SAFETY DATA SHEET
Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: FITC Annexin V
Catalog Number: 99903
Unit Size: 250 uL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
WHMIS classification None
GHS hazard pictogram None

Classification according to Regulation (EC) No 1272/2008[CLP] None
Classification according to Directive 1999/45/EC None

HMIS Classification
Health hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

4. FIRST- AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact
Wash off with soap and plenty of water. Consult a physician.
In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. **FIREFIGHTING MEASURES**

- Suitability extinguishing media
  Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
- Special protective equipment for firefighters
  Wear self contained breathing apparatus for firefighting if necessary.

6. **ACCIDENTAL RELEASE MEASURES**

- Personal precautions
  Avoid breathing vapors, mist or gas. Remove all sources of ignition.
- Environmental precautions
  Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
- Methods and materials for containment and cleaning up
  Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. **HANDLING AND STORAGE**

- Precautions for safe handling
  Avoid inhalation of vapor or mist.
- Conditions for safe storage
  Keep container tightly closed in a dry and well-ventilated place.
  Store at 4°C.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

- Components with workplace control parameters
  None
- Personal protective equipment
  Hand protection
  Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
- Respiratory protection
  Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- Eye protection
  Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
- Hygiene measures
  Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Name</td>
<td>FITC Annexin V</td>
</tr>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7-8</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

Chemical stability
Stable under recommended storage conditions.

 Possibility of hazardous reactions
No data available

 Conditions to avoid
Heat, flames and sparks.

 Materials to avoid
No data available

 Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

Acute toxicity

 Oral LD50 None
 Inhilation LC50 None
 Dermal LD50 None

 Other information on acute toxicity No data available

 Skin corrosion/irritation No data available
 Serious eye damage/eye irritation No data available
 Respiratory or skin sensitization No data available
 Germ cell mutagenicity No data available

 Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

 Specific target organ toxicity - single exposure (Globally Harmonized System)
No data available

 Specific target organ toxicity - repeated exposure (Globally Harmonized System)
No data available

 Aspiration hazard
No data available

 Potential health effects
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin may be harmful if absorbed through skin. May cause skin irritation.
Eyes may cause eye irritation.

**Additional Information**

RTECS: None

### 12. ECOLOGICAL INFORMATION

- **Toxicity**: No information available
- **Persistence and degradability**: No information available
- **Biodegradation**: No information available
- **Mobility in soil**: No information available
- **Results of PBT and vPvB assessment**: No information available
- **Other adverse effects**: No information available
- **Additional information**: No information available

### 13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

### 14. TRANSPORT INFORMATION

- **IATA, IMDG, DOT (US), TDG**: Not dangerous goods during transportation
- **UN number**: None
- **UN proper shipping name**: None
- **Transport hazard class**: None
- **Packing group**: None
- **Environmental hazards**: None
- **Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code**: None
- **Special precaution for user**: None

### 15. REGULATION INFORMATION

- **US Federal Regulations**
  - US Toxic Substances Control Act (TSCA): Not listed
  - SARA 302: No chemicals were found.
  - SARA 313: No chemicals were found.
  - SARA 311/312 Hazards: No chemicals were found.
- **WHMIS Hazard Class**: None

### 16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.

Version no. 3
Revision date (Initials) 6/20/19 (LR)
Reason for revision Application of WHMIS labeling requirements.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.
SAFETY DATA SHEET
Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

   Product Name: 5X Annexin Binding Buffer
   Catalog Number: 99902
   Unit Size: 15 mL
   Manufacturer/Supplier: Biotium, Inc.
   46117 Landing Parkway, Fremont, CA 94538, USA
   Phone: 1-510-265-1027, Fax: 1-510-265-1352
   Web: http://www.biotium.com

   Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

   GHS Classification
   Signal word None
   Health hazards None
   Physical hazards None
   Hazard statements None
   Precautionary statements None
   WHMIS classification None
   GHS hazard pictogram None

   Classification according to Regulation (EC) No 1272/2008[CLP] None
   Classification according to Directive 1999/45/EC None

   HMIS Classification
   Health hazard: 0
   Flammability: 0
   Physical hazards: 0

   NFPA Rating
   Health hazard: 0
   Fire: 0
   Reactivity Hazard: 0

   Labeling according to Regulation (EC) No 1272/2008[CLP]
   Hazard pictogram None
   Signal word None
   Hazard statements None
   Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

   No components present at concentrations classified as hazardous to health or the environment.

4. FIRST- AID MEASURES

   General advice
   Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

   If inhaled
   If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

   In case of skin contact
   Wash off with soap and plenty of water. Consult a physician.

