SAFETY DATA SHEET

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

Section 1. Identification

Product identifier : 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
Reference Dye
930880-51
600530-53
Material uses : Analytical reagent.

2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
1 ml
(100 µl 1 mM)

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

Emergency telephone number (with hours of operation) : CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

Classification of the substance or mixture

2X Brilliant III QPCR Master Mix Sample Size

H320 - Causes eye irritation.

GHS label elements

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

Hazard statements

2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
H320 - Causes eye irritation.

No known significant effects or critical hazards.

Precautionary statements

Prevention : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
Not applicable.

Response : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
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 advice or attention.

Storage : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
Not applicable.

Disposal : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
Not applicable.

Supplemental label elements : 2X Brilliant III QPCR Master Mix Sample Size
Reference Dye
None known.

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Section 2. Hazard identification

Reference Dye

Other hazards which do not result in classification:
- 2X Brilliant III QPCR Master Mix Sample Size
- None known.

Reference Dye

Section 3. Composition/information on ingredients

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

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>7 - 13</td>
<td>56-81-5</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>0.5 - 1.5</td>
<td>7447-40-7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reference Dye</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium chloride</td>
<td>1 - 5</td>
<td>7447-40-7</td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>1 - 5</td>
<td>1185-53-1</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**: 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. If irritation persists, get medical attention.

Reference Dye

**Inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 adverse health effects persist or are severe. 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.

Reference Dye

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Section 4. First-aid measures

**Skin contact**
- **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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- **Reference Dye**
  - 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**
  - Wash out mouth with water. Remove dentures if any.
  - 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.
  - Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. 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.
- **Reference Dye**
  - 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.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

**Eye contact**
- **2X Brilliant III QPCR Master Mix Sample Size**
  - Causes eye irritation.
- **Reference Dye**
  - No known significant effects or critical hazards.

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

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

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

**Over-exposure signs/symptoms**

**Eye contact**
- **2X Brilliant III QPCR Master Mix Sample Size**
  - Adverse symptoms may include the following:
    - irritation
    - watering
    - redness
- **Reference Dye**
  - No specific data.

**Inhalation**
- **2X Brilliant III QPCR Master Mix Sample Size**
  - No specific data.
- **Reference Dye**
  - No specific data.
Section 4. First-aid measures

### 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.

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

### 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.

- **2X Brilliant III QPCR Master Mix Sample Size**
- **Reference Dye**
  
  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.

### 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

- **2X Brilliant III QPCR Master Mix Sample Size**
- **Reference Dye**
  
  No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

### 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.

### Specific hazards arising from the chemical

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

### Hazardous thermal decomposition products

- **2X Brilliant III QPCR Master Mix Sample Size**
- **Reference Dye**
  
  Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Halogenated compounds
  - Metal oxide/oxides

- **2X Brilliant III QPCR Master Mix Sample Size**
- **Reference Dye**
  
  Decomposition products may include the following materials:
  - Carbon dioxide
  - Carbon monoxide
  - Nitrogen oxides
  - Halogenated compounds
  - Metal oxide/oxides
Section 5. Fire-fighting measures

Special protective actions 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.

Reference Dye

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.

Reference Dye

Section 6. Accidental release measures

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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Reference Dye

For emergency responders: 2X Brilliant III QPCR Master Mix Sample Size

If specialized 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

Environmental precautions: 2X Brilliant III QPCR Master Mix Sample Size

Avoid dispersal of spilled 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 spilled 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 materials for containment and cleaning up
Section 6. Accidental release measures

Methods for cleaning up: 2X Brilliant III QPCR Master Mix Sample Size

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.

Reference Dye

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: 2X Brilliant III QPCR Master Mix Sample Size

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Reference Dye

Put on appropriate personal protective equipment (see Section 8).

Advice on general occupational hygiene: 2X Brilliant III QPCR Master Mix Sample Size

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.

