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SECTION 1: Identification

1.1. Identification

| Product form | : Mixture |
|---------------|--|
| Product name | : PHOTOPROBE [®] (Long Arm) Biotin, Nucleic Acid Labeling |
| Product code | : SP-1020 |
| Kit component | : PHOTOPROBE [®] Biotin |
| | |

1.2. Recommended use and restrictions on use

Restrictions on use

: Laboratory chemicals

1.3. Supplier

Manufacturer

Vector Laboratories, Inc. 6737 Mowry Ave Newark, CA 94560 U.S.A T (650) 697-3600 - F (650) 697-0339 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

SECTION 4: First-aid measures

4.1. Description of first aid measures

| First-aid measures after inhalation | : | Remove person to fresh air and keep comfortable for breathing. |
|---------------------------------------|---|--|
| First-aid measures after skin contact | : | Wash skin with plenty of water. |

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First-aid measures after eye contact First-aid measures after ingestion : Rinse eyes with water as a precaution.

: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

| SECTION 5: Fire-fighting measures | |
|--|--|
| 5.1. Suitable (and unsuitable) extinguishing | media |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. |
| 5.2. Specific hazards arising from the chem | ical |

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

| SECTION 6: Accidental release measures | | |
|--|---|--|
| 6.1. Personal precautions, protective equipment and emergency procedures | | |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | : Ventilate spillage area. | |
| 6.1.2. For emergency responders | | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". | |
| 6.2. Environmental precautions | | |
| Avoid release to the environment. | | |
| 6.3. Methods and material for containment a | nd cleaning up | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. | |
| Other information | : Dispose of materials or solid residues at an authorized site. | |

6.4. Reference to other sections

For further information refer to section 13.

| SECTION 7: Handling and storage | | |
|---|---|--|
| 7.1. Precautions for safe handling | | |
| Precautions for safe handling Hygiene measures | Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | |
| 7.2. Conditions for safe storage, includi | ing any incompatibilities | |
| Storage conditions | : Store in a well-ventilated place. Keep cool. | |

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

PHOTOPROBE® Biotin, Nucleic Acid Labeling

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state Color Odor Odor threshold pH Melting point Freezing point Boiling point Flash point Relative evaporation rate (butyl acetate=1) Flammability (solid, gas) Vapor pressure Relative vapor density at 20 °C Relative density | Liquid Colorless No data available. No data available No data available No data available Not applicable No data available |
|---|--|
| | |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |
| Flammability (solid, gas) | : Not applicable. |
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| | |

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| Explosion limits | : | No data available |
|----------------------|---|-------------------|
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral) | : Not classified |
|-----------------------------------|---------------------|
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

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12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

| Proper Shipping Name (DOT) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) | : Not applicable : Not applicable : Not applicable |
|--|--|
| 14.3. Transport hazard class(es) | |
| DOT Transport hazard class(es) (DOT) | : Not applicable |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable |
| IATA Transport hazard class(es) (IATA) | : Not applicable |
| 14.4. Packing group | |
| Packing group (DOT) Packing group (IMDG) Packing group (IATA) | Not applicableNot applicableNot applicable |
| 14.5. Environmental hazards | |
| Other information | : No supplementary |
| 14.6. Special precautions for user | |
| DOT No data available | |

IMDG No data available

IATA No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

information available.

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Custom_SDS_USA_VECTOR

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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SECTION 1: Identification

1.1. Identification

| Product form | : Mixture |
|---------------|--|
| Product name | : PHOTOPROBE [®] (Long Arm) Biotin, Nucleic Acid Labeling |
| Product code | : SP-1020 |
| Kit component | : Tris Buffer (500 mM Tris, pH 9.5) |

1.2. Recommended use and restrictions on use

Use of the substance/mixture

: Laboratory chemicals

1.3. Supplier

Vector Laboratories, Inc. 6737 Mowry Ave Newark, CA 94560 U.S.A T (650) 697-3600 - F (650) 697-0339 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

| SECTION 2: Hazard(s) identification |
|-------------------------------------|
| |

2.1. Classification of the substance or mixture

GHS US classification

Serious eye damage/eye irritation Category 2 Specific target organ toxicity (repeated exposure) Category 2 Causes serious eye irritation May cause damage to organs through prolonged or repeated exposure

