SAFETY DATA SHEET

Genomic DNA ULS Labeling Kit Module, Part Number 5190-0420

Section 1. Identification

Product identifier : Genomic DNA ULS Labeling Kit Module, Part Number 5190-0420
Part No. (Chemical Kit) : 5190-0420
Part No. : 10x Labeling Solution
           Cy3, Cy5

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
                       679 Springvale Road
                       Mulgrave
                       Victoria 3170, Australia
                       1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

Cy3, Cy5
H227 FLAMMABLE LIQUIDS - Category 4
H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
H360 REPRODUCTIVE TOXICITY (Fertility) - Category 1B
H360 REPRODUCTIVE TOXICITY (Unborn child) - Category 1B

10x Labeling Solution
Cy3, Cy5
Percentage of the mixture consisting of ingredient(s)
of unknown inhalation toxicity: 1 - 10%

GHS label elements

Hazard pictograms : Cy3, Cy5

Signal word : 10x Labeling Solution
              Cy3, Cy5

Hazard statements : 10x Labeling Solution
                    Cy3, Cy5
No known significant effects or critical hazards.
H227 - Combustible liquid.
H319 - Causes serious eye irritation.
H360 - May damage fertility or the unborn child.

Precautionary statements
Section 2. Hazard(s) identification

Prevention:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Not applicable.

  P201 - Obtain special instructions before use.
  P202 - Do not handle until all safety precautions have been read and understood.
  P281 - Use personal protective equipment as required.
  P280 - Wear protective gloves. Wear eye or face protection.
  P210 - Keep away from flames and hot surfaces. - No smoking.
  P264 - Wash hands thoroughly after handling.

Response:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Not applicable.

  P308 + P313 - IF exposed or concerned: Get medical attention.
  P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  P337 + P313 - If eye irritation persists: Get medical attention.

Storage:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Not applicable.

  P405 - Store locked up.
  P403 - Store in a well-ventilated place.
  P235 - Keep cool.

Disposal:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Not applicable.

  P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Supplemental label elements:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Not applicable.

Other hazards which do not result in classification:  
- 10x Labeling Solution  
  Cy3, Cy5  
  None known.

Section 3. Composition and ingredient information

Substance/mixture:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Mixture

CAS number/other identifiers

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy3, Cy5</td>
<td>≥30 - &lt;55</td>
<td>68-12-2</td>
</tr>
<tr>
<td>N,N-Dimethylformamide</td>
<td>≥10 - ≤30</td>
<td>7647-14-5</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact:  
- 10x Labeling Solution  
  Cy3, Cy5  
  Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

  Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
## Section 4. First aid measures

<table>
<thead>
<tr>
<th><strong>Inhalation</strong></th>
<th>10x Labeling Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cy3, Cy5</strong></td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Skin contact</strong></th>
<th>10x Labeling Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cy3, Cy5</strong></td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Ingestion</strong></th>
<th>10x Labeling Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cy3, Cy5</strong></td>
<td>Wash out mouth with water. Remove contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Eye contact</strong></th>
<th>10x Labeling Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cy3, Cy5</strong></td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

### Potential acute health effects

- **Eye contact**: Causes serious eye irritation.
Section 4. First aid measures

**Inhalation**
- 10x Labeling Solution
- Cy3, Cy5
  - No known significant effects or critical hazards.
  - Harmful if inhaled.

**Skin contact**
- 10x Labeling Solution
- Cy3, Cy5
  - No known significant effects or critical hazards.
  - Harmful in contact with skin.

**Ingestion**
- 10x Labeling Solution
- Cy3, Cy5
  - No known significant effects or critical hazards.
  - No known significant effects or critical hazards.

**Over-exposure signs/symptoms**

**Eye contact**
- 10x Labeling Solution
- Cy3, Cy5
  - Adverse symptoms may include the following:
    - pain or irritation
    - watering
    - redness

**Inhalation**
- 10x Labeling Solution
- Cy3, Cy5
  - No specific data.
  - Adverse symptoms may include the following:
    - reduced foetal weight
    - increase in foetal deaths
    - skeletal malformations

**Skin contact**
- 10x Labeling Solution
- Cy3, Cy5
  - No specific data.
  - Adverse symptoms may include the following:
    - reduced foetal weight
    - increase in foetal deaths
    - skeletal malformations

**Ingestion**
- 10x Labeling Solution
- Cy3, Cy5
  - No specific data.
  - Adverse symptoms may include the following:
    - reduced foetal weight
    - increase in foetal deaths
    - skeletal malformations

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

**Notes to physician**
- 10x Labeling Solution
- Cy3, Cy5
  - In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

**Specific treatments**
- 10x Labeling Solution
- Cy3, Cy5
  - No specific treatment.

**Protection of first-aiders**
- 10x Labeling Solution
- Cy3, Cy5
  - No action shall be taken involving any personal risk or without suitable training.
  - No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)
Section 5. Firefighting measures

**Extinguishing media**

**Suitable extinguishing media**
- 10x Labeling Solution
- Cy3, Cy5

Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**
- 10x Labeling Solution
- Cy3, Cy5

Use dry chemical, CO₂, water spray (fog) or foam.

