

Ready Set Go, Biotin/Streptavidin-HRP/Yellow Chromogen Antibody Labeling and Detection Kit

MATERIAL SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1: Product Identifier

Product Name: Ready Set Go, Biotin/Streptavidin-HRP/Yellow Chromogen Antibody Labeling and Detection Kit

Catalog No.: RSGOY-002

Kit Components : Biotin-labeling Kit

| Chemical Name |
|------------------------------------|
| Component A: Biotin-PEG4-NHS ester |
| Component B: Reaction buffer |
| Component C: Quench buffer |

1.2: Product Uses

For Research Use Only. Not intended for human or animal diagnostic products.

1.3: Company/undertaking Identification

Cell IDx, Inc.
6197 Cornerstone Court E, Ste 102
San Diego, CA 92121
858.452.5800

Section 2: Hazardous Identification

2.1: Classification of the substance or material

GHS-US classification

2.2: Label Elements

GHS-US labeling
No label applicable

2.3: Other Hazards

No additional information available

2.4: Principle Routes of Exposure/Potential Health Effects

May cause eye irritation with susceptible persons.

Section 3: Composition/information on ingredients

| Chemical Name | CAS# | EINECS# | Appearance | Water Solubility |
|------------------------------------|-------------|---------|------------|------------------|
| Component A: Biotin-PEG4-NHS ester | 459426-22-3 | | Oily solid | Moderate |
| Component B: Reaction buffer | | | Liquid | High |
| Component C: Quench buffer | | | Liquid | High |

This product contains no substances which at their given concentration are considered to be hazardous to health.

Section 4: First Aid Measures

Skin contact

Rinse cautiously with water for several minutes. Immediate medical attention is not required.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Ingestion

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

Inhalation

Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary.

Most important symptoms and effects, both acute and delayed

Not Applicable

Notes to Physician

Treat symptomatically.

Section 5: Firefighting measures

Suitable extinguishing media Special protective equipment for firefighters

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical. Standard procedure for chemical fires.

Specific hazards arising from the chemical

Not known

Section 6: Accidental release measures

Personal precautions

Always wear recommended Personal Protective Equipment. Use personal protection equipment.

Methods for cleaning up Environmental precautions

Soak up with inert absorbent material. No special environmental precautions required

Section 7: Handling and Storage

Handling

Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

Storage

Keep in a dry, cool and well-ventilated place

Section 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available.

8.2. Exposure controls

Appropriate engineering controls:

Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Hand protection:

Wear suitable gloves.

Eye protection:

Safety glasses or goggles are recommended when handling product.

Skin and body protection:

Wear suitable protective clothing.

Respiratory protection:

Not normally needed. In case of insufficient ventilation wear suitable respiratory equipment.

Environmental exposure controls:

Maintain levels below Community environmental protection thresholds.

Other information:

Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|--------------------------|
| Physical state: | Lyophilized powder |
| Appearance: | No information available |
| Color: | No information available |
| Odour: | No data available |
| Odour threshold: | No data available |
| pH: | No data available |
| Melting point: | No data available |
| Freezing point: | No data available |
| Boiling point: | No data available |
| Flash point: | No data available |
| Relative evaporation rate (butylacetate=1): | No data available |
| Flammability (solid, gas): | Not flammable |
| Explosive limits: | No data available |
| Explosive properties: | No data available |
| Oxidising properties: | No data available |
| Vapor pressure: | No data available |
| Relative density: | No data available |
| Relative vapour density at 20 °C: | No data available |
| Solubility: | No data available |
| Partition coefficient: n-octanol/water: | No data available |
| Log Kow: | No data available |
| Auto-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity: | No data available |
| Viscosity, kinematic: | No data available |
| Viscosity, dynamic: | No data available |

Section 10: Stability and reactivity

| | |
|---|---|
| Stability | Stable under normal conditions. |
| Materials to avoid | No dangerous reaction known under conditions of normal use. |
| Possibility of hazardous reactions | Hazardous reaction has not been reported |
| Hazardous decomposition products | None under normal use conditions |
| Polymerization | Hazardous polymerization does not occur |
| Conditions to avoid | None under normal processing |

Section 11: Toxicological information

Acute Toxicity No toxicology information is available.