Reference Dye

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: 2X Brilliant III QPCR Master Mix Sample Size

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Reference Dye

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...
Section 7. Handling and storage

must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

### Control parameters

### Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. Form: Mist.</td>
</tr>
<tr>
<td>Glycerol</td>
<td>CA Quebec Provincial (Canada, 1/2014). TWAEV: 10 mg/m³ 8 hours. Form: mist.</td>
</tr>
<tr>
<td></td>
<td>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. Form: mist.</td>
</tr>
<tr>
<td></td>
<td>CA Ontario Provincial (Canada, 1/2018). TWA: 10 mg/m³ 8 hours. Form: mist.</td>
</tr>
<tr>
<td></td>
<td>CA British Columbia Provincial (Canada, 5/2019). TWA: 3 mg/m³ 8 hours. Form: respirable mist.</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m³ 8 hours. Form: total mist.</td>
</tr>
</tbody>
</table>

### Appropriate engineering controls

| Environmental exposure controls | : Good general ventilation should be sufficient to control worker exposure to airborne contaminants. |
| : 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

| 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. |
| : 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. |

| 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. |
| : 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. |

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Section 8. Exposure controls/personal protection

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

<table>
<thead>
<tr>
<th>Property</th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>Reference Dye</th>
<th>Reference Dye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
<td>Liquid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Color</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Odor threshold</td>
<td>Not available</td>
<td>Not available</td>
<td></td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>7.8</td>
<td>8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Physical state

- Melting point: Not available.
- Boiling point: Not available.
- Flash point: Not available.
- Evaporation rate: Not available.
- Flammability (solid, gas): Not applicable.
- Lower and upper explosive (flammable) limits: Not available.
- Vapor pressure: Not available.
- Vapor density: Not available.
- Relative density: 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>Reference Dye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

<table>
<thead>
<tr>
<th>Property</th>
<th>2X Brilliant III QPCR Master Mix Sample Size</th>
<th>Reference Dye</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reactivity</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical stability</td>
<td>The product is stable.</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Possibility of hazardous reactions</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conditions to avoid</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Incompatible materials</td>
<td>May react or be incompatible with oxidizing materials.</td>
<td>May react or be incompatible with oxidizing materials.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hazardous decomposition products</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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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>2X Brilliant III QPCR Master Mix Sample Size Glycerol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference Dye</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2600 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

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>2X Brilliant III QPCR Master Mix Sample Size Glycerol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 mg</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization

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>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>-</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.
# Section 11. Toxicological information

## Information on the likely routes of exposure

<table>
<thead>
<tr>
<th>Route</th>
<th>Product Details</th>
<th>Effects</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inhalation</strong></td>
<td>2X Brilliant III QPCR Master Mix Sample Size, Reference Dye</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation. (No known significant effects or critical hazards.)</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>2X Brilliant III QPCR Master Mix Sample Size, Reference Dye</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation. (No known significant effects or critical hazards.)</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>2X Brilliant III QPCR Master Mix Sample Size, Reference Dye</td>
<td>Routes of entry anticipated: Oral, Dermal, Inhalation. (No known significant effects or critical hazards.)</td>
</tr>
</tbody>
</table>

## Potential acute health effects

### Eye contact

- **2X Brilliant III QPCR Master Mix Sample Size, Reference Dye**: Causes eye irritation. (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.

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

### Eye contact

- **2X Brilliant III QPCR Master Mix Sample Size, Reference Dye**: Adverse symptoms may include the following:
  - irritation
  - watering
  - redness
  - 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.

## Delayed and immediate effects and also 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

### General

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

### Carcinogenicity

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

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**Date of previous issue**: 04/30/2018  
**Version**: 6  
11/15
Section 11. Toxicological information

Mutagenicity: 2X Brilliant III QPCR Master Mix Sample Size, No known significant effects or critical hazards.
Reference Dye, No known significant effects or critical hazards.

Teratogenicity: 2X Brilliant III QPCR Master Mix Sample Size, No known significant effects or critical hazards.
Reference Dye, No known significant effects or critical hazards.