**Specific hazards arising from the chemical**

- 10x Labeling Solution
- Cy3, Cy5

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Hazardous thermal decomposition products**

- 10x Labeling Solution
- Cy3, Cy5

Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide
- nitrogen oxides

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst.

In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. Runoff to sewer may create fire or explosion hazard.

Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide
- nitrogen oxides
- halogenated compounds
- metal oxide/oxides

**Special protective actions for fire-fighters**

- 10x Labeling Solution
- Cy3, Cy5

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

**Special protective equipment for fire-fighters**

- 10x Labeling Solution
- Cy3, Cy5

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

**Personal precautions, protective equipment and emergency procedures**

**For non-emergency personnel**

- 10x Labeling Solution
- Cy3, Cy5

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

**For emergency personnel**

- 10x Labeling Solution
- Cy3, Cy5

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid
Section 6. Accidental release measures

Environmental precautions: 10x Labeling Solution
Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up: 10x Labeling Solution
Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: 10x Labeling Solution
Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
Section 7. Handling and storage

Advice on general occupational hygiene

10x Labeling Solution

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Cy3, Cy5

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

10x Labeling Solution

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Cy3, Cy5

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
</table>
| Cy3, Cy5, N,N-Dimethylformamide | Safe Work Australia (Australia, 1/2014). Absorbed through skin.  
TWA: 30 mg/m³ 8 hours.  
TWA: 10 ppm 8 hours. |

Appropriate engineering controls

If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures
Section 8. Exposure controls and personal protection

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection
Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance
Physical state: 10x Labeling Solution Liquid. Cy3, Cy5 Liquid.
Colour: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Odour: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Odour threshold: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
pH: 10x Labeling Solution 7 Cy3, Cy5 Not available.
Melting point: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Boiling point: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Flash point: 10x Labeling Solution Not available. Cy3, Cy5 Closed cup: 61 to 93.3°C (141.8 to 199.9°F)
Evaporation rate: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Flammability (solid, gas): 10x Labeling Solution Not applicable. Cy3, Cy5 Not applicable.
Lower and upper explosive (flammable) limits: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Vapour pressure: 10x Labeling Solution Not available. Cy3, Cy5 Not available.
Vapour density: 
Section 9. Physical and chemical properties

10x Labeling Solution
Cy3, Cy5
Not available.

Relative density
10x Labeling Solution
Cy3, Cy5
Not available.

Solubility
10x Labeling Solution
Cy3, Cy5
Not available.

Cy3, Cy5
Easily soluble in the following materials: cold water and hot water.
Soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water
10x Labeling Solution
Cy3, Cy5
Not available.

Auto-ignition temperature
10x Labeling Solution
Cy3, Cy5
Not available.

Decomposition temperature
10x Labeling Solution
Cy3, Cy5
Not available.

Viscosity
10x Labeling Solution
Cy3, Cy5
Not available.

Section 10. Stability and reactivity

Reactivity
10x Labeling Solution
Cy3, Cy5
No specific test data related to reactivity available for this product or its ingredients.
No specific test data related to reactivity available for this product or its ingredients.

Chemical stability
10x Labeling Solution
Cy3, Cy5
The product is stable.
The product is stable.

Possibility of hazardous reactions
10x Labeling Solution
Cy3, Cy5
Under normal conditions of storage and use, hazardous reactions will not occur.
Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid
10x Labeling Solution
Cy3, Cy5
No specific data.
Avoid all possible sources of ignition (spark or flame).
Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials
10x Labeling Solution
Cy3, Cy5
May react or be incompatible with oxidising materials.
Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition products
10x Labeling Solution
Cy3, Cy5
Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>N,N-Dimethylformamide</td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>3421 ppm</td>
<td>1 hours</td>
</tr>
<tr>
<td></td>
<td>LC50 Inhalation Vapour</td>
<td>Rat</td>
<td>1948 ppm</td>
<td>4 hours</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rabbit</td>
<td>4720 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Section 11. Toxicological information

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy3, Cy5</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 Percent 24 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>N,N-Dimethylformamide</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitisation
Not available.

Mutagenicity
Not available.

Carcinogenicity
Not available.

Reproductive toxicity
Not available.