Principle Routes of Exposure

Potential Health Effects

| | |
|------------|--|
| Eyes | May cause eye irritation with susceptible persons. |
| Skin | May cause skin irritation in susceptible persons. |
| Inhalation | May be harmful by inhalation. |
| Ingestion | May be harmful if swallowed. |

| | |
|------------------------------|-------|
| Carcinogenic effects | None. |
| Mutagenic effects | None. |
| Reproductive toxicity | None. |
| Sensitization | None. |

Section 12: Ecological information

| | |
|------------------------|---|
| Ecotoxicity | Contains no substances known to be hazardous to the environment or not degradable in wastewater treatment plants. |
| Mobility | No information available. |
| Biodegradation | Inherently biodegradable. |
| Bioaccumulation | Material does not bioaccumulate. |

Section 13: Disposal considerations

| | |
|---|--|
| 13.1 Waste treatment Recommendations | This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible. |
|---|--|

Section 14: Transport information

| | |
|------------------------------------|---|
| Department of Transportation (DOT) | In accordance with DOT |
| Not regulated for transport. | |
| Other information | No supplementary information available |
| Special transport precautions | No not handle until all safety precautions have been read and understood. |

Section 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Section 16: Other information

Other information: None.

MATERIAL SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1: Product Identifier

Product Name: Ready Set Go, Biotin/Streptavidin-HRP/Yellow Chromogen Antibody Labeling and Detection Kit
Catalog No.: RSGOY-002
Kit Component: StAv-HRP

1.2: Product Uses

For Research Use Only. Not intended for human or animal diagnostic products.

1.3: Company/undertaking Identification

Cell IDx, Inc.
6197 Cornerstone Court E, Ste 102
San Diego, CA 92121
info@cellidx.com
858.452.5800

Section 2: Hazardous Identification

2.1: Classification of the substance or material

GHS-US classification

2.2: Label Elements

GHS-US labeling
No label applicable

2.3: Other Hazards

No additional information available

2.4: Principle Routes of Exposure/Potential Health Effects

May cause eye irritation with susceptible persons.

Section 3: Composition/information on ingredients

| Chemical Name | CAS number | EINECS- number | Weight |
|--------------------|------------|----------------|--------|
| StAv-HRP conjugate | None | | 100% |

This product contains no substances which at their given concentration are considered to be hazardous to health.

Section 4: First Aid Measures

Skin contact

Rinse cautiously with water for several minutes. Immediate medical attention is not required.

Eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Ingestion

Not expected to present a significant ingestion hazard under anticipated conditions of normal use. If you feel unwell, seek medical advice.

| | |
|--|--|
| Inhalation | Not expected to be an inhalation hazard under anticipated conditions of normal use of this material. Consult a physician if necessary. |
| Most important symptoms and effects, both acute and delayed | Not Applicable |

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

Section 5: Firefighting measures

| | |
|--|---|
| Suitable extinguishing media | Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical. |
| Special protective equipment for firefighters | Standard procedure for chemical fires. |
| Specific hazards arising from the chemical | Not known |

Section 6: Accidental release measures

| | |
|----------------------------------|---|
| Personal precautions | Always wear recommended Personal Protective Equipment. |
| Methods for cleaning up | Use personal protection equipment. |
| Environmental precautions | Soak up with inert absorbent material. No special environmental precautions required |

Section 7: Handling and Storage

| | |
|-----------------|---|
| Handling | Always wear recommended Personal Protective Equipment. |
| Storage | No special handling advices are necessary. Keep in a dry, cool and well-ventilated place |

Section 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available.

| | |
|-----------------------------------|--|
| 8.2. Exposure controls | |
| Appropriate engineering controls: | Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits. |
| Hand protection: | Wear suitable gloves. |
| Eye protection: | Safety glasses or goggles are recommended when handling product. |
| Skin and body protection: | Wear suitable protective clothing. |
| Respiratory protection: | Not normally needed. In case of insufficient ventilation wear suitable respiratory equipment. |
| Environmental exposure controls: | Maintain levels below Community environmental protection thresholds. |
| Other information: | Do not eat, smoke or drink where material is handled, processed or stored. Wash hands carefully before eating or smoking. Handle according to established industrial hygiene and safety practices. |

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state: Lyophilized powder

| | |
|---|--------------------------|
| Appearance: | No information available |
| Color: | No information available |
| Odour: | No data available |
| Odour threshold: | No data available |
| pH: | No data available |
| Melting point: | No data available |
| Freezing point: | No data available |
| Boiling point: | No data available |
| Flash point: | No data available |
| Relative evaporation rate (butylacetate=1): | No data available |
| Flammability (solid, gas): | Not flammable |
| Explosive limits: | No data available |
| Explosive properties: | No data available |
| Oxidising properties: | No data available |
| Vapor pressure: | No data available |
| Relative density: | No data available |
| Relative vapour density at 20 °C: | No data available |
| Solubility: | No data available |
| Partition coefficient: n-octanol/water: | No data available |
| Log Kow: | No data available |
| Auto-ignition temperature: | No data available |
| Decomposition temperature: | No data available |
| Viscosity: | No data available |
| Viscosity, kinematic: | No data available |
| Viscosity, dynamic: | No data available |

