SAFETY DATA SHEET

Brilliant III Ultra-Fast SYBR Green QRT-PCR Master Mix Sample, Part Number 5190-7276

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

1.1 Product identifier

- **Product name**: Brilliant III Ultra-Fast SYBR Green QRT-PCR Master Mix Sample, Part Number 5190-7276
- **Part no. (chemical kit)**: 5190-7276
- **Part no.**: 2X Brilliant III SYBR® Green QRT-PCR Master Mix
  - RT/RNase Block: 5190-7275
  - Reference Dye: 600530-53
  - 100 mM DTT: 600089-53

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

- **Material uses**: Analytical reagent.
  - 2X Brilliant III SYBR® Green QRT-PCR Master Mix: 2 ml
  - RT/RNase Block: 0.1 ml
  - Reference Dye: 0.1 ml (100 µl 1 mM)
  - 100 mM DTT: 0.1 ml

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS: pdl-msds_author@agilent.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- **Product definition**: 2X Brilliant III SYBR® Green QRT-PCR Master Mix
  - RT/RNase Block: Mixture
  - Reference Dye: Mixture
  - 100 mM DTT: Mixture

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

Date of issue/Date of revision: 03/07/2018

Agilent Technologies
SECTION 2: Hazards identification

Ingredients of unknown toxicity:

2X Brilliant III SYBR® Green QRT-PCR Master Mix
- Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
- Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
- Reference Dye
- Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
- Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%

RT/RNase Block
- Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
- Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%

Reference Dye
- Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
- Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%

100 mM DTT
- Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
- Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%

Ingredients of unknown ecotoxicity:

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

See Section 16 for the full text of the H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No signal word.
- RT/RNase Block: No signal word.
- Reference Dye: No signal word.
- 100 mM DTT: No signal word.

Hazard statements:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No known significant effects or critical hazards.
- RT/RNase Block: No known significant effects or critical hazards.
- Reference Dye: No known significant effects or critical hazards.
- 100 mM DTT: No known significant effects or critical hazards.

Precautionary statements

Prevention:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Not applicable.
- RT/RNase Block: Not applicable.
- Reference Dye: Not applicable.
- 100 mM DTT: Not applicable.

Response:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Not applicable.
- RT/RNase Block: Not applicable.
- Reference Dye: Not applicable.
- 100 mM DTT: Not applicable.

Storage:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Not applicable.
- RT/RNase Block: Not applicable.
- Reference Dye: Not applicable.
- 100 mM DTT: Not applicable.

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SECTION 2: Hazards identification

Disposal:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

Hazardous ingredients:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

Supplemental label elements:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

Special packaging requirements:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

2.3 Other hazards

Other hazards which do not result in classification:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

SECTION 3: Composition/information on ingredients

3.1 Substances:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

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

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SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Ingredient</th>
<th>CAS Number</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>propane-1,3-diol hydrochloride</td>
<td>1185-53-1</td>
<td>[1] Substance classified with a health or environmental hazard</td>
</tr>
<tr>
<td>100 mM DTT (R*,R*)-1,4-Dimercaptobutane-2,3-diol</td>
<td>EC: 222-468-7, CAS: 3483-12-3</td>
<td>≤3</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.

4.1 Description of first aid measures

**Eye contact**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

**Inhalation**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye

**Skin contact**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye

Date of issue/Date of revision: 03/07/2018
### SECTION 4: First aid measures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Ingestion</th>
<th>Protection of first-aiders</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 mM DTT</td>
<td>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.</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>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.</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>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.</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>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.</td>
<td>No action shall be taken involving any personal risk or without suitable training.</td>
</tr>
</tbody>
</table>

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<table>
<thead>
<tr>
<th>Exposure</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>RT/RNase Block</th>
<th>Reference Dye</th>
<th>100 mM DTT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye contact</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>Skin contact</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

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SECTION 4: First aid measures

Ingestion:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No known significant effects or critical hazards.
- RT/RNase Block: No known significant effects or critical hazards.
- Reference Dye: No known significant effects or critical hazards.
- 100 mM DTT: No known significant effects or critical hazards.

Over-exposure signs/symptoms:

Eye contact:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No specific data.
- RT/RNase Block: No specific data.
- Reference Dye: No specific data.
- 100 mM DTT: No specific data.

Inhalation:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No specific data.
- RT/RNase Block: No specific data.
- Reference Dye: No specific data.
- 100 mM DTT: No specific data.

