SAFETY DATA SHEET
Brilliant III Ultra-Fast QPCR Master Mix Sample Size, Part Number 930880

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

1.1 Product identifier
Product name : Brilliant III Ultra-Fast QPCR Master Mix Sample Size, Part Number 930880
Part no. (chemical kit) : 930880
Part no. : 2X Brilliant III QPCR Master Mix Sample Size 930880-51
Reference Dye 600530-53

1.2 Relevant identified uses of the substance or mixture and uses advised against
Material uses : Analytical reagent.
2X Brilliant III QPCR Master Mix Sample Size 1 ml
Reference Dye 1 ml (100 µl 1 mM)

1.3 Details of the supplier of the safety data sheet
Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000
e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number
Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
Product definition : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Not classified.

Ingredients of unknown toxicity : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%

Ingredients of unknown ecotoxicity : Reference Dye
Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.4%

See Section 16 for the full text of the H statements declared above.

Date of issue/Date of revision : 30/04/2018 1/14
### SECTION 2: Hazards identification

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

- **Signal word**: Not applicable.
- **Hazard statements**: None known.
- **Precautionary statements**:
  - **Prevention**: Not applicable.
  - **Response**: Not applicable.
  - **Storage**: Not applicable.
  - **Disposal**: Not applicable.

#### 2.3 Other hazards

- **Other hazards which do not result in classification**: None known.

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Identifiers</th>
<th>%</th>
<th>Regulation (EC) No. 1272/2008 [CLP]</th>
<th>Type</th>
</tr>
</thead>
</table>

| Date of issue/Date of revision | : | 30/04/2018 | 2/14 |
SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>Glycerol</th>
<th>≥10 - ≤25</th>
<th>Not classified.</th>
<th>[2]</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACH #: Annex V</td>
<td>EC: 200-289-5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAS: 56-81-5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference Dye</th>
<th>2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride</th>
<th>≤3</th>
<th>Skin Irr. 2, H315</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC: 214-684-5</td>
<td></td>
<td></td>
<td>Eye Irr. 2, H319</td>
</tr>
<tr>
<td>CAS: 1185-53-1</td>
<td></td>
<td></td>
<td>STOT SE 3, H335</td>
</tr>
</tbody>
</table>

See Section 16 for the full text of the H statements declared above.

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.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[5] Substance of equivalent concern
[6] Additional disclosure due to company policy

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact : 2X Brilliant III QPCR Master Mix Sample Size
2X Brilliant III QPCR Master Mix Sample Size : 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. Get medical attention if irritation occurs.

Inhalation : 2X Brilliant III QPCR Master Mix Sample Size
2X Brilliant III QPCR Master Mix Sample Size : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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.

Skin contact : 2X Brilliant III QPCR Master Mix Sample Size
2X Brilliant III QPCR Master Mix Sample Size : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion : 2X Brilliant III QPCR Master Mix Sample Size
2X Brilliant III QPCR Master Mix Sample Size : Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SECTION 4: First aid measures

Protection of first-aiders: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No known significant effects or critical hazards.

Inhalation: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No known significant effects or critical hazards.

Skin contact: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No known significant effects or critical hazards.

Ingestion: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No specific data.

Inhalation: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No specific data.

Skin contact: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No specific data.

Ingestion: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye

None known.

5.2 Special hazards arising from the substance or mixture
### SECTION 5: Firefighting measures

**Hazards from the substance or mixture**

| 2X Brilliant III QPCR Master Mix Sample Size | In a fire or if heated, a pressure increase will occur and the container may burst. |
| 2X Brilliant III QPCR Master Mix Sample Size | In a fire or if heated, a pressure increase will occur and the container may burst. |

**Hazardous combustion products**

| 2X Brilliant III QPCR Master Mix Sample Size | Decomposition products may include the following materials: |
| 2X Brilliant III QPCR Master Mix Sample Size | Decomposition products may include the following materials: |

- carbon dioxide
- carbon monoxide
- halogenated compounds
- metal oxide/oxides

**Reference Dye**

5.3 Advice for firefighters

**Special precautions for fire-fighters**

| 2X Brilliant III QPCR Master Mix Sample Size | 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. |
| 2X Brilliant III QPCR Master Mix Sample Size | 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**

| 2X Brilliant III QPCR Master Mix Sample Size | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |
| 2X Brilliant III QPCR Master Mix Sample Size | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