Section 10: Stability and reactivity

| | |
|---|---|
| Stability | Stable under normal conditions. |
| Materials to avoid | No dangerous reaction known under conditions of normal use. |
| Possibility of hazardous reactions | Hazardous reaction has not been reported |
| Hazardous decomposition products | None under normal use conditions. |
| Polymerization | Hazardous polymerization does not occur. |
| Conditions to avoid | None under normal processing |

Section 11: Toxicological information

| | |
|-------------------------------------|--|
| Acute Toxicity | No toxicology information is available. |
| Principle Routes of Exposure | |
| Potential Health Effects | |
| Eyes | May cause eye irritation with susceptible persons. |
| Skin | May cause skin irritation in susceptible persons. |
| Inhalation | May be harmful by inhalation. |
| Ingestion | May be harmful if swallowed. |
| Carcinogenic effects | None. |
| Mutagenic effects | None. |
| Reproductive toxicity | None. |
| Sensitization | None. |

Section 12: Ecological information

| | |
|--------------------|---|
| Ecotoxicity | Contains no substances known to be hazardous to the environment or not degradable in wastewater treatment plants. |
| Mobility | No information available. |

Biodegradation
Bioaccumulation

Inherently biodegradable.
Material does not bioaccumulate.

Section 13: Disposal considerations

13.1 Waste treatment Recommendations

This material must be disposed of in accordance with all local, state, provincial and federal regulations. The generation of waste should be avoided or minimized wherever possible.

Section 14: Transport information

Department of Transportation (DOT)
Not regulated for transport.
Other information
Special transport precautions

In accordance with DOT

No supplementary information available
Do not handle until all safety precautions have been read and understood.

Section 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

Section 16: Other information

Other information: None.

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MATERIAL SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1: Product Identifier

Product Name: Ready Set Go, Biotin/Streptavidin-HRP/Yellow Chromogen Antibody Labeling and Detection Kit
Catalog No.: RSGOY-002
Kit Component: HRP-Yellow Chromogen (50X)

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

Recommended use: Immunohistochemistry (IHC)

1.3 Details of the supplier of the safety data sheet

MANUFACTURER EMAIL ADDRESS:
 Cell IDx, Inc. support@cellidx.com
 6197 Cornerstone Court E, Ste 102
 San Diego, CA 92121

1.4 Emergency telephone number

9 am-5 pm Pacific time, M-F 858.452.5800

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the mixture

Classification (EC 1272/2008)
 Physical and Chemical Hazards Not classified
 Human health Muta. 2 - H341;Carc. 1B - H350
 Environment Not classified.
 Classification (1999/45/EEC) Carc. Cat. 2;R45. Muta Cat. 3;R68.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2 Label elements

Contains BIPHENYL-3,3',4,4'-TETRAYL-TETRAAMINE
 Label in Accordance With (EC) No. 1272/2008



Signal Word

Danger

Hazard Statements

H341

Suspected of causing genetic defects.

H35

May cause cancer.

Precautionary Statements

P202

Do not handle until all safety precautions have been read and understood.

P280

Wear protective clothing, gloves, eye and face protection.

P308+313

IF exposed or concerned: Get medical advice/attention.

2.3 Other information

None

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

| | |
|---|-----------------------------|
| BIPHENYL-3,3',4,4'-TETRAYL-TETRAAMINE <5% | |
| CAS-No.: 91-95-2 | EC No.: 202-110-6 |
| Classification (EC 1272/2008) | Classification (67/548/EEC) |
| Muta. 2 - H341 | Muta. Cat. 3;R68 |
| Carc. 1B - H350 | Carc. Cat. 2;R45 |
| ETHYLENE GLYCOL <80% | |
| CAS-No.: 107-21-1 | EC No.: 203-473-3 |
| Classification (EC 1272/2008) | Classification (67/548/EEC) |
| Not classified | [Xn] R22 |

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

If inhaled

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues.

If breathing stops, provide artificial respiration. Get medical attention immediately!

