Safety Data Sheet (SDS)

This product is a chemical substance and is intended to be used by persons having chemical knowledge and skill, at their own discretion and risk.

Revision Date: Jun. 1, 2015

Section1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier
- Product Name: Biotin Labeling Kit - NH₄ (for 1mg)
- Product Code: LK55
- CAS Number: -
- EC Number: -

1.2 Details of the supplier of the safety data sheet
- Company: Dojindo Laboratories
- Address: Tabaru 2025-5 Mashiki-machi, Kamimashiki-gun, Kumamoto 861-2202, Japan
- Telephone: +81-96-286-1515
- Fax: +81-96-286-1525
- Emergency phone number: +81-96-286-1515

1.3 Product use
- For research use only.

Section2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008.[EU-GHS/CLP]
- Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008

2.2 Label elements
- Labeling according Regulation (EC) No 1272/2008 [EU-GHS/CLP]
- Pictogram: None
- Signal word: None
- Hazard statement(s): None
- Precautionary statement(s): None

2.3 Other hazards
- None known.

Section3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Product name:
- Biotin Labeling Kit - NH₄ (for 1mg)

Section4. FIRST AID MEASURES

4.1 Description of first aid measures
- If inhaled: If breathed in, move into fresh air. Seek medical advice if discomfort occurs. If not breathing, give artificial respiration. Call a physician.
- If swallowed: Do not induce vomiting. Wash out mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention.
- In case of skin contact: Wash off with plenty of water. Remove contaminated clothing and launder before reuse.
- In case of eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if irritation occurs.

4.2 Most important symptoms and effects, both acute and delayed
- No information available.

4.3 Indication of any immediate medical attention and special treatment needed
- No information available.

Section5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media
- Use extinguishing media appropriate for the surrounding fire.
5.2 Special hazards arising from the substance or mixture
   May emit toxic fumes under fire conditions.

5.3 Special protective equipment for firefighters
   Wear self-contained breathing apparatus and full protective clothing if necessary.

Section 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
   Evacuate personnel to safe areas. Ensure adequate ventilation. Use personal protective equipment. Avoid
   formation of dust. Avoid breathing dust, vapors, mist or gas. Avoid contact with skin and clothing.

6.2 Environmental precautions
   Prevent further leakage. Prevent contamination of drains with product.

6.3 Methods and materials for containment and cleaning up
   Pick up and collect product in suitable container for disposal.

Section 7. HANDLING AND STORAGE

7.1 Precautions for safe handling
   Avoid contact with skin and eyes. Avoid formation of dust. Avoid breathing dust, vapors, mist or gas. Wear
   appropriate protective personal equipment. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities
   Keep tightly closed. Protect from moisture.
   Store in a cool (0-5°C), dark and dry place.
   Do not freeze.

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters
   Contains no substances with occupational exposure limit values.

8.2 Exposure controls
   Engineering measures
   Ensure adequate ventilation, especially in confined areas.

   Hygiene measures
   Handle in accordance with good industrial hygiene and safety practice. When using, do not eat, drink or
   smoke. Wash hands, forearms and face after handing.

   Personal protective equipment
   Eye/face protection: Wear safety glasses with side-shields conforming to European Standard
   Hand protection: Wear protective gloves conforming to EU Directive 89/686/EEC and
   European Standard EN374. Gloves must be inspected prior to use. Avoid
   Skin and body protection: Wear laboratory coat or impervious clothing. Choose appropriate body
   Respiratory protection: Wear suitable respiratory equipment in case of inadequate ventilation.

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

   a) Appearance:
      NH2-Reactive Biotin White solid
      WS Buffer Colorless liquid
      Reaction Buffer Colorless liquid
   b) Odor:
      NH2-Reactive Biotin Odorless
      WS Buffer Odorless
      Reaction Buffer Odorless
   c) Odor Threshold:
      No data available
   d) pH:
      No data available
   e) Melting point/freezing point:
      No data available
   f) Initial boiling point and boiling range:
      No data available
   g) Flash point:
      No data available
   h) Evaporation rate:
      No data available
   i) Flammability (solid, gas):
      No data available
   j) Upper / lower flammability or explosive limits:
      No data available
   k) Vapor pressure:
      No data available
   l) Vapor density:
      No data available
   m) Relative density:
      No data available
   n) Solubility(ies):
      No data available
   o) Partition coefficient: n-octanol / water:
      No data available
   p) Auto-ignition temperature:
      No data available
Section 10. STABILITY AND REACTIVITY

Stability and reactivity

- **Reactivity:** Stable
- **Chemical stability:** Stable at a cool (0-5°C), dark and dry place.
- **Possibility of hazardous reactions:** No data available
- **Conditions to avoid:** Heat, sunlight, high temperature
- **Incompatible materials:** Strong oxidizing agents, strong acids and bases
- **Hazardous decomposition products:** No data available

Section 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

- **a) Acute toxicity:** No data available
- **b) Skin corrosion / irritation:** No data available
- **c) Serious eye damage/eye irritation:** No data available
- **d) Carcinogenicity:** No component of this product present at levels greater than or equal to 0.1% is identified as a possible, probable or confirmed human carcinogen by IARC.
- **e) Reproductive toxicity:** No data available
- **f) STOT - SE:** No data available
- **g) STOT - RE:** No data available
- **h) Aspiration hazard:** No data available

11.2 Potential health effects

- **Ingestion:** May be harmful if swallowed.
- **Inhalation:** May be harmful if inhaled. Causes respiratory tract irritation.
- **Skin:** May be harmful if absorbed through skin. Causes skin irritation.
- **Eyes:** Causes serious eye irritation.

11.3 Additional Information

No additional information is available

Section 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

No data available

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

Section 13. DISPOSAL CONSIDERATIONS

Waste treatment methods

- **Product**
  - Contact a licensed professional waste disposal service to dispose of this material. Dispose of in accordance with local regulations.

- **Contaminated packaging**
  - Dispose of as unused product. Do not reuse empty containers.

Section 14. TRANSPORT INFORMATION

14.1 UN number, Transport hazard class(es) and Packaging group

<table>
<thead>
<tr>
<th>UN number</th>
<th>Transport hazard class(es)</th>
<th>Packaging group</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID:</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IMDG:</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>IATA:</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
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14.2 UN proper shipping name

<table>
<thead>
<tr>
<th>UN number</th>
<th>Shipping name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR/RID:</td>
<td>-</td>
</tr>
<tr>
<td>IMDG:</td>
<td>-</td>
</tr>
<tr>
<td>IATA:</td>
<td>Not dangerous goods</td>
</tr>
</tbody>
</table>
14.3 Environmental hazards
ADR/RID: No
IMDG: No
IATA: No

Section 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations / legislation specific for the substance or mixture
No information available

15.2 Chemical Safety Assessment
No information available

Section 16. OTHER INFORMATION
Key to abbreviations and acronyms
STOT-SE: Specific Target Organ Toxicity - Single Exposure
STOT-RE: Specific Target Organ Toxicity - Repeated Exposure
PBT: Persistent Bioaccumulative and Toxic
evPvB: very Persistent very Bioaccumulative and toxic
ADR: european Agreement concerning the international carriage of Dangerous goods by Road
CAS: Chemical Abstracts Service
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime code for Dangerous Goods
REACH: Registration, Evaluation, Authorization and restriction of Chemicals
RID: Regulations concerning the International transport of Dangerous goods by rail