid.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Liquid.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Liquid.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Color</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Odor threshold</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>pH</th>
<th>pBEn-SBPa</th>
<th>7.5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>7.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Melting point</th>
<th>pBEn-SBPa</th>
<th>0°C (32°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>0°C (32°F)</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>0°C (32°F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Boiling point</th>
<th>pBEn-SBPa</th>
<th>100°C (212°F)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>100°C (212°F)</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>100°C (212°F)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flash point</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Evaporation rate</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Flammability (solid, gas)</th>
<th>pBEn-SBPa</th>
<th>Not applicable.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not applicable.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Lower and upper explosive (flammable) limits</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor pressure</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Vapor density</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Relative density</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Solubility</th>
<th>pBEn-SBPa</th>
<th>Easily soluble in the following materials: cold water and hot water.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Partition coefficient: n-octanol/water</th>
<th>pBEn-SBPa</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>pBEn-SBPb</td>
<td>Not available.</td>
</tr>
<tr>
<td></td>
<td>pBEn-SBPc</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>pBEn-SBPa</th>
<th>pBEn-SBPs</th>
<th>pBEn-SBPe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Subsection</th>
<th>pBEn-SBPa</th>
<th>pBEn-SBPs</th>
<th>pBEn-SBPe</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1 Reactivity</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>10.2 Chemical stability</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>10.3 Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>10.4 Conditions to avoid</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>10.5 Incompatible materials</td>
<td>May react or be incompatible with oxidizing materials.</td>
<td>May react or be incompatible with oxidizing materials.</td>
<td>May react or be incompatible with oxidizing materials.</td>
</tr>
<tr>
<td>10.6 Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>
### Section 11. Toxicological information

#### 11.1 Information on toxicological effects

**Acute toxicity**
Not available.

**Irritation/Corrosion**
Not available.

**Sensitization**
Not available.

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**
Not available.

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

**Information on the likely routes of exposure**

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>pBEn-SBPa</th>
<th>pBEn-SB Pb</th>
<th>pBEn-SB Pc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>pBEn-SBPa</th>
<th>pBEn-SB Pb</th>
<th>pBEn-SB Pc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Eye contact</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Symptoms related to the physical, chemical and toxicological characteristics**

<table>
<thead>
<tr>
<th>Route of Exposure</th>
<th>pBEn-SBPa</th>
<th>pBEn-SB Pb</th>
<th>pBEn-SB Pc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data.</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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Skin contact:
- pBEn-SBPa: No specific data.
- pBEn-SBPb: No specific data.
- pBEn-SBPc: No specific data.

Ingestion:
- pBEn-SBPa: No specific data.
- pBEn-SBPb: No specific data.
- pBEn-SBPc: No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

Long term exposure
- Potential immediate effects: Not available.
- Potential delayed effects: Not available.

Potential chronic health effects
- General:
  - pBEn-SBPa: No known significant effects or critical hazards.
  - pBEn-SBPb: No known significant effects or critical hazards.
  - pBEn-SBPc: No known significant effects or critical hazards.
- Carcinogenicity:
  - pBEn-SBPa: No known significant effects or critical hazards.
  - pBEn-SBPb: No known significant effects or critical hazards.
  - pBEn-SBPc: No known significant effects or critical hazards.
- Mutagenicity:
  - pBEn-SBPa: No known significant effects or critical hazards.
  - pBEn-SBPb: No known significant effects or critical hazards.
  - pBEn-SBPc: No known significant effects or critical hazards.
- Teratogenicity:
  - pBEn-SBPa: No known significant effects or critical hazards.
  - pBEn-SBPb: No known significant effects or critical hazards.
  - pBEn-SBPc: No known significant effects or critical hazards.
- Developmental effects:
  - pBEn-SBPa: No known significant effects or critical hazards.
  - pBEn-SBPb: No known significant effects or critical hazards.
  - pBEn-SBPc: No known significant effects or critical hazards.
- Fertility effects:
  - pBEn-SBPa: No known significant effects or critical hazards.
  - pBEn-SBPb: No known significant effects or critical hazards.
  - pBEn-SBPc: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates
- Not available.

Section 12. Ecological information

12.1 Toxicity
- Not available.

12.2 Persistence and degradability
- Not available.

12.3 Bioaccumulative potential

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Not available.

12.4 Mobility in soil

Soil/water partition coefficient ($K_{OC}$) : Not available.

12.5 Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

Regulatory information

DOT / IMDG / IATA : Not regulated.

Section 15. Regulatory information

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

U.S. Federal regulations : United States inventory (TSCA 8b): All components are listed or exempted.

Clean Water Act (CWA) 311: Edetic acid

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

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Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304
Composition/information on ingredients
No products were found.

SARA 304 RQ : Not applicable.
SARA 311/312
Classification : Not applicable.

Composition/information on ingredients
No products were found.

State regulations
Massachusetts : None of the components are listed.
New York : None of the components are listed.
New Jersey : None of the components are listed.
Pennsylvania : None of the components are listed.

California Prop. 65
No products were found.

International regulations
Chemical Weapon Convention List Schedules I, II & III Chemicals
Not applicable.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list
Australia : All components are listed or exempted.
Canada inventory : All components are listed or exempted.
China : All components are listed or exempted.
Europe : All components are listed or exempted.
Japan : [Japan inventory (ENCS): All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
Malaysia : Not determined.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : All components are listed or exempted.
Taiwan : All components are listed or exempted.
Turkey : Not determined.

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Version : 4

 Indicates information that has changed from previously issued version.

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