Skin contact:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No specific data.
- RT/RNase Block: No specific data.
- Reference Dye: No specific data.
- 100 mM DTT: No specific data.

Ingestion:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: No specific data.
- RT/RNase Block: No specific data.
- Reference Dye: No specific data.
- 100 mM DTT: No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- RT/RNase Block: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Reference Dye: In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- 100 mM DTT: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments:
- RT/RNase Block: No specific treatment.
- 100 mM DTT: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Use an extinguishing agent suitable for the surrounding fire.
- RT/RNase Block: Use an extinguishing agent suitable for the surrounding fire.
- Reference Dye: Use an extinguishing agent suitable for the surrounding fire.
- 100 mM DTT: Use an extinguishing agent suitable for the surrounding fire.
## SECTION 5: Firefighting measures

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>None known.</th>
</tr>
</thead>
<tbody>
<tr>
<td>RT/RNase Block</td>
<td>None known.</td>
<td>None known.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>None known.</td>
<td>None known.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>None known.</td>
<td>None known.</td>
</tr>
</tbody>
</table>

### 5.2 Special hazards arising from the substance or mixture

#### Hazards from the substance or mixture

| 2X Brilliant III SYBR® Green QRT-PCR Master Mix | In a fire or if heated, a pressure increase will occur and the container may burst. |
| RT/RNase Block | In a fire or if heated, a pressure increase will occur and the container may burst. |
| Reference Dye | In a fire or if heated, a pressure increase will occur and the container may burst. |
| 100 mM DTT | In a fire or if heated, a pressure increase will occur and the container may burst. |

#### Hazardous combustion products

| 2X Brilliant III SYBR® Green QRT-PCR Master Mix | Decomposition products may include the following materials: |
| RT/RNase Block | carbon dioxide |
| Reference Dye | carbon monoxide |
| 100 mM DTT | sulfur oxides |

### 5.3 Advice for firefighters

#### Special precautions for fire-fighters

| 2X Brilliant III SYBR® Green QRT-PCR 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 | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Reference Dye | 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. |
| 100 mM DTT | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |

#### Special protective equipment for fire-fighters

| 2X Brilliant III SYBR® Green QRT-PCR 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |
| RT/RNase Block | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. |

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

100 mM DTT
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

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

- Reference Dye
  - 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.

- 100 mM DTT
  - 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 III SYBR® Green QRT-PCR 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
  - If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- Reference Dye
  - 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".

- 100 mM DTT
  - 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".
SECTION 6: Accidental release measures

6.2 Environmental precautions

<table>
<thead>
<tr>
<th>Substance</th>
<th>Precautions</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>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).</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>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).</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>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).</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>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).</td>
</tr>
</tbody>
</table>

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

<table>
<thead>
<tr>
<th>Substance</th>
<th>Methods for cleaning up</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.</td>
</tr>
</tbody>
</table>

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

<table>
<thead>
<tr>
<th>Substance</th>
<th>Protective measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Put on appropriate personal protective equipment (see Section 8).</td>
</tr>
</tbody>
</table>
SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

**Storage:** 2X Brilliant III SYBR® Green QRT-PCR 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.

**Storage:** RT/RNase Block

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.

**Storage:** Reference Dye

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened 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.

**Storage:** 100 mM DTT

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.

Advice on general occupational hygiene

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**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Reference Dye**

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**100 mM DTT**

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.

Advice on general occupational hygiene:

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.
SECTION 7: Handling and storage

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

7.3 Specific end use(s)

**Recommendations**

- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

**Industrial sector specific solutions**

- 2X Brilliant III SYBR® Green QRT-PCR Master Mix
- RT/RNase Block
- Reference Dye
- 100 mM DTT

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

**Occupational exposure limits**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Exposure limit values</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m³ 8 hours. Form: Mist</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m³ 8 hours. Form: Mist</td>
</tr>
<tr>
<td>Glycerol</td>
<td></td>
</tr>
</tbody>
</table>

**Recommended monitoring procedures**

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

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

8.2 Exposure controls

**Appropriate engineering controls**

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

**Individual protection measures**

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SECTION 8: Exposure controls/personal protection

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.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

**Physical state**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Liquid.
- RT/RNase Block: Liquid.
- Reference Dye: Liquid.
- 100 mM DTT: Liquid.

**Colour**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Not available.
- RT/RNase Block: Not available.
- Reference Dye: Not available.
- 100 mM DTT: Not available.

**Odour**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Not available.
- RT/RNase Block: Not available.
- Reference Dye: Not available.
- 100 mM DTT: Not available.