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)

Signal word (GHS US) Hazard statements (GHS US)

Precautionary statements (GHS US)



- Warning
 Causes serious eye irritation May cause damage to organs through prolonged or repeated exposure
 Do not breathe dust/fume/gas/mist/vapors/spray. Wash hands, forearms and face thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention if you feel unwell. If eye irritation persists: Get medical advice/attention.
 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

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SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

| Name | Product identifier | % |
|--|---------------------|-------|
| Ethylenediaminetetraacetic acid tetrasodium salt hydrate | CAS-No.: 194491-31- | 2 – 3 |
| | 1 | |

The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

SECTION 4: First-aid measures

4.1. Description of first aid measures

| First-aid measures general | : Get medical advice/attention if you feel unwell. | | |
|--|--|--|--|
| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. | | |
| First-aid measures after skin contact | : Wash skin with plenty of water. | | |
| First-aid measures after eye contact | : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to | | |
| | do. Continue rinsing. If eye irritation persists: Get medical advice/attention. | | |
| First-aid measures after ingestion | : Call a poison center/doctor/physician if you feel unwell. | | |
| 4.2. Most important symptoms and effects (acute and delayed) | | | |

Symptoms/effects after eye contact

: Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

| SECTION 5: Fire-fighting measures | | | | |
|---|--|--|--|--|
| 5.1. Suitable (and unsuitable) extinguishing media | | | | |
| Suitable extinguishing media | : Water spray. Dry powder. Foam. Carbon dioxide. | | | |
| 5.2. Specific hazards arising from the chemical | | | | |
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. | | | |
| 5.3. Special protective equipment and precautions for fire-fighters | | | | |

 Protection during firefighting
 : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures

: Ventilate spillage area. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes.

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6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| Methods for cleaning up | : | Take up liquid spill into absorbent material. |
|-------------------------|---|---|
| Other information | : | Dispose of materials or solid residues at an authorized site. |

6.4. Reference to other sections

For further information refer to section 13.

| SECTION 7: Handling and storage | | | |
|------------------------------------|---|--|--|
| 7.1. Precautions for safe handling | | | |
| Precautions for safe handling | : Ensure good ventilation of the work station. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. Wear personal protective equipment. | | |
| Hygiene measures | : Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | | |

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions

: Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Tris Buffer (500 mM Tris, pH 9.5)

No additional information available

Ethylenediaminetetraacetic acid tetrasodium salt hydrate (194491-31-1)

No additional information available

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

| Hand protection: | |
|--|--|
| Protective gloves | |
| Eye protection: | |
| Safety glasses | |
| Skin and body protection: | |
| Wear suitable protective clothing | |
| Respiratory protection: | |
| In case of insufficient ventilation, wear suitable respiratory equipment | |

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Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | : | Liquid |
|---|---|--------------------|
| Color | : | White |
| Odor | : | No data available. |
| Odor threshold | : | No data available |
| рН | : | No data available |
| Melting point | : | Not applicable |
| Freezing point | : | No data available |
| Boiling point | : | No data available |
| Flash point | : | No data available |
| Relative evaporation rate (butyl acetate=1) | : | No data available |
| Flammability (solid, gas) | : | Not applicable. |
| Vapor pressure | : | No data available |
| Relative vapor density at 20 °C | : | No data available |
| Relative density | : | No data available |
| Solubility | : | No data available |
| Partition coefficient n-octanol/water (Log Pow) | : | No data available |
| Auto-ignition temperature | : | No data available |
| Decomposition temperature | : | No data available |
| Viscosity, kinematic | : | No data available |
| Viscosity, dynamic | : | No data available |
| Explosion limits | : | No data available |
| Explosive properties | : | No data available |
| Oxidizing properties | : | No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation) | Not classified Not classified Not classified | | | | |
|---|--|--|--|--|--|
| Ethylenediaminetetraacetic acid tetrasodium salt hydrate (194491-31-1) | | | | | |
| ATE US (oral) | 500 mg/kg body weight | | | | |
| ATE US (dust, mist) | 1.5 mg/l/4h | | | | |
| Skin corrosion/irritation | : Not classified | | | | |
| Serious eye damage/irritation | : Causes serious eye irritation. | | | | |
| Respiratory or skin sensitization | : Not classified | | | | |
| Germ cell mutagenicity | : Not classified | | | | |
| Carcinogenicity | : Not classified | | | | |
| Reproductive toxicity | : Not classified | | | | |
| STOT-single exposure | : Not classified | | | | |
| STOT-repeated exposure | : May cause damage to organs through prolonged or repeated exposure. | | | | |
| Ethylenediaminetetraacetic acid tetrasodium salt hydrate (194491-31-1) | | | | | |
| STOT-repeated exposure | May cause damage to organs through prolonged or repeated exposure. | | | | |
| Aspiration hazard | : Not classified | | | | |
| Viscosity, kinematic | : No data available | | | | |
| Symptoms/effects after eye contact | : Eye irritation. | | | | |

