# SAFETY DATA SHEET

VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein Kit

### Section 1. Identification

<table>
<thead>
<tr>
<th>GHS product identifier</th>
<th>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein Kit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Code</td>
<td>75715</td>
</tr>
<tr>
<td>Other means of</td>
<td>Not available.</td>
</tr>
<tr>
<td>identification</td>
<td></td>
</tr>
<tr>
<td>Supplier/Manufacturer</td>
<td>3420 Central Expressway, Santa Clara CA 95051</td>
</tr>
</tbody>
</table>
| In case of emergency   | Chemtrec: 1 800 424 9300  
Outside USA & Canada: +1 703 527 3887                                     |

### Section 2. Hazards identification

- **OSHA/HCS status**: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

- **Classification of the substance or mixture**:  
  VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B

- **GHS label elements**:  
  **Signal word**: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  Warning

  **Hazard statements**: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  Causes eye irritation.

- **Precautionary statements**:  
  **General**: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  Not applicable.

  **Prevention**: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  Wear eye or face protection. Wash hands thoroughly after handling.

  **Response**: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)  
  VeriQuest® One-Step 100X RT-qPCR Enzyme Mix  
  IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 29.7%
Section 2. Hazards identification

Storage: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Not applicable.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Not applicable.

Disposal: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Not applicable.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Not applicable.

Supplemental label elements: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) None known.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix None known.

Hazards not otherwise classified: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) None known.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix None known.

Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Substance/mixture</th>
<th>Mixture</th>
</tr>
</thead>
</table>

| Ingredient name                                                                 | %   | CAS number |
| VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)        |      |            |
| dimethyl sulfoxide                                                              | 10 - 25 | 67-68-5    |
| glycerol                                                                      | 1 - 10  | 56-81-5    |
| 2-(6-hydroxy-3-oxo-(3H)-xanthen-9-y1)benzoic acid                            | 0 - 1   | 2321-07-5  |
| VeriQuest® One-Step 100X RT-qPCR Enzyme Mix                                    |      |            |
| glycerol                                                                      | 25 - 50 | 56-81-5    |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

CAUTION: This product contains Sodium Azide. Build-ups of Sodium Azide may react with lead and copper plumbing to form highly explosive metal azides.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
### Section 4. First aid measures

<table>
<thead>
<tr>
<th><strong>Inhalation</strong></th>
<th>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)</th>
<th>Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</td>
<td>Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</td>
<td></td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)</td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</td>
<td>Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.</td>
<td></td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)</td>
<td>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</td>
<td>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.</td>
<td></td>
</tr>
</tbody>
</table>
Section 4. First aid measures

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Causes eye irritation. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Causes eye irritation.

Inhalation: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) No known significant effects or critical hazards. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix No known significant effects or critical hazards.

Skin contact: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) No known significant effects or critical hazards. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix No known significant effects or critical hazards.

Ingestion: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) May be irritating to mouth, throat and stomach. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix May be irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

Eye contact: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Adverse symptoms may include the following: irritation watering redness VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Adverse symptoms may include the following: irritation watering redness

Inhalation: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) No specific data. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix No specific data.

Skin contact: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) No specific data. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix No specific data.

Ingestion: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) No specific data. VeriQuest® One-Step 100X RT-qPCR Enzyme Mix No specific data.

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

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

Specific treatments: No specific treatment.
Section 4. First aid measures

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) VeriQuest® One-Step 100X RT-qPCR Enzyme Mix

Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) VeriQuest® One-Step 100X RT-qPCR Enzyme Mix

None known.

Specific hazards arising from the chemical: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) VeriQuest® One-Step 100X RT-qPCR Enzyme Mix

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) VeriQuest® One-Step 100X RT-qPCR Enzyme Mix

Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide
- sulfur oxides

Decomposition products may include the following materials:
- carbon dioxide
- carbon monoxide

Special protective actions for fire-fighters: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) VeriQuest® One-Step 100X RT-qPCR Enzyme 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: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) VeriQuest® One-Step 100X RT-qPCR Enzyme 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: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders: 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: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill: 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.

Large spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) 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.

VeriQuest® One-Step 100X RT-qPCR Enzyme 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
Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities:

- Store in accordance with local regulations.
- Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)</td>
<td>AIHA WEEL (United States, 10/2011). TWA: 250 ppm 8 hours.</td>
</tr>
<tr>
<td>dimethyl sulfoxide</td>
<td>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable</td>
</tr>
<tr>
<td></td>
<td>fraction TWA: 10 mg/m³ 8 hours. Form: Total dust</td>
</tr>
<tr>
<td>glycerol</td>
<td>OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours. Form: Respirable</td>
</tr>
<tr>
<td></td>
<td>fraction TWA: 15 mg/m³ 8 hours. Form: Total dust</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</td>
<td>OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable</td>
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<tr>
<td>glycerol</td>
<td>fraction TWA: 10 mg/m³ 8 hours. Form: Total dust</td>
</tr>
<tr>
<td></td>
<td>OSHA PEL (United States, 2/2013). TWA: 5 mg/m³ 8 hours. Form: Respirable</td>
</tr>
<tr>
<td></td>
<td>fraction TWA: 15 mg/m³ 8 hours. Form: Total dust</td>
</tr>
</tbody>
</table>

Appropriate engineering controls:

- Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Section 8. Exposure controls/personal protection

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: chemical splash goggles.

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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Liquid.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Liquid.

Color: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Not available.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Not available.

Odor: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Not available.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Not available.

