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

1.1. Product identifier
Trade name: miRCURY LNA™ Array, 2x Hybridization Buffer
Item number: 208022

1.2. Relevant identified uses of the substance or mixture and uses advised against
Recommended uses: Life Science laboratory chemical. For research use only.

1.3. Details of the supplier of the safety data sheet
Supplier: Exiqon A/S
Skelstedet 16
2950 Vedbæk
Denmark

Tel: +4545660888
Fax: +4545661888
Email: support@exiqon.com
WWW: www.exiqon.dk

1.4. Emergency telephone number
Emergency telephone comments: The emergency telephone is open between 8 a.m. and 4 p.m. on workdays.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
CLP-classification (Regulation (EC) No 1272/2008):
Carc. 2;H351 Repr. 1B; H360D STOT RE 2; H373

Please see section 16 for the full text of H-phrases.

Most serious harmful effects: Suspected of causing cancer. May damage the unborn child. May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Signal word: Danger
Contains: Formamide
H-phrases: Suspected of causing cancer.(H351)
May damage the unborn child.(H360D)
May cause damage to organs through prolonged or repeated exposure. (H373)

P-phrases:
- Obtain special instructions before use. (P201)
- Do not breathe vapours. (P260-d)
- Wear protective gloves. (P280-h)

Supplemental information:
- Restricted to professional users.

### 2.3. Other hazards

The product does not contain any PBT or vPvB substances.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<table>
<thead>
<tr>
<th>Registration number</th>
<th>CAS/EC No.</th>
<th>Substance</th>
<th>CLP-classification (Regulation (EC) No 1272/2008) w/w%</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>01-211949606</td>
<td>75-12-7-B</td>
<td>Formamide</td>
<td>Carc. 2; H351; Rep. 1B; H360D; STOT RE 2; H373</td>
<td>25-40 14</td>
</tr>
<tr>
<td>4-35-xxxx</td>
<td>200-842-0</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14) The substance is included in the candidate list (SVHC), Regulation 1907/2006/EC, Article 59.

*Please see section 16 for the full text of H-phrases.*

Other information:
- Any letters after the CAS number refer to individual data sets.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

- **Inhalation:** Seek fresh air. Seek medical advice in case of persistent discomfort.
- **Ingestion:** Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Seek medical advice in case of discomfort.
- **Skin:** Immediately remove contaminated clothing, watch and jewellery. Wash skin with soap and water. Seek medical advice in case of persistent discomfort.
- **Eyes:** Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

Other information:
- When obtaining medical advice, show the safety data sheet or label.

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

Suspected of causing cancer. May damage the unborn child. Causes damage to organs through prolonged or repeated exposure.

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

- Treat symptoms. No special immediate treatment required. Ensure that medical personnel are aware of the material involved, and take precautions to protect themselves.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- **Suitable extinguishing media:** The product is not directly flammable. Choose extinguishing agents based on the surrounding fire.
- **Unsuitable extinguishing media:** Do not use water stream, as it may spread the fire.

#### 5.2. Special hazards arising from the substance or mixture

The product decomposes when combusted and the following toxic gases can be formed: Nitrous gases/Carbon monoxide and carbon dioxide.

#### 5.3. Advice for firefighters

Move containers from danger area if it can be done without risk. Avoid inhalation of vapour and flue gases – seek fresh air. Wear Self-Contained Breathing Apparatus (SCBA) with a chemical protection suit.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
- Stop leak if this can be done without risk. Provide good ventilation. Wear gloves.
For emergency responders: In addition to the above: Protective suit equivalent to EN 368, type 3, is recommended.

6.2. Environmental precautions
Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up
Wipe up minor spills with a cloth.

6.4. Reference to other sections
See section 8 for type of protective equipment. See section 13 for instructions on disposal.

SECTION 7: Handling and storage
7.1. Precautions for safe handling
The product should be used under well-ventilated conditions and preferably under process ventilation. Running water and eye wash equipment should be available. Wash hands before breaks, before using restroom facilities, and at the end of work. A workplace assessment must be conducted to ensure that employees are not exposed to effects that may involve a risk during pregnancy.

7.2. Conditions for safe storage, including any incompatibilities
Store safely, out of reach of children and away from food, animal feeding stuffs, medicines, etc.

7.3. Specific end use(s)
None.

SECTION 8: Exposure controls/personal protection
8.1. Control parameters
Contains no substances subject to reporting requirements.

8.2. Exposure controls
Appropriate engineering controls: Wear the personal protective equipment specified below.

Personal protective equipment, eye/face protection:
Wear safety goggles if there is a risk of eye splash. Eye protection must conform to EN 166.

Personal protective equipment, skin protection:
Wear gloves. Type of material and thickness: Nitrile rubber, 0.2 mm. Penetration time: >8 hours. Gloves must conform to EN 374.

Personal protective equipment, respiratory protection:
In case of insufficient ventilation, wear respiratory protective equipment. Filter type: A. /B. /K. Respiratory protection must conform to one of the following standards: EN 136/140/145.