| SECTION 12: Ecological information |
|------------------------------------|
|------------------------------------|

12.1. Toxicity

Ecology - general

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

| SECTION 13: Disposal considerations |
|-------------------------------------|
| |

effects in the environment.

13.1. Disposal methods

Waste treatment methods

: Dispose of contents/container in accordance with licensed collector's sorting instructions.

: The product is not considered harmful to aquatic organisms or to cause long-term adverse

SECTION 14: Transport information

In accordance with DOT / IMDG / IATA

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14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

| Proper Shipping Name (DOT) Proper Shipping Name (IMDG) Proper Shipping Name (IATA) | Not applicableNot applicableNot applicableNot applicable |
|--|---|
| 14.3. Transport hazard class(es) | |
| DOT Transport hazard class(es) (DOT) | : Not applicable |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable |
| IATA Transport hazard class(es) (IATA) | : Not applicable |
| 14.4. Packing group | |
| Packing group (DOT) | : Not applicable |
| Packing group (IMDG) | : Not applicable |
| Packing group (IATA) | : Not applicable |
| 14.5. Environmental hazards | |
| Other information | : No supplementary information available. |
| 14.6. Special precautions for user | |
| DOT No data available | |
| IMDG | |

No data available

IATA No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

| SECTION 15: Regulatory information |
|------------------------------------|
|------------------------------------|

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

| Ethylenediaminetetraacetic acid tetrasodium salt | CAS-No. 194491-31-1 | 2 – 3% |
|--|---------------------|--------|
| hydrate | | |

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

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SECTION 16: Other information

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Custom_SDS_USA_VECTOR

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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SECTION 1: Identification

1.1. Identification

| Product form | : Substance |
|---------------|--|
| Trade name | : PHOTOPROBE [®] (Long Arm) Biotin, Nucleic Acid Labeling |
| Product code | : SP-1020 |
| Kit component | : sec-butanol |

1.2. Recommended use and restrictions on use

Use of the substance/mixture

: Laboratory chemicals

1.3. Supplier

Manufacturer

Vector Laboratories, Inc. 6737 Mowry Ave Newark, CA 94560 U.S.A T (650) 697-3600 - F (650) 697-0339 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

2.1. Classification of the substance or mixture

GHS US classification

 Flammable liquids Category 3
 F

 Serious eye damage/eye irritation Category 2
 C

 Specific target organ toxicity – Single exposure, Category 3, Narcosis
 N

 Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation
 N

Flammable liquid and vapor Causes serious eye irritation May cause drowsiness or dizziness May cause respiratory irritation

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US)

| | \mathbf{v} |
|-----------------------------------|---|
| Signal word (GHS US) | : Warning |
| Hazard statements (GHS US) | : Flammable liquid and vapor |
| | Causes serious eye irritation |
| | May cause respiratory irritation |
| | May cause drowsiness or dizziness |
| Precautionary statements (GHS US) | : Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| | Keep container tightly closed. |
| | Ground/Bond container and receiving equipment. |
| | Use explosion-proof electrical/ventilating/lighting equipment. |
| | Use only non-sparking tools. |
| | Take precautionary measures against static discharge. |
| | Avoid breathing dust/fume/gas/mist/vapors/spray. |
| | Wash hands, forearms and face thoroughly after handling. |
| | Use only outdoors or in a well-ventilated area. |
| | Wear protective gloves/protective clothing/eye protection/face protection. |
| | If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Call a poison center or doctor if you feel unwell.
If eye irritation persists: Get medical advice/attention.
In case of fire: Use media other than water to extinguish.
Store in a well-ventilated place. Keep container tightly closed.
Store in a well-ventilated place. Keep cool.
Store locked up.
Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

| Name | | Product identifier | % |
|------------|--|--------------------|-----|
| butan-2-ol | | CAS-No.: 78-92-2 | 100 |