If ingested

Immediately rinse mouth and drink plenty of water (200-300 ml). DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Get medical attention.

In case of skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

In case of eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Make sure to remove any contact lenses from the eyes before rinsing. Continue to rinse for at least 15 minutes. Obtain medical attention and bring these instructions.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

May cause coughing or mild irritation.

Ingestion

May cause discomfort if swallowed.

Skin contact

Prolonged skin contact may cause redness and irritation.

Eye contact

May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No specific first aid measures noted. Treat Symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Fire can be extinguished using: Water spray. Foam. Powder.

5.2. Special hazards arising from the substance or mixture

The product is non-combustible. If heated, irritating vapors may be formed. Hydrogen chloride (HCl). When heated and in case of fire, very toxic nitrogen oxides are formed.

5.3. Advice for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Stop leak if possible, without any risk. Remove or isolate all sources of ignition. Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Absorb spillage with suitable absorbent material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. For waste disposal, see section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Avoid inhalation of vapors/spray and contact with skin and eyes. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Refer to product label.
Storage Class: Refer to product datasheet.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

| | | |
|--------------------------|---------------------------------------|--|
| Name: | ETHYLENE GLYCOL | |
| Workplace Exposure Limit | UK - 8 hour TWA: 60 mg/m ³ | UK - 15 min. STEL: 125 mg/m ³ |

8.2. Exposure controls

Protective equipment

Impermeable gloves and safety glasses

Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the glove's supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|---|---|
| Appearance | Form: Liquid Color: Light brown/purple |
| Odor | Odorless |
| Solubility | Soluble in water. |
| Initial boiling point and boiling range | <100 @ 760 mm Hg |
| Melting point (°C) | ~ 0°C |
| Relative density | ~1 g/ml |
| Vapor density (air=1) | No Data Available |
| Vapor pressure | No Data Available |
| Evaporation rate | No Data Available |
| Viscosity | No Data Available |
| Solubility Value (G/100G H2O@20°) | No Data Available |
| Decomposition temperature (°C) | No Data Available |
| Flash point | No Data Available |
| Auto Ignition Temperature (°C) | No Data Available |
| Flammability Limit - Lower(%) | No Data Available |
| Flammability Limit - Upper(%) | No Data Available |
| Partition Coefficient (N-Octanol/Water) | No Data Available |
| Explosive properties | No Data Available |
| Oxidizing properties | No Data Available |

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Will not polymerize

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight.

10.5. Incompatible materials

Materials to Avoid Strong alkalis

10.6. Hazardous decomposition products

Oxides of: Carbon, Nitrogen

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information No information available

Acute toxicity:

Acute Toxicity (Oral LD50)

Mouse 1834 mg/kg

Skin Corrosion/Irritation:

Human Skin Model Test Not determined

Serious eye damage/irritation: Not determined

Respiratory sensitization Not determined

Skin sensitization Not determined

Germ cell mutagenicity (InVitro) Not determined

Carcinogenicity Not determined

Reproductive Toxicity – Fertility Not determined

Specific target organ toxicity - single exposure:

STOT - Single exposure Not determined

Specific target organ toxicity – repeated exposure:

STOT - Repeated exposure Not determined

Aspiration hazard:

Viscosity Not determined

Inhalation

In high concentrations, vapors may irritate throat and respiratory system and cause coughing.

Ingestion

Harmful if swallowed.

Skin contact

Liquid may irritate skin. Not a skin sensitizer.

Eye contact

Spray and vapor in the eyes may cause irritation and smarting.

Health Warnings

Known or suspected mutagen. Known or suspected carcinogen for humans.

Route of entry

Ingestion. Skin and/or eye contact.

Toxicological information on ingredients.

BIPHENYL-3,3',4,4'-TETRAYL-TETRAAMINE (CAS: 91-95-2)

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity There are no data on the ecotoxicity of this product.