Environmental exposure controls: Ensure compliance with local regulations for emissions.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
State: Liquid
Colour: No data
Odour: No data
Odour threshold: No data
pH (solution for use): No data
pH (concentrate): No data
Melting point/freezing point: No data
Initial boiling point and boiling range: No data
Flash point: No data
Evaporation rate: No data
Flammability (solid, gas): No data
Upper/lower flammability limits: No data
Upper/lower explosive limits: No data
Vapour pressure: No data
Vapour density: No data
Relative density: No data
Solubility: Soluble in the following: Water.
Partition coefficient: No data
n-octanol/water: No data
Auto-ignition temperature: No data
Decomposition temperature: No data
Viscosity: No data
Explosive properties: No data
Oxidising properties: No data

9.2. Other information
None.

SECTION 10: Stability and reactivity
10.1. Reactivity
Strong oxidisers.

10.2. Chemical stability
The product is stable when used in accordance with the supplier’s directions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
Strong oxidisers.

10.6. Hazardous decomposition products
Product decomposes in fire conditions or when heated to high temperatures, and inflammable and toxic gases may be released. Nitrous gases/ Sulphur oxides. Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity - oral: The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.
75-12-7-B: Rat: LD50 = 5325 mg/kg (OECD 401)

Acute toxicity - dermal: The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met. Can be absorbed through the skin causing symptoms such as dizziness and headache.
75-12-7-B: Rat: LD50 = >3000 mg/kg

Acute toxicity - inhalation: The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.
75-12-7-B: Rat, 4h: LC50 = >21 mg/l (OECD 403)

Skin corrosion/irritation: The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.
75-12-7-B: Rabbit, , 20h: Non-irritating

Serious eye damage/eye irritation: The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.
75-12-7-B: Rabbit: Mild (OECD 405)

Respiratory sensitisation or skin sensitisation: The product does not have to be classified. Test data are not available.

Germ cell mutagenicity: The product does not have to be classified. Test data are not available.
Carcinogenic properties: Suspected of causing cancer.
Reproductive toxicity: May damage the unborn child.
75-12-7-B: Post-implantation mortality and fetotoxicity.
Single STOT exposure: The product does not have to be classified. Test data are not available.
Repeated STOT exposure: Causes damage to organs through prolonged or repeated exposure.
75-12-7-B: Rat.: May cause damage to organs - blood
Aspiration hazard: The product does not have to be classified. Test data are not available.
Other toxicological effects: None known.

SECTION 12: Ecological information
12.1. Toxicity
The product does not have to be classified. Based on existing data, the classification criteria are deemed not to have been met.
Acute toxicity:
75-12-7-B:
Fish: Leuciscus idus: 96hLC₅₀ = 6569 mg/l
Crustacea: Daphnia magna: 48hEC₅₀ = >500 mg/l
Algae: Desmodesmus subspicatus: 72hEC₅₀ = >500 mg/l

12.2. Persistence and degradability
Expected to be biodegradable.
75-12-7-B: Readily biodegradable.

12.3. Bioaccumulative potential
No bioaccumulation expected.
75-12-7-B: Partition coefficient n-octanol/water: -0,82

12.4. Mobility in soil
Test data are not available.

12.5. Results of PBT and vPvB assessment
The product does not contain any PBT or vPvB substances.

12.6. Other adverse effects
None known.

SECTION 13: Disposal considerations
13.1. Waste treatment methods
Avoid discharge to drain or surface water. Collect spills and waste in closed, leak-proof containers for disposal at the local hazardous waste site.
EWC code: Depends on line of business and use, for instance 16 05 06 laboratory chemicals, consisting of or containing dangerous substances, including mixtures of laboratory chemicals
Absorbent/cloth contaminated with the product:
EWC code: 15 02 02 absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances.

SECTION 14: Transport information
The product is not covered by the rules for transport of dangerous goods.

14.1. UN number
14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

14.5. Environmental hazards

14.6. Special precautions for user

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

SECTION 15: Regulatory information

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

Special provisions: Special care should be applied for employees under the age of 18. Young people under the age of 18 may not carry out any work causing harmful exposure to this product.

15.2. Chemical safety assessment

Chemical safety assessments have been performed for the following substances: Formamide, cas no. 75-12-7

SECTION 16: Other information

Changes have been made in the following sections: 2,3,8,16

Abbreviation explanations:
- PBT: Persistent, Bioaccumulative and Toxic
- vPvB: Very Persistent and Very Bioaccumulative
- STOT: Specific Target Organ Toxicity

Classification method: Calculation based on the hazards of the known components.

H-phrases:
- H351 Suspected of causing cancer.
- H360D May damage the unborn child.
- H373 May cause damage to organs through prolonged or repeated exposure.

Training:
- A thorough knowledge of this safety data sheet should be a prerequisite condition.

Other information:
- This safety data sheet has been prepared for and applies to this product only. It is based on our current knowledge and the information that the supplier was able to provide about the product at the time of preparation. The safety data sheet complies with applicable law on preparation of safety data sheets in accordance with 1907/2006/EC (REACH) as subsequently changed.