The specific chemical\ component identities and/or the exact component percentages of this material may be withheld as trade secrets. This information is made available to health professionals, employees, and designated representatives in accordance with the applicable provisions of 29 CFR 1910.1200 (I)(1). Trace ingredients (if any) are present in < 1% concentration, (< 0.1% for potential carcinogens, mutagen, and reproductive toxicant, respiratory tract and skin sensitizers in addition to oral/ inhalation acute toxicant in category 1 and 2). None of the trace ingredients contribute significant additional hazards at the concentrations that may be present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalents.

3.2. Mixtures

Not applicable

SECTION 4: First-aid measures

4.1. Description of first aid measures

| : Call a poison center/doctor/physician if you feel unwell. | | |
|--|--|--|
| Remove person to fresh air and keep comfortable for breathing. Call a poison center/doctor/physician if you feel unwell. | | |
| : Rinse skin with water/shower. Remove/Take off immediately all contaminated clothing. | | |
| Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. | | |
| : Call a poison center/doctor/physician if you feel unwell. | | |
| 4.2. Most important symptoms and effects (acute and delayed) | | |
| : May cause drowsiness or dizziness. | | |
| : May cause respiratory irritation. | | |
| • | | |

Symptoms/effects after eye contact : Eye irritation.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

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| CECTION | | fighting measures | |
|---------|--------------|-------------------|--|
| SECTION | | righting measures | |
| CLOTION | I U. I IIU-I | ingining measures | |
| | | | |

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

| Fire hazard | : Flammable liquid and vapor. |
|--|--------------------------------|
| Hazardous decomposition products in case of fire | : Toxic fumes may be released. |

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

| SECTION 6: Accidental release measure | S |
|---|---|
| 6.1. Personal precautions, protective equip | oment and emergency procedures |
| 6.1.1. For non-emergency personnel | |
| Emergency procedures | · Ventilate spillage area. No open flames, no sparks, and no smoking. Avoid breathing |

| Emergency procedures | dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. |
|---------------------------------|---|
| 6.1.2. For emergency responders | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". |

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

| Methods for cleaning up | Take up liquid spill into absorbent material. Notify authorities if product enters sewers or public waters. |
|----------------------------------|---|
| Other information | : Dispose of materials or solid residues at an authorized site. |
| 6.4. Reference to other sections | |

For further information refer to section 13.

| SECTION 7: Handling and storage | | | |
|---|---|--|--|
| 7.1. Precautions for safe handling | | | |
| Precautions for safe handling | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Ground/bond container and receiving equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Flammable vapors may accumulate in the container. Use explosion-proof equipment. Wear personal protective equipment. Use only outdoors or in a well-ventilated area. Avoid breathing dust/fume/gas/mist/vapors/spray. Avoid contact with skin and eyes. | | |
| Hygiene measures | Do not eat, drink or smoke when using this product. Always wash hands after handling the product. | | |
| 7.2. Conditions for safe storage, including any incompatibilities | | | |
| Technical measures:Storage conditions: | Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep cool. Keep container tightly closed. Store locked up. | | |

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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| sec-butanol | | |
|--|---------------------------------|--|
| USA - ACGIH - Occupational Exposure Limits | | |
| Local name | sec-Butanol | |
| ACGIH OEL TWA [ppm] | 100 ppm | |
| Remark (ACGIH) | TLV® Basis: URT irr; CNS impair | |
| Regulatory reference | ACGIH 2022 | |
| USA - OSHA - Occupational Exposure Limits | | |
| Local name | sec-Butyl alcohol | |
| OSHA PEL TWA [1] | 450 mg/m³ | |
| OSHA PEL TWA [2] | 150 ppm | |
| Regulatory reference (US-OSHA) | OSHA Annotated Table Z-1 | |