Teratogenicity
Not available.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on likely routes of exposure
- Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>10x Labeling Solution Cy3, Cy5</th>
<th>No known significant effects or critical hazards. Causes serious eye irritation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>10x Labeling Solution Cy3, Cy5</td>
<td>No known significant effects or critical hazards. Harmful if inhaled.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>10x Labeling Solution Cy3, Cy5</td>
<td>No known significant effects or critical hazards. Harmful in contact with skin.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>10x Labeling Solution Cy3, Cy5</td>
<td>No known significant effects or critical hazards. No specific data.</td>
</tr>
</tbody>
</table>

Symptoms related to the physical, chemical and toxicological characteristics

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>10x Labeling Solution Cy3, Cy5</th>
<th>No specific data. Adverse symptoms may include the following: pain or irritation, watering, redness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>10x Labeling Solution Cy3, Cy5</td>
<td>No specific data. Adverse symptoms may include the following: reduced foetal weight, increase in foetal deaths, skeletal malformations</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 27/06/2017 Date of previous issue: 27/06/2017 Version: 5
Section 11. Toxicological information

Skin contact : 10x Labeling Solution
Cy3, Cy5
No specific data.
Adverse symptoms may include the following:
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Ingestion : 10x Labeling Solution
Cy3, Cy5
No specific data.
Adverse symptoms may include the following:
- reduced foetal weight
- increase in foetal deaths
- skeletal malformations

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure
Potential immediate effects : Not available.
Potential delayed effects : Not available.

Long term exposure
Potential immediate effects : Not available.
Potential delayed effects : Not available.

Potential chronic health effects
Not available.

General : 10x Labeling Solution
Cy3, Cy5
No known significant effects or critical hazards.

Carcinogenicity : 10x Labeling Solution
Cy3, Cy5
No known significant effects or critical hazards.

Mutagenicity : 10x Labeling Solution
Cy3, Cy5
No known significant effects or critical hazards.

Teratogenicity : 10x Labeling Solution
Cy3, Cy5
May damage the unborn child.

Developmental effects : 10x Labeling Solution
Cy3, Cy5
No known significant effects or critical hazards.

Fertility effects : 10x Labeling Solution
Cy3, Cy5
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy3, Cy5 Dermal</td>
<td>2750 mg/kg</td>
</tr>
<tr>
<td></td>
<td>27.5 mg/l</td>
</tr>
<tr>
<td>Inhalation (vapours)</td>
<td></td>
</tr>
</tbody>
</table>

Other information : 10x Labeling Solution
Cy3, Cy5
Not available.
Not available.

Section 12. Ecological information

Toxicity
Section 12. Ecological information

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy3, Cy5 N,N-Dimethylformamide</td>
<td>Acute EC50 4500000 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 &gt;100000 μg/l Marine water</td>
<td>Crustaceans - Crangon crangon - Adult</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 7100000 μg/l Fresh water</td>
<td>Fish - Lepomis macrochirus - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>96 hours</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>Chronic NOEC 1500 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 2430000 μg/l Fresh water</td>
<td>Algae - Navicula seminulum</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 28.85 mg/dm3 Fresh water</td>
<td>Algae - Pseudokirchneriella subcapitata</td>
<td>72 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 519.6 mg/l Fresh water</td>
<td>Crustaceans - Cypris subglobosa</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 6.87 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1661 mg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1000000 μg/l Fresh water</td>
<td>Fish - Morone saxatilis - Larvae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic LC10 781 mg/l Fresh water</td>
<td>Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>3 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 6 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.314 g/L Fresh water</td>
<td>Daphnia - Daphnia pulex</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 100 mg/l Fresh water</td>
<td>Fish - Gambusia holbrooki - Adult</td>
<td>8 weeks</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy3, Cy5 N,N-Dimethylformamide</td>
<td>-1.01</td>
<td>0.3 to 1.2</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

| Soil/water partition coefficient (K_{oc}) | Not available. |

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code.

Special precautions for user : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons
6

Model Work Health and Safety Regulations - Scheduled Substances
No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals
Not listed.

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list

Australia : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

Japan : Japan inventory (ENCS): All components are listed or exempted.

Japan inventory (ISHL): All components are listed or exempted.

Malaysia : Not determined.

New Zealand : All components are listed or exempted.

Philippines : All components are listed or exempted.

Republic of Korea : All components are listed or exempted.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are listed or exempted.

Viet Nam : Not determined.
Section 16. Any other relevant information

History

Date of issue/Date of revision : 27/06/2017
Date of previous issue : 27/06/2017.
Version : 5

Key to abbreviations : ADG = Australian Dangerous Goods
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
NOHSC = National Occupational Health and Safety Commission
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cy3, Cy5 Flam. Liq. 4, H227</td>
<td>On basis of test data</td>
</tr>
<tr>
<td>Eye Irrit. 2A, H319</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Repr. 1B, H360 (Fertility)</td>
<td>Calculation method</td>
</tr>
<tr>
<td>Repr. 1B, H360 (Unborn child)</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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