Section 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>Brilliant II QRT-PCR Low ROX Master Mix - 1-Step, Part Number 600837</th>
</tr>
</thead>
<tbody>
<tr>
<td>Part no. (chemical kit)</td>
<td>600837</td>
</tr>
<tr>
<td>Part no.</td>
<td>2X Brilliant II QRT-PCR Low ROX Master Mix 600837-51 RT/RNase Block Enzyme Mixture 600809-52</td>
</tr>
</tbody>
</table>

Relevant identified uses of the substance or mixture and uses advised against

Material uses | Analytical reagent.
2X Brilliant II QRT-PCR Low ROX Master Mix | 2 × 2.5 ml
RT/RNase Block Enzyme Mixture | 0.4 ml

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.

2X Brilliant II QRT-PCR Low ROX Master Mix | Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
RT/RNase Block Enzyme Mixture | Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%

GHS label elements

Signal word | 2X Brilliant II QRT-PCR Low ROX Master Mix
RT/RNase Block Enzyme Mixture | No signal word.

Hazard statements | 2X Brilliant II QRT-PCR Low ROX Master Mix
RT/RNase Block Enzyme Mixture | No known significant effects or critical hazards.

Precautionary statements

Prevention | 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture | Not applicable.

Response | 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture | Not applicable.

Storage | 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture | Not applicable.
Section 2. Hazard(s) identification

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

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

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

Section 3. Composition and ingredient information

Substance/mixture: 2X Brilliant II QRT-PCR Low ROX Master Mix Mixture RT/RNase Block Enzyme Mixture Mixture

CAS number/other identifiers

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant II QRT-PCR Low ROX Master Mix</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>≥10 - ≤30</td>
<td>56-81-5</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>≥10 - ≤30</td>
<td>25322-68-3</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>≤3</td>
<td>67-68-5</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</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 QRT-PCR Low ROX Master Mix 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. 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 QRT-PCR Low ROX Master Mix Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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 QRT-PCR Low 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 QRT-PCR Low 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

Eye contact: 2X Brilliant II QRT-PCR Low ROX Master Mix
No known significant effects or critical hazards.

RT/RNase Block Enzyme Mixture
No known significant effects or critical hazards.

Inhalation: 2X Brilliant II QRT-PCR Low ROX Master Mix
No known significant effects or critical hazards.

RT/RNase Block Enzyme Mixture
No known significant effects or critical hazards.

Skin contact: 2X Brilliant II QRT-PCR Low ROX Master Mix
No known significant effects or critical hazards.

RT/RNase Block Enzyme Mixture
No known significant effects or critical hazards.

Ingestion: 2X Brilliant II QRT-PCR Low ROX Master Mix
No known significant effects or critical hazards.

RT/RNase Block Enzyme Mixture
No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact: 2X Brilliant II QRT-PCR Low ROX Master Mix
No specific data.

RT/RNase Block Enzyme Mixture
No specific data.

Inhalation: 2X Brilliant II QRT-PCR Low ROX Master Mix
No specific data.

RT/RNase Block Enzyme Mixture
No specific data.

Skin contact: 2X Brilliant II QRT-PCR Low ROX Master Mix
No specific data.

RT/RNase Block Enzyme Mixture
No specific data.

Ingestion: 2X Brilliant II QRT-PCR Low ROX Master Mix
No specific data.

RT/RNase Block Enzyme Mixture
No specific data.

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

| Notes to physician | 2X Brilliant II QRT-PCR Low ROX Master Mix | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | 2X Brilliant II QRT-PCR Low ROX Master Mix | No specific treatment. |
| Protection of first-aiders | 2X Brilliant II QRT-PCR Low ROX Master Mix | 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 | Use an extinguishing agent suitable for the surrounding fire. |
| Hazardous thermal decomposition products | 2X Brilliant II QRT-PCR Low ROX Master Mix | Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides |
| Special protective actions for fire-fighters | 2X Brilliant II QRT-PCR Low ROX Master Mix | 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 II QRT-PCR Low ROX Master Mix | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:
- **2X Brilliant II QRT-PCR Low 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**: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders:
- **2X Brilliant II QRT-PCR Low 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".
- **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".

Environmental precautions:
- **2X Brilliant II QRT-PCR Low 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 and material for containment and cleaning up

Methods for cleaning up:
- **2X Brilliant II QRT-PCR Low 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:
- **2X Brilliant II QRT-PCR Low ROX Master Mix**
- **RT/RNase Block Enzyme Mixture**: Put on appropriate personal protective equipment (see Section 8).