8.2. Appropriate engineering controls

Appropriate engineering controls Environmental exposure controls : Ensure good ventilation of the work station.: Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

| Hand protection: | |
|--|--|
| Protective gloves | |
| Eye protection: | |
| Safety glasses | |
| Skin and body protection: | |
| Wear suitable protective clothing | |
| Respiratory protection: | |
| In case of insufficient ventilation, wear suitable respiratory equipment | |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | : Liquid |
|---|---------------------|
| Color | : Colorless |
| Odor | : Alcohol odour |
| Odor threshold | : No data available |
| рН | : No data available |
| Melting point | : Not applicable |
| Freezing point | : No data available |
| Boiling point | : No data available |
| Flash point | : No data available |
| Relative evaporation rate (butyl acetate=1) | : No data available |

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| Flammability (solid, gas) | : Not applicable. |
|---|---------------------|
| Vapor pressure | : No data available |
| Relative vapor density at 20 °C | : No data available |
| Relative density | : No data available |
| Solubility | : No data available |
| Partition coefficient n-octanol/water (Log Pow) | : No data available |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Viscosity, kinematic | : No data available |
| Viscosity, dynamic | : No data available |
| Explosion limits | : No data available |
| Explosive properties | : No data available |
| Oxidizing properties | : No data available |

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Flammable liquid and vapor.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

Avoid contact with hot surfaces. Heat. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral) | : | Not classified |
|-----------------------------|---|----------------|
| Acute toxicity (dermal) | : | Not classified |
| Acute toxicity (inhalation) | : | Not classified |

| butan-2-ol (78-92-2) | |
|-----------------------------------|----------------------------------|
| LD50 oral rat | 2054 mg/kg Source: ECHA |
| LD50 dermal rat | > 2000 mg/kg Source: ECHA |
| ATE US (oral) | 2054 mg/kg body weight |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Causes serious eye irritation. |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |

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| STOT-single exposure | : May cause drowsiness or dizziness. May cause respiratory irritation. |
|------------------------------------|--|
| butan-2-ol (78-92-2) | |
| STOT-single exposure | May cause drowsiness or dizziness. May cause respiratory irritation. |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |
| Symptoms/effects | : May cause drowsiness or dizziness. |
| Symptoms/effects after inhalation | : May cause respiratory irritation. |
| Symptoms/effects after eye contact | : Eye irritation. |

| SECTION 12: Ecological information | |
|------------------------------------|--|
| 12.1. Toxicity | |

| | 6, 6 | The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment. | |
|----------------------|----------------------|--|--|
| butan-2-ol (78-92-2) | | | |
| | LC50 - Fish [1] | 3520 mg/l Source: ECHA | |
| | EC50 - Crustacea [1] | 308 mg/l Test organisms (species): Daphnia magna | |

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

| butan-2-ol (78-92-2) | | |
|---|------------------|--|
| Partition coefficient n-octanol/water (Log Pow) | 0.6 Source: ICSC | |

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

| SECTION 13: Disposal considerations | |
|-------------------------------------|--|
| 13.1. Disposal methods | |

| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
|-------------------------|---|
| Additional information | : Flammable vapors may accumulate in the container. |

| SECTION 14: Transport information | SECTI | ON 14: | Transpor | t inforr | nation |
|-----------------------------------|-------|--------|----------|----------|--------|
|-----------------------------------|-------|--------|----------|----------|--------|

In accordance with DOT / IMDG / IATA

14.1. UN number

| DOT NA No | : UN1993 |
|-------------------------------|---|
| UN-No. (IMDG) | : 1993 |
| UN-No. (IATA) | : 1993 |
| 14.2. UN proper shipping name | |
| Proper Shipping Name (DOT) | : Flammable liquids, n.o.s. (CONTAINS : butan-2-ol) |
| Proper Shipping Name (IMDG) | : FLAMMABLE LIQUID, N.O.S. (CONTAINS : butan-2-ol) |
| Proper Shipping Name (IATA) | : Flammable liquid, n.o.s. (CONTAINS : butan-2-ol) |
| | |

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14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT) Hazard labels (DOT)



IMDG

Transport hazard class(es) (IMDG) Hazard labels (IMDG)



: 3

: 3

: 111

: 111

: 111

ΙΑΤΑ

Transport hazard class(es) (IATA) Hazard labels (IATA)

14.4. Packing group

Packing group (DOT) Packing group (IMDG) Packing group (IATA)

14.5. Environmental hazards

Other information

14.6. Special precautions for user

DOT UN-No.(DOT) DOT Special Provisions (49 CFR 172.102)

- : No supplementary information available.
- : UN1993
- : B1 If the material has a flash point at or above 38 C (100 F) and below 93 C (200 F), then the bulk packaging requirements of 173.241 of this subchapter are applicable. If the material has a flash point of less than 38 C (100 F), then the bulk packaging requirements of 173.242 of this subchapter are applicable.