**Reference Dye**

### SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

| 2X Brilliant III QPCR Master Mix Sample Size | 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. |
| 2X Brilliant III QPCR Master Mix Sample Size | 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. |

**Reference Dye**

**For emergency responders**

| 2X Brilliant III QPCR Master Mix Sample Size | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| 2X Brilliant III QPCR Master Mix Sample Size | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |

**Reference Dye**

Date of issue/Date of revision: 30/04/2018
Brilliant III Ultra-Fast QPCR Master Mix Sample Size, Part Number 930880

SECTION 6: Accidental release measures

6.2 Environmental precautions

<table>
<thead>
<tr>
<th>Substance</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Avoid dispersal of spill 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).</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Avoid dispersal of spill 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).</td>
</tr>
</tbody>
</table>

2X Brilliant III QPCR Master Mix Sample Size

Avoid dispersal of spill 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).

Reference Dye

Avoid dispersal of spill 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).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

<table>
<thead>
<tr>
<th>Substance</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>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.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>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.</td>
</tr>
</tbody>
</table>

6.4 Reference to other sections

Reference: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
</tbody>
</table>

Advice on general occupational hygiene

<table>
<thead>
<tr>
<th>Substance</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>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.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>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.</td>
</tr>
</tbody>
</table>

7.2 Conditions for safe storage, including any incompatibilities

Storage

<table>
<thead>
<tr>
<th>Substance</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>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. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>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. See Section 10 for incompatible materials before handling or use.</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 30/04/2018
SECTION 7: Handling and storage

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. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations:
- 2X Brilliant III QPCR Master Mix Sample Size
- Reference Dye

Industrial sector specific solutions:
- 2X Brilliant III QPCR Master Mix Sample Size
- Reference Dye

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011).</td>
</tr>
<tr>
<td>Glycerol</td>
<td>TWA: 10 mg/m³ 8 hours. Form: Mist</td>
</tr>
</tbody>
</table>

Recommended monitoring procedures:
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs
No DNELs/DMELs available.

PNECs
No PNECs available

8.2 Exposure controls

Appropriate engineering controls:
Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

Individual protection measures

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: safety glasses with side-shields.

Date of issue/Date of revision: 30/04/2018
SECTION 8: Exposure controls/personal protection

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.

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.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: 2X Brilliant III QPCR Master Mix Sample Size Liquid.
Reference Dye Liquid.

Colour: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

Odour: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

Odour threshold: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

pH: 2X Brilliant III QPCR Master Mix Sample Size 7.8
Reference Dye 8

Melting point/freezing point: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

Initial boiling point and boiling range: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

Flash point: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

Evaporation rate: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.

Flammability (solid, gas): 2X Brilliant III QPCR Master Mix Sample Size Not applicable.
Reference Dye Not applicable.

Upper/lower flammability or explosive limits: 2X Brilliant III QPCR Master Mix Sample Size Not available.
Reference Dye Not available.
## SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Not available.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

| 2X Brilliant III QPCR Master Mix Sample Size | 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. |

### 10.2 Chemical stability

| 2X Brilliant III QPCR Master Mix Sample Size | The product is stable. |

### 10.3 Possibility of hazardous reactions

| 2X Brilliant III QPCR Master Mix Sample Size | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. |

### 10.4 Conditions to avoid

| 2X Brilliant III QPCR Master Mix Sample Size | No specific data. |
SECTION 10: Stability and reactivity

10.5 Incompatible materials
- 2X Brilliant III QPCR Master Mix Sample Size
- Reference Dye
May react or be incompatible with oxidising materials.

10.6 Hazardous decomposition products
- 2X Brilliant III QPCR Master Mix Sample Size
- Reference Dye
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

11.1 Information on toxicological effects

Acute toxicity
Not available.

Acute toxicity estimates
Not available.

Irritation/Corrosion
Conclusion/Summary: Not available.

Sensitiser
Conclusion/Summary: Not available.

Mutagenicity
Conclusion/Summary: Not available.

Carcinogenicity
Conclusion/Summary: Not available.

Reproductive toxicity
Conclusion/Summary: Not available.