   In case of eye contact
Flush eyes with water as a precaution.
If swallowed
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water.
Consult a physician.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.
Special protective equipment for firefighters
Wear self contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid breathing vapors, mist or gas. Remove all sources of ignition.
Environmental precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.
Methods and materials for containment and cleaning up
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.
Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.
Store at 4°C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters
None
Personal protective equipment
Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
Respiratory protection
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
Eye protection
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
Hygiene measures
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>5X Annexin Binding Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7-8</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
No data available

**Conditions to avoid**
Heat, flames and sparks.

**Materials to avoid**
No data available

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
- Oral LD50: None
- Inhalation LC50: None
- Dermal LD50: None

**Other information on acute toxicity**
No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**
No data available

**Aspiration hazard**
No data available

**Potential health effects**
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed. 
Skin May be harmful if absorbed through skin. May cause skin irritation. 
Eyes May cause eye irritation. 
**Additional Information** 
RTECS: None 

### 12. ECOLOGICAL INFORMATION

**Toxicity** No information available 
**Persistence and degradability** No information available 
**Biodegradation** No information available 
**Mobility in soil** No information available 
**Results of PBT and vPvB assessment** No information available 
**Other adverse effects** No information available 
**Additional information** No information available 

### 13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal. 

### 14. TRANSPORT INFORMATION

**IATA, IMDG, DOT (US), TDG** Not dangerous goods during transportation 
**UN number** None 
**UN proper shipping name** None 
**Transport hazard class** None 
**Packing group** None 
**Environmental hazards** None 
**Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code** None 
**Special precaution for user** None 

### 15. REGULATION INFORMATION

**US Federal Regulations** 
US Toxic Substances Control Act (TSCA): Not listed 
SARA 302: No chemicals were found. 
SARA 313: No chemicals were found. 
SARA 311/312 Hazards: No chemicals were found. 
**WHMIS Hazard Class** None 

### 16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008 
Refer to section 2 and section 3 

Prepared by: Regulatory Department 
Biotium Inc. 
Version no. 4 
Revision date (Initials) 6/20/19 (LR) 
Reason for revision Application of WHMIS labeling requirements. 

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.
SAFETY DATA SHEET
Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Ethidium Homodimer III
Catalog Number: 99904
Unit Size: 250 uL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
WHMIS classification None
GHS hazard pictogram None

Classification according to Regulation (EC) No 1272/2008[CLP] None
Classification according to Directive 1999/45/EC None

HMIS Classification
Health hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

4. FIRST-AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. **FIREFIGHTING MEASURES**

**Suitable extinguishing media**
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

**Special protective equipment for firefighters**
Wear self contained breathing apparatus for firefighting if necessary.

6. **ACCIDENTAL RELEASE MEASURES**

**Personal precautions**
Avoid breathing vapors, mist or gas. Remove all sources of ignition.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. **HANDLING AND STORAGE**

**Precautions for safe handling**
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.

**Conditions for safe storage**
Keep container tightly closed in a dry and well-ventilated place.
Store at 4°C.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**
None

**Personal protective equipment**

**Hand protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection**
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Ethidium Homodimer III</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appearance</strong></td>
<td>Red solution</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>Odor threshold</strong></td>
<td>No data available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>7-8</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
No data available

**Conditions to avoid**
Heat, flames and sparks.

**Materials to avoid**
No data available

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**

<table>
<thead>
<tr>
<th>Route</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral LD50</td>
<td>None</td>
</tr>
<tr>
<td>Inhalation LC50</td>
<td>None</td>
</tr>
<tr>
<td>Dermal LD50</td>
<td>None</td>
</tr>
</tbody>
</table>

**Other information on acute toxicity**
No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**
No data available

**Aspiration hazard**
No data available

**Potential health effects**
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.

Additional Information
RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity No information available
Persistence and degradability No information available
Biodegradation No information available
Mobility in soil No information available
Results of PBT and vPvB assessment No information available
Other adverse effects No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG Not dangerous goods during transportation
UN number None
UN proper shipping name None
Transport hazard class None
Packing group None
Environmental hazards None
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None
Special precaution for user None

15. REGULATION INFORMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Not listed
SARA 302: No chemicals were found.
SARA 313: No chemicals were found.
SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class None

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3

Prepared by: Regulatory Department
Biotium Inc.
Version no. 4
Revision date (Initials) 6/20/19 (LR)
Reason for revision Application of WHMIS labeling requirements.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.
SAFETY DATA SHEET
Date: June 20, 2019

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Hoechst 33342
Catalog Number: 30018C
Unit Size: 250 μL
Manufacturer/Supplier: Biotium, Inc.
46117 Landing Parkway, Fremont, CA 94538, USA
Phone: 1-510-265-1027, Fax: 1-510-265-1352
Web: http://www.biotium.com

Use as laboratory reagent. For research use only. Not for food, drug, household, or cosmetic use.