**Odour threshold**
- 2X Brilliant III SYBR® Green QRT-PCR Master Mix: Not available.
- RT/RNase Block: Not available.
- Reference Dye: Not available.
- 100 mM DTT: Not available.
## SECTION 9: Physical and chemical properties

### pH
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>7.8</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Melting point/freezing point
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>0°C</td>
</tr>
</tbody>
</table>

### Initial boiling point and boiling range
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>100°C</td>
</tr>
</tbody>
</table>

### Flash point
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Evaporation rate
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Flammability (solid, gas)
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not applicable.</td>
</tr>
</tbody>
</table>

### Upper/lower flammability or explosive limits
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Vapour pressure
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Vapour density
<table>
<thead>
<tr>
<th>Component</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix</td>
<td>Not available.</td>
</tr>
<tr>
<td>RT/RNase Block</td>
<td>Not available.</td>
</tr>
<tr>
<td>Reference Dye</td>
<td>Not available.</td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
### SECTION 9: Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>RT/RNase Block</th>
<th>Reference Dye</th>
<th>100 mM DTT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solubility(ies)</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

**9.2 Other information**
No additional information.
## SECTION 10: Stability and reactivity

<table>
<thead>
<tr>
<th>10.1 Reactivity</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>No specific test data related to reactivity available for this product or its ingredients.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RT/RNase Block</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td></td>
<td>100 mM DTT</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.2 Chemical stability</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RT/RNase Block</td>
<td>The product is stable.</td>
</tr>
<tr>
<td></td>
<td>Reference Dye</td>
<td>The product is stable.</td>
</tr>
<tr>
<td></td>
<td>100 mM DTT</td>
<td>The product is stable.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.3 Possibility of hazardous reactions</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>Under normal conditions of storage and use, hazardous reactions will not occur.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RT/RNase Block</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td></td>
<td>Reference Dye</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td></td>
<td>100 mM DTT</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.4 Conditions to avoid</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RT/RNase Block</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>Reference Dye</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>100 mM DTT</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.5 Incompatible materials</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>May react or be incompatible with oxidising materials.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RT/RNase Block</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td></td>
<td>Reference Dye</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
<tr>
<td></td>
<td>100 mM DTT</td>
<td>May react or be incompatible with oxidising materials.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>10.6 Hazardous decomposition products</th>
<th>2X Brilliant III SYBR® Green QRT-PCR Master Mix</th>
<th>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>RT/RNase Block</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td></td>
<td>Reference Dye</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
<tr>
<td></td>
<td>100 mM DTT</td>
<td>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</td>
</tr>
</tbody>
</table>
SECTION 11: Toxicological information

11.1 Information on toxicological effects

**Acute toxicity**
Not available.

### Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 mM DTT Oral</td>
<td>33333.3 mg/kg</td>
</tr>
</tbody>
</table>

**Irritation/Corrosion**
Not available.

**Sensitiser**
Not available.

**Mutagenicity**
Not available.

**Carcinogenicity**
Not available.

**Reproductive toxicity**
Not available.

**Teratogenicity**
Not available.

**Specific target organ toxicity (single exposure)**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reference Dye</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100 mM DTT</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>(R*,R*)-1,4-Dimercaptobutane-2,3-diol</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Specific target organ toxicity (repeated exposure)**
Not available.

**Aspiration hazard**
Not available.

**Information on likely routes of exposure**

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Routes of entry anticipated: Oral, Dermal, Inhalation.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix RT/RNase Block</td>
<td></td>
</tr>
<tr>
<td>Reference Dye</td>
<td></td>
</tr>
<tr>
<td>100 mM DTT</td>
<td></td>
</tr>
</tbody>
</table>

**Potential acute health effects**

<table>
<thead>
<tr>
<th>Route</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhalation</td>
<td>2X Brilliant III SYBR® Green QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT</td>
</tr>
</tbody>
</table>
SECTION 11: Toxicological information

Potential chronic health effects

Skin contact

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No known significant effects or critical hazards.

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No known significant effects or critical hazards.

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No known significant effects or critical hazards.

Ingestion

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No known significant effects or critical hazards.

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No known significant effects or critical hazards.

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No specific data.

Ingestion

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No specific data.

Skin contact

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
No specific data.