B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks.

IB3 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1 and 31HA2, 31HB2, 31HN2, 31HD2 and 31HH2). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized, except for UN2672 (also see Special Provision IP8 in Table 2 for UN2672).

T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3)

TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP29 - A portable tank having a minimum test pressure of 1.5 bar (150.0 kPa) may be used provided the calculated test pressure is 1.5 bar or less based on the MAWP of the hazardous materials, as defined in 178.275 of this subchapter, where the test pressure is 1.5 times the MAWP.

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| DOT Packaging Exceptions (49 CFR 173.xxx) | : 150 |
|--|---|
| DOT Packaging Non Bulk (49 CFR 173.xxx) | : 203 |
| DOT Packaging Bulk (49 CFR 173.xxx) | : 242 |
| DOT Quantity Limitations Passenger aircraft/rail (49 | : 60 L |
| CFR 173.27) | |
| DOT Quantity Limitations Cargo aircraft only (49 | : 220 L |
| CFR 175.75) | |
| DOT Vessel Stowage Location | : A - The material may be stowed "on deck" or "under deck" on a cargo vessel and on a |
| | passenger vessel. |
| | |
| IMDG | |
| Special provision (IMDG) | : 223, 274, 955 |
| Limited quantities (IMDG) | : 5L |
| Excepted quantities (IMDG) | : E1 |
| Packing instructions (IMDG) | : LP01, P001 |
| IBC packing instructions (IMDG) | : IBC03 |
| Tank instructions (IMDG) | : T4 |
| Tank special provisions (IMDG) | : TP1, TP29 |
| EmS-No. (Fire) | : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS |
| EmS-No. (Spillage) | : S-E - SPILLAGE SCHEDULE Echo - FLAMMABLE LIQUIDS, FLOATING ON WATER |
| Stowage category (IMDG) | : A |
| ΙΑΤΑ | |
| PCA Excepted quantities (IATA) | : E1 |
| PCA Limited quantities (IATA) | : Y344 |
| PCA limited quantity max net quantity (IATA) | : 10L |
| PCA packing instructions (IATA) | : 355 |
| PCA max net quantity (IATA) | : 60L |
| CAO packing instructions (IATA) | : 366 |
| CAO max net quantity (IATA) | : 220L |
| Special provision (IATA) | : A3 |
| ERG code (IATA) | : 3L |

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

| butan-2-ol | CAS-No. 78-92-2 | 100% |
|------------|-----------------|------|

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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SECTION 1: Identification

1.1. Identification

| Product form | : Mixture |
|---------------|--|
| Product name | : PHOTOPROBE [®] (Long Arm) Biotin, Nucleic Acid Labeling |
| Product code | : SP-1020 |
| Kit component | : Precipitant |

1.2. Recommended use and restrictions on use

Use of the substance/mixture

: Laboratory chemicals

1.3. Supplier

Manufacturer

Vector Laboratories, Inc. 6737 Mowry Ave Newark, CA 94560 U.S.A T (650) 697-3600 - F (650) 697-0339 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

SECTION 4: First-aid measures

4.1. Description of first aid measures

| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
|---------------------------------------|--|
| First-aid measures after skin contact | : Wash skin with plenty of water. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| | |

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/27/2022 Version: 00



First-aid measures after ingestion

: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

| 5.1. Suitable (and unsuitable |) extinguishing media |
|-------------------------------|-----------------------|
|-------------------------------|-----------------------|

Suitable extinguishing media

: Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

| SECTION 6: Accidental release measures | | |
|--|---|--|
| 6.1. Personal precautions, protective equipment and emergency procedures | | |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | : Ventilate spillage area. | |
| 6.1.2. For emergency responders | | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". | |
| 6.2. Environmental precautions | | |
| Avoid release to the environment. | | |
| 6.3. Methods and material for containment and cleaning up | | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. | |
| Other information | : Dispose of materials or solid residues at an authorized site. | |
| | | |