Flash point: VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Not available.
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Not available.
### Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)</th>
<th>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto-ignition temperature</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Flammable limits</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Molecular weight</strong></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Molecular formula</strong></td>
<td>Not applicable.</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Boiling/condensation point</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Melting/freezing point</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Relative density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Volatility</strong></td>
<td>Not available.</td>
<td>Not available.</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties

Evaporation rate: Not available.

Viscosity: Not available.

Solubility: Not available.

Physical/chemical properties comments: Not available.

Section 10. Stability and reactivity

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

Chemical stability: The product is stable.

Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid: No specific data.

Incompatible materials: No specific data.
Section 10. Stability and reactivity

Hazardous decomposition products: 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>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) dimethyl sulfoxide</td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>40000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>14500 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>glycerol</td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>21900 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>12600 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix glycerol</td>
<td>LD50 Dermal</td>
<td>Rat</td>
<td>21900 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td></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>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) 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>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>glycerol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td>2-(6-hydroxy-3-oxo-(3H)-xanthen-9-yl)benzoic acid</td>
<td>Eyes - Severe irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 microliters</td>
<td>-</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix glycerol</td>
<td>Eyes - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity
Section 11. Toxicological information

Not available.

Reproductive toxicity
Not available.

Teratogenicity
Not available.

Specific target organ toxicity (single exposure)
Not available.

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure
Not available.

Potential acute health effects

Eye contact
Inhalation
Skin contact
Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
Inhalation
Skin contact
Ingestion

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
Potential immediate effects
Potential delayed effects
Not available.

Long term exposure
Potential immediate effects
Potential delayed effects

Potential chronic health effects
Not available.

General
Carcinogenicity
Mutagenicity
Teratogenicity
Developmental effects
Fertility effects
Section 11. Toxicological information

Numerical measures of toxicity

Acute toxicity estimates
Not available.

Interactive effects:

Other information:

Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) 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 6 ppb Fresh water</td>
<td>Fish - Poecilia reticulata - Adult</td>
<td>16 weeks</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogP_{ow}</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) dimethyl sulfoxide glycerol</td>
<td>-1.35</td>
<td>3.16</td>
<td>low</td>
</tr>
<tr>
<td></td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix glycerol</td>
<td>-1.76</td>
<td>-</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

<table>
<thead>
<tr>
<th>Soil/water partition coefficient (K_{oc})</th>
<th>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X)</th>
<th>Not available.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Mobility:

Other adverse effects:
No known significant effects or critical hazards.
Section 13. Disposal considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

<table>
<thead>
<tr>
<th>UN number</th>
<th>DOT Classification</th>
<th>TDG Classification</th>
<th>Mexico Classification</th>
<th>ADR/RID</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Additional information</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

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 73/78 and the IBC Code: Not available.

Section 15. Regulatory information

U.S. Federal regulations: TSCA 8(a) PAIR: Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-; Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): Not determined.

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed
Clean Air Act Section 602 Class I Substances: Not listed
### Section 15. Regulatory information

**Clean Air Act Section 602**
- Not listed

**Class II Substances**
- Not listed

**DEA List I Chemicals**
- Not listed

**DEA List II Chemicals**
- Not listed

**SARA 302/304**

#### Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
<th>SARA 302 TPQ (lbs)</th>
<th>SARA 304 RQ (gallons)</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) sodium azide</td>
<td>0 - 1</td>
<td>Yes.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>500</td>
<td>-</td>
</tr>
</tbody>
</table>

**SARA 304 RQ**
- 5050000 lbs / 2292700 kg

**SARA 311/312**

#### Classification
- Immediate (acute) health hazard

#### Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) dimethyl sulfoxide</td>
<td>10 - 25</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>glycerol</td>
<td>1 - 10</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>2-(6-hydroxy-3-oxo-(3H)-xanthen-9-yl) benzoic acid</td>
<td>0 - 1</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix</td>
<td>25 - 50</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
<tr>
<td>glycerol</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**State regulations**

**Massachusetts**
- The following components are listed: SUCROSE DUST; GLYCERINE MIST

**New York**
- None of the components are listed.

**New Jersey**
- The following components are listed: DIMETHYL SULFOXIDE; METHANE, SULFINYLBS-; GLYCERIN; 1,2,3-PROPANETRIOL

**Pennsylvania**
- The following components are listed: .ALPHA.-D-GLUCOPYRANOSIDE, .BETA.-D-FRUCTOFURANOSYL; 1,2,3-PROPANETRIOL

**California Prop. 65**

**WARNING:** This product contains less than 0.1% of a chemical known to the State of California to cause cancer.
Section 15. Regulatory information

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
<tr>
<td>VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Poly(oxy-1,2-ethanediyl), α-[4-(1,1,3,3-tetramethylbutyl)phenyl]-ω-hydroxy-</td>
<td>Yes.</td>
<td>No.</td>
<td>No.</td>
<td>No.</td>
</tr>
</tbody>
</table>

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 Inform Consent (PIC)
Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals
Not listed.

Canada

WHMIS (Canada)
VeriQuest™ SYBR® Green One-Step qRT-PCR Master Mix with Fluorescein (2X) Class D-2B: Material causing other toxic effects (Toxic).
VeriQuest® One-Step 100X RT-qPCR Enzyme Mix Not controlled under WHMIS (Canada).

Canadian lists
Canadian NPRI: None of the components are listed.
CEPA Toxic substances: None of the components are listed.
Canada inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

Health: 0
Flammability: 0
Physical hazards: 0

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.)
Section 16. Other information

History

- Date of issue/Date of revision: 11/23/2015.
- Date of previous issue: No previous validation.
- Version: 1

Key to abbreviations:
- 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
- UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.