12.1. Toxicity

Acute Toxicity – Fish Not determined

12.2. Persistence and degradability

Degradability

There are no data on the degradability of this product. This product is expected to be not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential

No data available on bioaccumulation. The product does not contain any substances expected to be bioaccumulating.

| | |
|-----------------------|----------------|
| Partition coefficient | Not determined |
|-----------------------|----------------|

12.4. Mobility in soil

| | |
|-----------|----------------------------------|
| Mobility: | The product is soluble in water. |
|-----------|----------------------------------|

12.5. Results of PBT and vPvB assessment

Not expected to be PBT or vPvB

12.6. Other adverse effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste is classified as hazardous waste. Disposal to licensed waste disposal site in accordance with the local Waste Disposal Authority.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID)

| | |
|----------------------|----------------|
| Road Transport Notes | Not classified |
| Rail Transport Notes | Not classified |
| Sea Transport Notes | Not classified |
| Air Transport Notes | Not classified |

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

| | |
|--|-----|
| Environmentally Hazardous Substance/Marine Pollutant | No. |
|--|-----|

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

| | |
|---------------------------|--|
| General information | Only trained personnel should use this material. |
| Risk Phrases In Full | |
| R22 | Harmful if swallowed |
| R45 | May cause cancer. |
| R68 | Possible risk of irreversible effects. |
| Hazard Statements In Full | |
| H350 | May cause cancer. |
| H341 | Suspected of causing genetic defects. |

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

MATERIAL SAFETY DATA SHEET

Section 1: Identification of the substance/mixture and of the company/undertaking

1.1: Product Identifier

Product Name: Ready Set Go, Biotin/Streptavidin-HRP/Yellow Chromogen Antibody Labeling and Detection Kit
Catalog No.: RSGOY-002
Kit Component: HRP-Yellow Buffer (1X)

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

Recommended use: Immunohistochemistry (IHC)

1.3. Details of the supplier of the safety data sheet

MANUFACTURER EMAIL ADDRESS:
 Cell IDx, Inc. info@cellidx.com
 6197 Cornerstone Court E, Ste 102
 San Diego, CA 92121

1.4. Emergency telephone number

9 am-5 pm PST, M-F 858.452.5800

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the mixture

GHS Classification in accordance with EC 1272/2008

| | |
|-------------------------------|----------------|
| Physical and Chemical Hazards | Not classified |
| Human health | Not classified |
| Environment | Not classified |

GHS Classification in accordance with 1999/45/EEC

Not classified

2.2. GHS label elements

Label in accordance with (EC) No. 1272/2008

Not classified

Supplemental Label information (EU)

EUH210 Safety data sheet available on request

2.3. Other hazards which do not result in classification

None

SECTION 3: COMPOSITION/ INFORMATION ON INGREDIENTS

| Description | CAS# | EINECS# | % |
|-------------------------------|-----------|-----------|-----|
| Hydrogen Peroxide Solution | 7722-84-1 | 231-765-0 | <1% |
| Classification (EC 1272/2008) | | | |
| Ox. Liq. 1 - H271 | R5 | | |
| Acute Tox. 4 – H302 | O;R8 | | |
| Acute Tox. 4 – H332 | C;R35 | | |
| Skin Corr. 1A – H314 | Xn;R20/22 | | |
| Classification (67/548/EEC) | | | |

STOT Single 3 H335

Citric Acid 770-92-9 201-069-1 <1%

Classification (EC 1272/2008) Classification (67/548/EEC)
Eye Irrit. 2 – H319 Xi;R36

The Full Test for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of 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 and keep at rest. Get medical attention if any discomfort continues. If breathing stops, provide artificial respiration. Get medical attention immediately!

In case of skin contact

Wash off with soap and plenty of water. Consult a physician if symptoms occur after washing.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation

May cause coughing or mild irritation

Ingestion

May cause discomfort if swallowed

Skin Contact

Prolonged skin contact may cause redness and irritation

Eye Contact

May cause temporary eye irritation

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No specific first aid measures noted.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

This product is not flammable. Use fire-extinguishing media appropriate for surrounding materials

5.2. Special hazards arising from the substance or mixture

None under normal condition.

5.3. Special advice for firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of spray mist and contact with skin and eyes. Use protective gloves, goggles and suitable protective clothing. For personal protection, see section 8.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses.

6.3. Methods and material for containment and cleaning up

Stop leak if possible without risk. Absorb spillage with suitable absorbent material. Flush with plenty of water to clean spillage area. Do not contaminate water sources or sewer.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container. Store at specified temperature. Refer to product label.

Storage Class: Refer to product datasheet.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

| | |
|--------------------------|--|
| Name: | HYDROGEN PEROXIDE SOLUTION |
| Workplace Exposure Limit | UK - 8 hour TWA: 1.4 mg/m ³ UK - 15 min. STEL: 2.8 mg/m ³ |

8.2. Exposure controls

Protective equipment

Impermeable gloves and safety glasses

Process conditions

Provide eyewash station.