Developmental effects: 2X Brilliant III QPCR Master Mix Sample Size, No known significant effects or critical hazards.
Reference Dye, No known significant effects or critical hazards.

Fertility effects: 2X Brilliant III QPCR Master Mix Sample Size, No known significant effects or critical hazards.
Reference Dye, No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Oral (mg/kg)</th>
<th>Dermal (mg/kg)</th>
<th>Inhalation (gases) (ppm)</th>
<th>Inhalation (vapors) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>190265.5 12600 2600</td>
<td>N/A N/A N/A</td>
<td>N/A N/A</td>
<td>N/A N/A</td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>70270.3 2600</td>
<td>N/A N/A N/A</td>
<td>N/A N/A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium chloride</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Acute LC50 54000 mg/l Fresh water Acute EC50 1337000 µg/l Fresh water Acute EC50 9.24 g/L Fresh water Acute EC50 141.46 mg/l Fresh water Acute LC50 12.77 mg/l Fresh water Acute LC50 880 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss Algae - Navicula seminulum Algae - Desmodesmus subspicatus Daphnia - Daphnia magna Crustaceans - Pseudosida ramosa - Neonate Fish - Pimephales promelas</td>
<td>96 hours 96 hours 72 hours 48 hours 48 hours 96 hours</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Potassium chloride</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reference Dye

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Dye</td>
<td>Acute EC50 1337000 µg/l Fresh water Acute EC50 9.24 g/L Fresh water Acute EC50 141.46 mg/l Fresh water Acute LC50 12.77 mg/l Fresh water Acute LC50 880 mg/l Fresh water</td>
<td>Algae - Navicula seminulum Algae - Desmodesmus subspicatus Daphnia - Daphnia magna Crustaceans - Pseudosida ramosa - Neonate Fish - Pimephales promelas</td>
<td>96 hours 72 hours 48 hours 48 hours 96 hours</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Section 12. Ecological information

#### Persistence and degradability

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Result</th>
<th>Dose</th>
<th>Inoculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>301D Ready Biodegradability - Closed Bottle Test</td>
<td>93 % - 30 days</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Aquatic half-life</th>
<th>Photolysis</th>
<th>Biodegradability</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>-</td>
<td>-</td>
<td>Readily</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

#### Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP&lt;sub&gt;ow&lt;/sub&gt;</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Glycerol</td>
<td>-0.46</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>-0.46</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>-0.46</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Potassium chloride</td>
<td>-0.46</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

#### Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>):** 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 minimized 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.
Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

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 IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : None of the components are listed.
CEPA Toxic substances : None of the components are listed.

International regulations

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

Montreal Protocol
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 : Not determined.
Canada : Not determined.
China : All components are listed or exempted.
Europe : Not determined.
New Zealand : Not determined.
Philippines : Not determined.
Republic of Korea : Not determined.
Taiwan : Not determined.
Thailand : Not determined.
Turkey : Not determined.
United States : Not determined.
Viet Nam : Not determined.
Section 16. Other information

History

Date of issue/Date of revision : 08/11/2020
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Version : 6

Key to abbreviations : ATE = Acute Toxicity Estimate
                      BCF = Bioconcentration Factor
                      GHS = Globally Harmonized System of Classification and Labelling of Chemicals
                      HPR = Hazardous Products Regulations
                      IATA = International Air Transport Association
                      IBC = Intermediate Bulk Container
                      IMDG = International Maritime Dangerous Goods
                      LogPow = logarithm of the octanol/water partition coefficient
                      N/A = Not available
                      UN = United Nations

Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III QPCR Master Mix Sample Size</td>
<td>Calculation method</td>
</tr>
<tr>
<td>EYE IRRITATION - Category 2B</td>
<td></td>
</tr>
</tbody>
</table>

References : Not available.

ちなみに情報を示す。この文書に含まれる情報は、Agilentの知識に基づいて作成されました。その正確性、完全性、または特定目的に対する適合性を保証するものではありません。

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