Date of issue/Date of revision: 25/04/2019
Date of previous issue: 27/10/2017
Version: 6
Section 7. Handling and storage

Advice on general occupational hygiene:
- 2X Brilliant II QRT-PCR Low 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 QRT-PCR Low 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 QRT-PCR Low ROX Master Mix</td>
<td>Safe Work Australia (Australia, 4/2018). TWA: 10 mg/m³ 8 hours.</td>
</tr>
<tr>
<td>Glycerol</td>
<td>DFG MAC-values list (Germany, 7/2017). PEAK: 8000 mg/m³, 4 times per shift, 15 minutes. Form: Inhalable fraction TWA: 1000 mg/m³ 8 hours. Form: Inhalable fraction</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td></td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>DFG MAC-values list (Germany, 7/2017). Absorbed through skin. PEAK: 320 mg/m³, 4 times per shift, 15 minutes. TWA: 160 mg/m³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours.</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td></td>
</tr>
</tbody>
</table>
Section 8. Exposure controls and personal protection

**Glycerol**

<table>
<thead>
<tr>
<th>Safe Work Australia (Australia, 4/2018).</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA: 10 mg/m³ 8 hours.</td>
</tr>
</tbody>
</table>

**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**

**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.

**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.

Section 9. Physical and chemical properties

**Appearance**

**Physical state**

- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture: Liquid.
- RT/RNase Block Enzyme Mixture: Liquid.

**Colour**

- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- RT/RNase Block Enzyme Mixture: Not available.

**Odour**

- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- RT/RNase Block Enzyme Mixture: Not available.

**Odour threshold**

- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- RT/RNase Block Enzyme Mixture: Not available.

**pH**

- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture: Not available.
- 8
## Section 9. Physical and chemical properties

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

Reactivity

2X Brilliant II QRT-PCR Low 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 QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
The product is stable.

Possibility of hazardous reactions

2X Brilliant II QRT-PCR Low 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 QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
No specific data.

Incompatible materials

2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
May react or be incompatible with oxidising materials.

Hazardous decomposition products

2X Brilliant II QRT-PCR Low 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 Dermal</td>
<td>Rat</td>
<td>40000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>LD50 Oral</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>Glycerol</td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>
# Section 11. Toxicological information

<table>
<thead>
<tr>
<th>Dimethyl sulfoxide</th>
<th>Skin - Mild irritant</th>
<th>Rabbit</th>
<th>-</th>
<th>24 hours 500 milligrams</th>
<th>-</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>500 milligrams</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 milligrams</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 milligrams</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

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

**Sensitisation**
- 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)**
- 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**

**Eye contact**
- 2X Brilliant II QRT-PCR Low ROX Master Mix
- 2X Brilliant II QRT-PCR Low ROX Master Mix
- No known significant effects or critical hazards.

**Inhalation**
- 2X Brilliant II QRT-PCR Low ROX Master Mix
- 2X Brilliant II QRT-PCR Low ROX Master Mix
- No known significant effects or critical hazards.

**Skin contact**
- 2X Brilliant II QRT-PCR Low ROX Master Mix
- 2X Brilliant II QRT-PCR Low ROX Master Mix
- No known significant effects or critical hazards.
Section 11. Toxicological information

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

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

**Eye contact**
- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
  - No specific data.

**Inhalation**
- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
  - No specific data.

**Skin contact**
- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
  - No specific data.

**Ingestion**
- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
  - No specific data.

**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**

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

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

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

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

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

**Fertility effects**
- 2X Brilliant II QRT-PCR Low ROX Master Mix RT/RNase Block Enzyme Mixture
  - No known significant effects or critical hazards.
Section 11. Toxicological information

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 (vapours) (mg/l)</th>
<th>Inhalation (dusts and mists) (mg/l)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant II QRT-PCR Low ROX Master Mix</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>12600</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>28000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>14500</td>
<td>40000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>12600</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</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 II QRT-PCR Low ROX Master Mix</td>
<td>Acute LC50 54000 mg/l Fresh water</td>
<td>Fish - Oncorhynchus mykiss</td>
<td>96 hours</td>
</tr>
<tr>
<td>Glycerol</td>
<td>Acute LC50 &gt;1000000 μg/l Fresh water</td>
<td>Fish - Salmo salar - Parr</td>
<td>96 hours</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>Acute LC50 25000 ppm Fresh water</td>
<td>Daphnia - Daphnia magna - Neonate</td>
<td>48 hours</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>Acute LC50 34000000 μg/l Fresh water</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>Chronic NOEC 3323 μg/l Marine water</td>
<td>Algae - Nitzschia pungens</td>
<td>96 hours</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>2X Brilliant II QRT-PCR Low ROX Master Mix</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>RT/RNase Block Enzyme Mixture</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>
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<td></td>
</tr>
</tbody>
</table>

Bioaccumulative potential
Section 12. Ecological information

<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 II QRT-PCR Low ROX Master Mix</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>-1.76</td>
<td>3.2</td>
<td>low</td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>-</td>
<td>3.16</td>
<td>low</td>
</tr>
<tr>
<td>Dimethyl sulfoxide</td>
<td>-1.35</td>
<td></td>
<td>low</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</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<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 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.

Date of issue/Date of revision : 25/04/2019  Date of previous issue : 27/10/2017  Version : 6
Section 15. Regulatory information

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.
New Zealand : All components are listed or exempted.
Philippines : All components are listed or exempted.
Republic of Korea : Not determined.
Taiwan : All components are listed or exempted.
Thailand : Not determined.
Turkey : Not determined.
United States : All components are listed or exempted.
Viet Nam : Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 25/04/2019
Date of previous issue : 27/10/2017
Version : 6

Key to abbreviations

ADG = Australian Dangerous Goods
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
N/A = Not available
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>
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</tr>
</tbody>
</table>

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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