Engineering measures

Provide adequate ventilation. Observe occupational exposure limits and minimize the risk of inhalation of spray.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

Use suitable protective gloves if risk of skin contact. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of skin contact.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Skin protection

Wear apron or protective clothing in case of contact. Wash contaminated clothing before reuse.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

| | |
|---|--|
| Appearance | Form: Liquid |
| | Color: Colorless |
| Odor | Odorless |
| Solubility | Soluble in water |
| Initial boiling point and boiling range | <100 @ 760 mm Hg |
| Melting point (°C) | ~ 0°C |
| Relative density | ~1 g/ml |
| Vapor density (air=1) | Not determined |
| Vapor pressure | Not determined |
| Evaporation rate | Not determined |
| Viscosity | Not determined |
| Solubility Value (G/100G H ₂ O@20°C) | Not determined |
| Decomposition temperature (°C) | Not determined |
| Flash point | Not applicable |
| Auto Ignition Temperature (°C) | Not determined |
| Flammability Limit - Lower(%) | Not applicable |
| Flammability Limit - Upper(%) | Not applicable |
| Partition Coefficient (N-Octanol/Water) | Not determined |
| Explosive properties | Not applicable |
| Oxidizing properties | Does not meet the criteria for oxidizing |

9.2. Other information

None

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data available

10.2. Chemical stability

Stable under normal temperature conditions

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

Avoid exposure to high temperatures or direct sunlight

10.5. Incompatible materials

Materials To Avoid Strong alkalis

10.6. Hazardous decomposition products

None under normal conditions

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

| | |
|---|--------------------------|
| Toxicological information | No information available |
| Acute Toxicity (Oral LD50) | Not determined |
| Skin Corrosion/Irritation | |
| Human Skin Model | Test Not determined |
| Serious eye damage/irritation | Not determined |
| Respiratory sensitization | Not determined |
| Skin sensitization | Not determined |
| Germ cell mutagenicity (In Vitro) | Not determined |
| Carcinogenicity | Not determined |
| Reproductive Toxicity – Fertility | Not determined |
| Specific target organ toxicity | |
| Single exposure | Not determined |
| Repeated exposure | Not determined |
| Aspiration hazard | Not determined |
| Inhalation | |
| In high concentrations, vapors may irritate throat and respiratory system and cause coughing. | |
| Ingestion | |
| May cause discomfort if swallowed. | |
| Skin contact | |
| Liquid may irritate skin. | |
| Eye contact | |
| Spray and vapor in the eyes may cause irritation and smarting. | |
| Health Warnings | |
| Known or suspected mutagen. Known or suspected carcinogen for humans. | |
| Route of entry Ingestion. | |
| Skin and/or eye contact. | |

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Not considered toxic to fish

12.2. Persistence and degradability

This product is expected to be biodegradable

12.3. Bio accumulative potential

This product does not contain any substances expected to be bioaccumulating

12.4. Mobility in soil

This product is soluble in water

12.5. Results of PBT and vPvB assessment

No information available

12.6. Other adverse effects

Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

General information

When handling waste, consideration should be made to the safety precautions applying to handling of the product

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORTATION INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (MDG, IATA, ADR/RID)

| | |
|---------------------------|----------------|
| Road Transport Notes | Not Classified |
| Rail Transportation Notes | Not Classified |
| Sea Transport Notes | Not Classified |
| Air Transport Notes | Not Classified |

14.1. UN number/UN Proper Shipping Name

Not applicable.

14.2. DOT (US)

Not dangerous good

14.3. Transport hazard class(es)

Not dangerous goods.

14.4. Packing group

Not applicable

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutants

No

14.6. Special precautions for user

None

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable

SECTION 15: REGULATORY INFORMATION

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

Approved Code Of Practice

Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.

Guidance Notes

Workplace Exposure Limits EH40.

EU Legislation

Regulation (EU) No 453/2010 of 20 May 2010 Annex II and Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission

Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

General information

Only trained personnel should use this material.

Risk Phrases In Full

| | |
|--------|--|
| R35 | Causes severe burns |
| R8 | Contact with combustible material may cause fire |
| R20/22 | Harmful by inhalation and if swallowed |
| R5 | Heating may cause an explosion |
| R36 | Irritating to eyes |
| R37 | Irritating to respiratory system |

Hazard Statements In Full

| | |
|------|--|
| H271 | May cause fire or explosion; strong oxidizer |
| H302 | Harmful if swallowed |
| H314 | Causes severe skin burns and eye damage |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H335 | May cause respiratory irritation. |

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.