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

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

Material uses : Analytical reagent.
2X Brilliant II SYBR® QRT-PCR High 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.

Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%

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

GHS label elements

Signal word : 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture
No signal word.

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

Precautionary statements

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

Response : 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture
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>CAS number/other identifiers</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</td>
<td>Mixture</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>Mixture</td>
</tr>
</tbody>
</table>

### Ingredient name

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</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>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 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 | 2X Brilliant II SYBR® QRT-PCR High 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 SYBR® QRT-PCR High 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 SYBR® QRT-PCR High 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 SYBR® QRT-PCR High 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 SYBR® QRT-PCR High ROX Master Mix | No specific data. |
| RT/RNase Block Enzyme Mixture | No specific data. |

| Inhalation | 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix | No specific data. |
| RT/RNase Block Enzyme Mixture | No specific data. |

| Skin contact | 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix | No specific data. |
| RT/RNase Block Enzyme Mixture | No specific data. |

| Ingestion | 2X Brilliant II SYBR® QRT-PCR High 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 SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture

Protection of first-aiders:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
- RT/RNase Block Enzyme Mixture

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

Notes to physician:
- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Protection of first-aiders:
- No action shall be taken involving any personal risk or without suitable training.
- No action shall be taken involving any personal risk or without suitable training.

Specific treatments:
- No specific treatment.
- No specific treatment.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media:
- Suitable extinguishing media:
  - 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
  - RT/RNase Block Enzyme Mixture
  - Use an extinguishing agent suitable for the surrounding fire.
  - Use an extinguishing agent suitable for the surrounding fire.

- Unsuitable extinguishing media:
  - 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
  - RT/RNase Block Enzyme Mixture
  - None known.
  - None known.

Specific hazards arising from the chemical:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
  - In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products:
- 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide
    - sulfur oxides
  - RT/RNase Block Enzyme Mixture
  - Decomposition products may include the following materials:
    - carbon dioxide
    - carbon monoxide

Special protective actions for fire-fighters:
- 2X Brilliant II SYBR® QRT-PCR High 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.
  - RT/RNase Block Enzyme Mixture
  - 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 SYBR® QRT-PCR High 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.
  - RT/RNase Block Enzyme Mixture
  - 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 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**
  - 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 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".

- **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 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 and material for containment and cleaning up

#### Methods for cleaning up

- **2X 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

- **2X Brilliant II SYBR® QRT-PCR High ROX Master Mix**
  - Put on appropriate personal protective equipment (see Section 8).

- **RT/RNase Block Enzyme Mixture**
  - Put on appropriate personal protective equipment (see Section 8).
Section 7. Handling and storage

Advice on general occupational hygiene

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.</td>
</tr>
</tbody>
</table>

Conditions for safe storage, including any incompatibilities

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure parameters</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</td>
</tr>
</tbody>
</table>

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, 4/2018). TWA: 10 mg/m³ 8 hours. 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>Glycerol</td>
<td>Safe Work Australia (Australia, 4/2018). TWA: 10 mg/m³ 8 hours. 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>Dimethyl sulfoxide</td>
<td>Safe Work Australia (Australia, 4/2018). TWA: 10 mg/m³ 8 hours. 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>
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<tr>
<td>RT/RNase Block Enzyme Mixture</td>
<td>Safe Work Australia (Australia, 4/2018). TWA: 10 mg/m³ 8 hours. 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>
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</tr>
</tbody>
</table>
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**

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

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

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

**Odour threshold**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture - Not available.

**pH**: 2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture - 8
### 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></td>
</tr>
<tr>
<td>Boiling point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flash point</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evaporation rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lower and upper explosive (flammable) limits</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapour density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Relative density</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility</td>
<td></td>
<td>Soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viscosity</td>
<td></td>
<td></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.
- **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.
- **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.
- **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.
- **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.
- **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.
- **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

<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><strong>Acute toxicity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
<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>RT/RNase Block Enzyme Mixture</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>14500 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

<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><strong>Irritation/Corrosion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</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>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>
Section 11. Toxicological information

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

Sensitisation
Not available.

Mutagenicity

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
2X Brilliant II SYBR® QRT-PCR High ROX Master Mix RT/RNase Block Enzyme Mixture
Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

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

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

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

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

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

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

#### 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 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**
### Section 11. Toxicological information

<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><strong>2X Brilliant II SYBR® QRT-PCR High ROX Master Mix</strong></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>Dimethyl sulfoxide</td>
<td>14500</td>
<td>40000</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>RT/RNase Block Enzyme Mixture</strong></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><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</td>
<td>Fish - Pimephales promelas</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 3323 μg/l Marine water</td>
<td>Algae - Nitzschia pungens</td>
<td>96 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></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>301D Ready Biodegradability - Closed Bottle Test</td>
<td>93 % - 30 days</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>RT/RNase Block Enzyme Mixture</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glycerol</td>
<td>301D Ready Biodegradability - Closed Bottle Test</td>
<td>93 % - 30 days</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><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>

Date of issue/Date of revision : 25/04/2019   Date of previous issue : 27/10/2017   Version : 6   12/14
Section 12. Ecological information

**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.

Date of issue/Date of revision : 25/04/2019

Date of previous issue : 27/10/2017

Version : 6
Section 15. Regulatory information

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>
<td></td>
</tr>
</tbody>
</table>

References: Not available.

 Indicates information that has changed from previously issued version.

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