SAFETY DATA SHEET

Brilliant II SYBR Green QRT-PCR High ROX Master Mix - 1-Step, Part Number 600836

Section 1. Identification

Product identifier: Brilliant II SYBR Green QRT-PCR High ROX Master Mix - 1-Step, Part Number 600836

Part No. (Chemical Kit): 600836

Part No.: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix 600836-51

RT/RNase Block Enzyme Mixture 600825-52

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
Not classified.

Brilliant II SYBR® QRT-PCR High ROX Master Mix
RT/RNase Block Enzyme Mixture
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%

GHS label elements

Signal word: No signal word.

Hazard statements: No known significant effects or critical hazards.

Precautionary statements

Prevention: Not applicable.

Response: Not applicable.
Section 2. Hazard(s) identification

Storage:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture
Not applicable.

Disposal:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture
Not applicable.

Supplemental label elements:
- Additional warning phrases:
  - 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
  - RT/RNase Block Enzyme Mixture
  Not applicable.

Other hazards which do not result in classification:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture
None known.

Section 3. Composition and ingredient information

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</th>
<th>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glycerol</td>
<td>≥10 - ≤30</td>
<td>56-81-5</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>≤10</td>
<td>67-68-5</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>≥30 - ≤60</td>
<td>56-81-5</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**:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture
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 II SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
## Section 4. First aid measures

### Skin contact
- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix**
  - Flush contaminated skin with plenty of water.
  - Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

- **RT/RNase Block Enzyme Mixture**
  - Flush contaminated skin with plenty of water.
  - Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

### Ingestion
- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix**
  - 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.

- **RT/RNase Block Enzyme Mixture**
  - 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

<table>
<thead>
<tr>
<th>Mode of Exposure</th>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Over-exposure signs/symptoms

<table>
<thead>
<tr>
<th>Mode of Exposure</th>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No specific data.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

### Indication of immediate medical attention and special treatment needed, if necessary
### Section 4. First aid measures

**Notes to physician**: Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- No action shall be taken involving any personal risk or without suitable training.

**Specific treatments**: Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

- No specific treatment.

**Protection of first-aiders**: Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

- No action shall be taken involving any personal risk or without suitable training.

**See toxicological information (Section 11)**

### Section 5. Firefighting measures

**Extinguishing media**

**Suitable extinguishing media**: Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

- Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**: Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

- None known.

**Specific hazards arising from the chemical**

**Hazardous thermal decomposition products**: Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

- In a fire or if heated, a pressure increase will occur and the container may burst.
- Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - sulfur oxides

**Special protective actions for fire-fighters**

**Special protective equipment for fire-fighters**

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

**Date of issue/Date of revision**: 27/10/2017
**Date of previous issue**: 28/05/2015
**Version**: 5
Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

- **Brilliant II SYBR® QRT-PCR High ROX Master Mix**: 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.

- **RT/RNase Block Enzyme Mixture**: 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".

For emergency responders:

- **Brilliant II SYBR® QRT-PCR High ROX Master Mix**: 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".

Environmental precautions:

- **Brilliant II SYBR® QRT-PCR High ROX Master Mix**: 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).

- **RT/RNase Block Enzyme Mixture**: 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 for cleaning up

Methods for cleaning up:

- **Brilliant II SYBR® QRT-PCR High ROX Master Mix**: 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.

- **RT/RNase Block Enzyme Mixture**: 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:

- **Brilliant II SYBR® QRT-PCR High ROX Master Mix**
- **RT/RNase Block Enzyme Mixture**: Put on appropriate personal protective equipment (see Section 8).

- **Brilliant II SYBR® QRT-PCR High ROX Master Mix**
- **RT/RNase Block Enzyme Mixture**: Put on appropriate personal protective equipment (see Section 8).
Section 7. Handling and storage

Advice on general occupational hygiene

2X Brilliant II SYBR® QRT-PCR High ROX Master Mix

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.

RT/RNase Block Enzyme Mixture

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 II SYBR® QRT-PCR High ROX Master Mix

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.

RT/RNase Block Enzyme Mixture

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.

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>
<tbody>
<tr>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</td>
<td>Safe Work Australia (Australia, 1/2014).</td>
</tr>
<tr>
<td>Glycerol</td>
<td>TWA: 10 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>DFG MAC-values list (Germany, 7/2015).</td>
</tr>
<tr>
<td></td>
<td>Absorbed through skin.</td>
</tr>
<tr>
<td></td>
<td>PEAK: 320 mg/m³, 4 times per shift, 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 160 mg/m³ 8 hours.</td>
</tr>
<tr>
<td></td>
<td>PEAK: 100 ppm, 4 times per shift, 15 minutes.</td>
</tr>
<tr>
<td></td>
<td>TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Safe Work Australia (Australia, 1/2014).</td>
</tr>
<tr>
<td></td>
<td>TWA: 10 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Date of issue/Date of revision : 27/10/2017
Date of previous issue : 28/05/2015.
Version : 5
### Section 8. Exposure controls and personal protection

**Appropriate engineering controls**

- Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**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**

**Hand protection**

- 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.