6.4. Reference to other sections

For further information refer to section 13.

| SECTION 7: Handling and storage | |
|---|---|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling Hygiene measures | Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| 7.2. Conditions for safe storage, including any incompatibilities | |

Storage conditions

: Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Precipitant

No additional information available

8.2. Appropriate engineering controls

| Appropriate engineering controls | |
|----------------------------------|--|
| Environmental exposure controls | |

Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

| Hand protection: | |
|--|--|
| Protective gloves | |
| Eye protection: | |
| Safety glasses | |
| Skin and body protection: | |
| Wear suitable protective clothing | |
| Respiratory protection: | |
| In case of insufficient ventilation, wear suitable respiratory equipment | |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| : Liquid |
|----------------------|
| Colorless |
| : No data available. |
| : No data available |
| : No data available |
| : Not applicable |
| : No data available |
| : Not applicable. |
| : No data available |
| |

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral) | : Not classified |
|-----------------------------------|---------------------|
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

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12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

| SECTION 13: Disposal considerations | 3 |
|--|---|
| 13.1. Disposal methods | |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| | |
| SECTION 14: Transport information | |
| In accordance with DOT / IMDG / IATA | |
| 14.1. UN number | |
| Not regulated for transport | |
| 14.2. UN proper shipping name | |
| Proper Shipping Name (DOT) | : Not applicable |
| Proper Shipping Name (IMDG) Proper Shipping Name (IATA) | : Not applicable : Not applicable |
| 14.3. Transport hazard class(es) | |
| DOT | |
| Transport hazard class(es) (DOT) | : Not applicable |
| IMDG | |
| Transport hazard class(es) (IMDG) | : Not applicable |
| ΙΑΤΑ | |
| Transport hazard class(es) (IATA) | : Not applicable |
| 14.4. Packing group | |
| Packing group (DOT) | : Not applicable |
| Packing group (IMDG) Packing group (IATA) | : Not applicable : Not applicable |
| 14.5. Environmental hazards | |
| Other information | : No supplementary information available. |
| 14.6. Special precautions for user | |
| DOT | |
| No data available | |
| IMDG | |
| No data available | |
| ΙΛΤΛ | |

IATA No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

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This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

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SECTION 1: Identification

1.1. Identification

| Product form | : Mixture |
|---------------|--|
| Product name | : PHOTOPROBE [®] (Long Arm) Biotin, Nucleic Acid Labeling |
| Product code | : SP-1020 |
| Kit component | : Biotinylated DNA standard |

1.2. Recommended use and restrictions on use

Use of the substance/mixture

: Laboratory chemicals

1.3. Supplier

Manufacturer

Vector Laboratories, Inc. 6737 Mowry Ave Newark, CA 94560 U.S.A T (650) 697-3600 - F (650) 697-0339 customerservice@vectorlabs.com

1.4. Emergency telephone number

Emergency number

: US only (800) 227-6666 or outside of the US +1 (650) 697-3600 (7:15 AM - 5:00 PM PST)

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Not classified

2.2. GHS Label elements, including precautionary statements

GHS US labeling

No labeling applicable

2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

This mixture does not contain any substances to be mentioned according to the criteria of section 3.2 of HazCom 2012

SECTION 4: First-aid measures

4.1. Description of first aid measures

| First-aid measures after inhalation | : Remove person to fresh air and keep comfortable for breathing. |
|---------------------------------------|--|
| First-aid measures after skin contact | : Wash skin with plenty of water. |
| First-aid measures after eye contact | : Rinse eyes with water as a precaution. |
| | |

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First-aid measures after ingestion

: Call a poison center/doctor/physician if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

No additional information available

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

| 5.1. Suitable (and unsuitable) | extinguishing media |
|--------------------------------|---------------------|
|--------------------------------|---------------------|

Suitable extinguishing media

: Water spray. Dry powder. Foam. Carbon dioxide.