2. HAZARDS IDENTIFICATION

GHS Classification
Signal word None
Health hazards None
Physical hazards None
Hazard statements None
Precautionary statements None
WHMIS classification None
GHS hazard pictogram None

Classification according to Regulation (EC) No 1272/2008[CLP] None
Classification according to Directive 1999/45/EC None

HMIS Classification
Health hazard: 0
Flammability: 0
Physical hazards: 0

NFPA Rating
Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Labeling according to Regulation (EC) No 1272/2008[CLP]
Hazard pictogram None
Signal word None
Hazard statements None
Precautionary statements None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No components present at concentrations classified as hazardous to health or the environment.

4. FIRST-AID MEASURES

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

In case of eye contact
Flush eyes with water as a precaution.

**If swallowed**
Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. **FIREFIGHTING MEASURES**

**Suitable extinguishing media**
Carbon dioxide, dry chemical extinguishers, foam extinguishers or water.

**Special protective equipment for firefighters**
Wear self contained breathing apparatus for firefighting if necessary.

6. **ACCIDENTAL RELEASE MEASURES**

**Personal precautions**
Avoid breathing vapors, mist or gas. Remove all sources of ignition.

**Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**Methods and materials for containment and cleaning up**
Contain spillage. Soak up spilled substance with inert absorbent material. Keep in suitable, closed containers for disposal.

7. **HANDLING AND STORAGE**

**Precautions for safe handling**
Avoid inhalation of vapor or mist.
Avoid direct contact with substance.

**Conditions for safe storage**
Keep container tightly closed in a dry and well-ventilated place.
Store at 4°C.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Components with workplace control parameters**
None

**Personal protective equipment**

**Hand protection**
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Respiratory protection**
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eye protection**
Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Hygiene measures**
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hoechst 33342</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>7-8</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No data available</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

**Chemical stability**
Stable under recommended storage conditions.

**Possibility of hazardous reactions**
No data available

**Conditions to avoid**
Heat, flames and sparks.

**Materials to avoid**
No data available

**Hazardous decomposition products**
Hazardous decomposition products formed under fire conditions. - Carbon oxides
Other decomposition products - No data available

11. TOXICOLOGICAL INFORMATION

**Acute toxicity**
- Oral LD50 None
- Inhalation LC50 None
- Dermal LD50 None

**Other information on acute toxicity**
No data available

**Skin corrosion/irritation**
No data available

**Serious eye damage/eye irritation**
No data available

**Respiratory or skin sensitization**
No data available

**Germ cell mutagenicity**
No data available

**Carcinogenicity**
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

**Reproductive toxicity**
No data available

**Specific target organ toxicity - single exposure (Globally Harmonized System)**
No data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**
No data available

**Aspiration hazard**
No data available

**Potential health effects**
Inhalation May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion May be harmful if swallowed.
Skin May be harmful if absorbed through skin. May cause skin irritation.
Eyes May cause eye irritation.

Additional Information
RTECS: None

12. ECOLOGICAL INFORMATION

Toxicity          No information available  
Persistence and degradability  No information available 
Biodegradation        No information available 
Mobility in soil       No information available 
Results of PBT and vPvB assessment No information available
Other adverse effects  No information available
Additional information No information available

13. DISPOSAL CONSIDERATIONS

Do not dispose product directly into sewage. Consult local state or national regulation for proper disposal.

14. TRANSPORT INFORMATION

IATA, IMDG, DOT (US), TDG  Not dangerous goods during transportation
UN number          None 
UN proper shipping name None 
Transport hazard class None 
Packing group        None 
Environmental hazards None 
Transport in bulk according to Annex II of MARPOL 73/78 and IBC Code None 
Special precaution for user None 

15. REGULATION INFORMATION

US Federal Regulations
US Toxic Substances Control Act (TSCA): Not listed 
SARA 302: No chemicals were found. 
SARA 313: No chemicals were found. 
SARA 311/312 Hazards: No chemicals were found.

WHMIS Hazard Class      None 

16. OTHER INFORMATION

Classification according to Regulation (EC) Nr. 1272/2008
Refer to section 2 and section 3 

Prepared by: Regulatory Department 
Biotium Inc. 
Version no. 3 
Revision date (Initials)  6/20/19  (LR) 
Reason for revision Application of WHMIS labeling requirements.

The information provided above is believed to be correct to our best knowledge, but does not purport to be all inclusive, and shall be used only as a guide. This material is sold for research purposes only and is not required to appear on the TSCA inventory. It is not intended for food, drug, household, agricultural or cosmetic use. Its use must be supervised by a technically qualified individual experienced in handling potentially hazardous chemicals. Biotium shall not be held liable for any damage resulting from handling or contact with the above product.