**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.**

**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.

**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**

- Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture: Liquid.
- RT/RNase Block Enzyme Mixture: Liquid.

**Colour**

- Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- RT/RNase Block Enzyme Mixture: 8

**Odour**

- Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- RT/RNase Block Enzyme Mixture: Not available.

**Odour threshold**

- Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- RT/RNase Block Enzyme Mixture: Not available.

**pH**

- Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.

---

**Date of issue/Date of revision**: 27/10/2017
**Date of previous issue**: 28/05/2015
**Version**: 5
## Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Flash point</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td></td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Lower and upper explosive (flammable) limits</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Vapour density</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Relative density</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Solubility</td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>Soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</td>
<td>Not available.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td></td>
<td>Not available.</td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Section 10. Stability and reactivity

**Reactivity**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

No specific test data related to reactivity available for this product or its ingredients.

**Chemical stability**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

The product is stable.

**Possibility of hazardous reactions**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Conditions to avoid**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

No specific data.

**Incompatible materials**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

May react or be incompatible with oxidising materials.

**Hazardous decomposition products**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

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>Glycerol</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>40000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>14500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 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>Glycerol</td>
<td>Eyes - Mild 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>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td></td>
<td>100 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Date of issue/Date of revision: 27/10/2017   Date of previous issue: 28/05/2015   Version: 5
Section 11. Toxicological information

| RT/RNase Block Enzyme Mixture | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams 100 milligrams | - |
| RT/RNase Block Enzyme Mixture | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams 24 hours 500 milligrams | - |
| Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| Glycerol | Skin - Mild irritant | Rabbit | - | - | - |

**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**
- No known significant effects or critical hazards.

**Eye contact**
Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

**Inhalation**
Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

**Skin contact**
Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

**Ingestion**
Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture

**Symptoms related to the physical, chemical and toxicological characteristics**
Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Category</th>
<th>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No specific data.</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>No specific data.</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**: 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**

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture**: No known significant effects or critical hazards.

**Carcinogenicity**

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture**: No known significant effects or critical hazards.

**Mutagenicity**

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture**: No known significant effects or critical hazards.

**Teratogenicity**

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture**: No known significant effects or critical hazards.

**Developmental effects**

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture**: No known significant effects or critical hazards.

**Fertility effects**

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture**: No known significant effects or critical hazards.

Numerical measures of toxicity

**Acute toxicity estimates**
Not available.

**Date of issue/Date of revision**: 27/10/2017
**Date of previous issue**: 28/05/2015
**Version**: 5
Section 11. Toxicological information

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><strong>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>Acute LC50 54000 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Acute LC50 25000 ppm Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 34000000 μg/l Fresh water Chronic NOEC 100 ul/L Marine water</td>
<td>Fish - Pimephales promelas Algae - Ulva lactuca</td>
<td>96 hours 72 hours</td>
</tr>
<tr>
<td><strong>RT/RNase Block Enzyme Mixture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>Acute LC50 54000 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

**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><strong>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</strong></td>
<td>301D Ready Biodegradability - Closed Bottle Test</td>
<td>93 % - 30 days</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>RT/RNase Block Enzyme Mixture</strong></td>
<td>301D Ready Biodegradability - Closed Bottle Test</td>
<td>93 % - 30 days</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**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><strong>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>-1.35</td>
<td>3.16</td>
<td>low</td>
</tr>
<tr>
<td><strong>RT/RNase Block Enzyme Mixture</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>-1.76</td>
<td>-</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. 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**
  
  Not determined.

- **Canada**
  
  All components are listed or exempted.

- **China**
  
  All components are listed or exempted.

- **Europe**
  
  Not determined.

- **Japan**
  
  Japan inventory (ENCS): Not determined.
  
  Japan inventory (ISHL): Not determined.

- **Malaysia**
  
  Not determined.

- **New Zealand**
  
  All components are listed or exempted.

- **Philippines**
  
  All components are listed or exempted.

- **Republic of Korea**
  
  Not determined.
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Country</th>
<th>Regulation Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taiwan</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Thailand</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Turkey</td>
<td>Not determined.</td>
</tr>
<tr>
<td>United States</td>
<td>All components are listed or exempted.</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>Not determined.</td>
</tr>
</tbody>
</table>

Section 16. Any other relevant information

**History**

- Date of issue/Date of revision: 27/10/2017
- Date of previous issue: 28/05/2015
- 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 = log 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>Not classified.</td>
<td></td>
</tr>
</tbody>
</table>

**References**

Not available.

- Indicates information that has changed from previously issued version.

**Notice to reader**

Disclaimer: The information contained in this document is based on Agilent’s state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.