5.2. Specific hazards arising from the chemical

Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Special protective equipment and precautions for fire-fighters

Protection during firefighting

: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

| SECTION 6: Accidental release measures | | |
|--|---|--|
| 6.1. Personal precautions, protective equipment and emergency procedures | | |
| 6.1.1. For non-emergency personnel | | |
| Emergency procedures | : Ventilate spillage area. | |
| 6.1.2. For emergency responders | | |
| Protective equipment | : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection". | |
| 6.2. Environmental precautions | | |
| Avoid release to the environment. | | |
| 6.3. Methods and material for containment a | and cleaning up | |
| Methods for cleaning up | : Take up liquid spill into absorbent material. | |
| Other information | : Dispose of materials or solid residues at an authorized site. | |
| 6.4. Peteronee to other costions | | |

6.4. Reference to other sections

For further information refer to section 13.

| SECTION 7: Handling and storage | |
|---|---|
| 7.1. Precautions for safe handling | |
| Precautions for safe handling Hygiene measures | Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product. |
| 7.2. Conditions for safe storage, including any incompatibilities | |

Storage conditions

: Store in a well-ventilated place. Keep cool.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Biotinylated DNA standard

No additional information available

8.2. Appropriate engineering controls

| Appropriate engineering controls | |
|----------------------------------|--|
| Environmental exposure controls | |

Ensure good ventilation of the work station.Avoid release to the environment.

8.3. Individual protection measures/Personal protective equipment

| Hand protection: | |
|--|--|
| Protective gloves | |
| Eye protection: | |
| Safety glasses | |
| Skin and body protection: | |
| Wear suitable protective clothing | |
| Respiratory protection: | |
| In case of insufficient ventilation, wear suitable respiratory equipment | |

Personal protective equipment symbol(s):



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Odor:Odor threshold:pH:Melting point:Freezing point:Boiling point:Flash point:Relative evaporation rate (butyl acetate=1):Flammability (solid, gas):Vapor pressure:Relative vapor density at 20 °C:Relative density: | No data available No data available Not applicable No data available No data available No data available No data available Not applicable. No data available No data available No data available No data available |
|--|---|
| Relative density : Solubility : | No data available No data available |
| Partition coefficient n-octanol/water (Log Pow):Auto-ignition temperature:Decomposition temperature:Viscosity, kinematic:Viscosity, dynamic:Explosion limits:Explosive properties:Oxidizing properties: | No data available No data available |

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9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity (oral) | : Not classified |
|-----------------------------------|---------------------|
| Acute toxicity (dermal) | : Not classified |
| Acute toxicity (inhalation) | : Not classified |
| Skin corrosion/irritation | : Not classified |
| Serious eye damage/irritation | : Not classified |
| Respiratory or skin sensitization | : Not classified |
| Germ cell mutagenicity | : Not classified |
| Carcinogenicity | : Not classified |
| Reproductive toxicity | : Not classified |
| STOT-single exposure | : Not classified |
| STOT-repeated exposure | : Not classified |
| Aspiration hazard | : Not classified |
| Viscosity, kinematic | : No data available |

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general

: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/27/2022 Version: 00



12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

No additional information available

| SECTION 13: Disposal considerations | |
|--|---|
| 13.1. Disposal methods | |
| Waste treatment methods | : Dispose of contents/container in accordance with licensed collector's sorting instructions. |
| | |
| SECTION 14: Transport information | |
| In accordance with DOT / IMDG / IATA | |
| 14.1. UN number | |
| Not regulated for transport | |
| 14.2. UN proper shipping name | |
| Proper Shipping Name (DOT) | : Not applicable |
| Proper Shipping Name (IMDG) Proper Shipping Name (IATA) | : Not applicable : Not applicable |
| 14.3. Transport hazard class(es) | |
| | |
| DOT Transport hazard class(es) (DOT) | : Not applicable |
| | |
| IMDG Transport hazard class(es) (IMDG) | : Not applicable |
| | |
| | |
| Transport hazard class(es) (IATA) | : Not applicable |
| 14.4. Packing group | |
| Packing group (DOT) Packing group (IMDG) | : Not applicable : Not applicable |
| Packing group (IATA) | : Not applicable |
| 14.5. Environmental hazards | |
| Other information | : No supplementary information available. |
| 14.6. Special precautions for user | |
| DOT No data available | |
| IMDG No data available | |
| 1474 | |

IATA No data available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012) Issue date: 09/27/2022 Version: 00



SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

15.2. International regulations

No additional information available

15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

according to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Custom_SDS_USA_VECTOR

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.