Teratogenicity
Conclusion/Summary: Not available.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Dye 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on likely routes of exposure
- 2X Brilliant III QPCR Master Mix Sample Size Reference Dye
Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation
- 2X Brilliant III QPCR Master Mix Sample Size Reference Dye
No known significant effects or critical hazards.

Ingestion
- 2X Brilliant III QPCR Master Mix Sample Size Reference Dye
No known significant effects or critical hazards.

Skin contact
- 2X Brilliant III QPCR Master Mix Sample Size Reference Dye
No known significant effects or critical hazards.
### SECTION 11: Toxicological information

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation**

<table>
<thead>
<tr>
<th></th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Ingestion**

<table>
<thead>
<tr>
<th></th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Skin contact**

<table>
<thead>
<tr>
<th></th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Eye contact**

<table>
<thead>
<tr>
<th></th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

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

**Short term exposure**

**Potential immediate effects**

<table>
<thead>
<tr>
<th></th>
<th>Not available.</th>
</tr>
</thead>
</table>

**Potential delayed effects**

<table>
<thead>
<tr>
<th></th>
<th>Not available.</th>
</tr>
</thead>
</table>

**Long term exposure**

**Potential immediate effects**

<table>
<thead>
<tr>
<th></th>
<th>Not available.</th>
</tr>
</thead>
</table>

**Potential delayed effects**

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**Potential chronic health effects**

**General**

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<tr>
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<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>No known significant effects or critical hazards.</th>
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<tbody>
<tr>
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<td>No known significant effects or critical hazards.</td>
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**Carcinogenicity**

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<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No known significant effects or critical hazards.</td>
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**Mutagenicity**

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<td>Reference Dye</td>
<td>No known significant effects or critical hazards.</td>
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**Teratogenicity**

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</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No known significant effects or critical hazards.</td>
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</tbody>
</table>

**Developmental effects**

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</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No known significant effects or critical hazards.</td>
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</table>

**Fertility effects**

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<th>No known significant effects or critical hazards.</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No known significant effects or critical hazards.</td>
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</table>

**Metabolism**

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**Elimination**

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**Date of issue/Date of revision**

<table>
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<th>30/04/2018</th>
</tr>
</thead>
</table>

**11/14**
SECTION 12: Ecological information

12.1 Toxicity
Conclusion/Summary : Not available.

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
Soil/water partition coefficient (K<sub>OC</sub>) : Not available.
Mobility : Not available.

12.5 Results of PBT and vPvB assessment
PBT : Not applicable.
vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Product
Methods of disposal : 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.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging
Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. 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

14.6 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.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.
SECTION 15: Regulatory information

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

**EU Regulation (EC) No. 1907/2006 (REACH)**

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

2X Brilliant III QPCR Master Mix Sample Size

Reference Dye

Not applicable.

**Other EU regulations**

**Ozone depleting substances (1005/2009/EU)**

Not listed.

**Prior Informed Consent (PIC) (649/2012/EU)**

Not listed.

**Seveso Directive**

This product is not controlled under the Seveso Directive.

**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**

<table>
<thead>
<tr>
<th>Country</th>
<th>Status</th>
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<tr>
<td>Canada</td>
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</tr>
<tr>
<td>China</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Europe</td>
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<tr>
<td>Japan</td>
<td>Japan inventory (ENCS): Not determined.</td>
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<tr>
<td></td>
<td>Japan inventory (ISHL): Not determined.</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Not determined.</td>
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<td>New Zealand</td>
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<tr>
<td>United States</td>
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</tbody>
</table>

**Date of issue/Date of revision**: 30/04/2018
SECTION 15: Regulatory information

15.2 Chemical safety assessment
This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

Abbreviations and acronyms:
ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not classified.</td>
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</table>

Full text of abbreviated H statements

Reference Dye
H315
H319
H335

Full text of classifications [CLP/GHS]

<table>
<thead>
<tr>
<th>Reference Dye</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2, H319</td>
<td>SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2</td>
</tr>
<tr>
<td>Skin Irrit. 2, H315</td>
<td>SKIN CORROSION/IRRITATION - Category 2</td>
</tr>
<tr>
<td>STOT SE 3, H335</td>
<td>SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3</td>
</tr>
</tbody>
</table>

Date of issue/ Date of revision: 30/04/2018
Date of previous issue: 29/09/2016
Version: 2

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