Eye contact

2X Brilliant III SYBR® Green QRT-PCR Master Mix
RT/RNase Block
Reference Dye
100 mM DTT
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
**SECTION 11: Toxicological information**

### General
- **2X Brilliant III SYBR® Green QRT-PCR Master Mix**
  - No known significant effects or critical hazards.
- **RT/RNase Block**
  - No known significant effects or critical hazards.
- **Reference Dye**
  - No known significant effects or critical hazards.
- **100 mM DTT**
  - No known significant effects or critical hazards.

### Carcinogenicity
- **2X Brilliant III SYBR® Green QRT-PCR Master Mix**
  - No known significant effects or critical hazards.
- **RT/RNase Block**
  - No known significant effects or critical hazards.
- **Reference Dye**
  - No known significant effects or critical hazards.
- **100 mM DTT**
  - No known significant effects or critical hazards.

### Mutagenicity
- **2X Brilliant III SYBR® Green QRT-PCR Master Mix**
  - No known significant effects or critical hazards.
- **RT/RNase Block**
  - No known significant effects or critical hazards.
- **Reference Dye**
  - No known significant effects or critical hazards.
- **100 mM DTT**
  - No known significant effects or critical hazards.

### Teratogenicity
- **2X Brilliant III SYBR® Green QRT-PCR Master Mix**
  - No known significant effects or critical hazards.
- **RT/RNase Block**
  - No known significant effects or critical hazards.
- **Reference Dye**
  - No known significant effects or critical hazards.
- **100 mM DTT**
  - No known significant effects or critical hazards.

### Developmental effects
- **2X Brilliant III SYBR® Green QRT-PCR Master Mix**
  - No known significant effects or critical hazards.
- **RT/RNase Block**
  - No known significant effects or critical hazards.
- **Reference Dye**
  - No known significant effects or critical hazards.
- **100 mM DTT**
  - No known significant effects or critical hazards.

### Fertility effects
- **2X Brilliant III SYBR® Green QRT-PCR Master Mix**
  - No known significant effects or critical hazards.
- **RT/RNase Block**
  - No known significant effects or critical hazards.
- **Reference Dye**
  - No known significant effects or critical hazards.
- **100 mM DTT**
  - No known significant effects or critical hazards.

### SECTION 12: Ecological information

#### 12.1 Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 mM DTT</td>
<td>Acute LC50 27000 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
</tbody>
</table>

#### 12.2 Persistence and degradability

Not available.

#### 12.3 Bioaccumulative potential

Not available.

#### 12.4 Mobility in soil

- **Soil/water partition coefficient (K<sub>oc</sub>)**: Not available.
- **Mobility**: Not available.

**Date of issue/Date of revision**: 03/07/2018
SECTION 12: Ecological information

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

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

Packaging

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

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

ADR/RID / IMDG / IATA : Not regulated.

14.6 Special precautions for user : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

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

Other EU regulations

2X Brilliant III SYBR® Green QRT-PCR Master Mix : Not applicable.

RT/RNase Block : Not applicable.

Reference Dye : Not applicable.

100 mM DTT : Not applicable.

Date of issue/Date of revision : 03/07/2018
SECTION 15: Regulatory information

Industrial emissions: Listed
(integrated pollution prevention and control) - Air
Ozone depleting substances (1005/2009/EU)
Not listed.

Prior Informed Consent (PIC) (649/2012/EU)
Not listed.

Seveso Directive
This product is not controlled under the Seveso Directive.

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

Montreal Protocol (Annexes A, B, C, E)
Not listed.

Stockholm Convention on Persistent Organic Pollutants
Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Inventory list
Australia: Not determined.
Canada: Not determined.
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: Not determined.
Philippines: Not determined.
Republic of Korea: Not determined.
Taiwan: Not determined.
Thailand: Not determined.
Turkey: Not determined.
United States: Not determined.
Viet Nam: Not determined.

15.2 Chemical safety assessment: This product contains substances for which Chemical Safety Assessments might still be required.
SECTION 16: Other information

Indicates information that has changed from previously issued version.

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

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

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

Full text of abbreviated H statements

Reference Dye
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.

100 mM DTT
- H302: Harmful if swallowed.
- H315: Causes skin irritation.
- H319: Causes serious eye irritation.
- H335: May cause respiratory irritation.
- H412: Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Reference Dye
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- STOT SE 3, H335: SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

100 mM DTT
- Acute Tox. 4, H302: ACUTE TOXICITY (oral) - Category 4
- Aquatic Chronic 3, H412: LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
- Eye Irrit. 2, H319: SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
- Skin Irrit. 2, H315: SKIN CORROSION/IRRITATION - Category 2
- STOT SE 3, H335: SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3

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.