

# SAFETY DATA SHEET

Brilliant III Ultra-Fast QRT-PCR Master Mix, 10-pack, Part Number 600885

## Section 1. Identification

### 1.1 Product identifier

**Product name** : Brilliant III Ultra-Fast QRT-PCR Master Mix, 10-pack, Part Number 600885

**Part no. (chemical kit)** : 600885

**Part no.** : 2X Brilliant III QRT-PCR Master Mix 600884-51  
 RT/RNase Block 600884-52  
 Reference Dye 600530-53  
 100 mM DTT 600089-53

**Validation date** : 9/17/2019

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

**Material uses** : Analytical reagent.

<input checked="" type="checkbox"/> Brilliant III QRT-PCR Master Mix	10 x (2 x 2 ml)
RT/RNase Block	10 x 0.4 ml
Reference Dye	10 x (0.1 ml (100 µl 1 mM))
100 mM DTT	0.1 ml

### 1.3 Details of the supplier of the safety data sheet

**Supplier/Manufacturer** : Agilent Technologies, Inc.  
 5301 Stevens Creek Blvd  
 Santa Clara, CA 95051, USA  
 800-227-9770

### 1.4 Emergency telephone number

**In case of emergency** : CHEMTREC®: 1-800-424-9300

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

<p><b>OSHA/HCS status</b> : 2X Brilliant III QRT-PCR Master Mix                  RT/RNase Block                  Reference Dye                  100 mM DTT</p>	<p>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).                  This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).                  While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.                  While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.</p>
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### Classification of the substance or mixture

## Section 2. Hazards identification

### 2X Brilliant III QRT-PCR Master

#### Mix

H320 EYE IRRITATION - Category 2B

### RT/RNase Block

H320 EYE IRRITATION - Category 2B

<b>Ingredients of unknown toxicity</b>	: 2X Brilliant III QRT-PCR Master Mix	Percentage of the mixture consisting of ingredient (s) of unknown acute dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient (s) of unknown acute inhalation toxicity: 10 - 30%
	RT/RNase Block	Percentage of the mixture consisting of ingredient (s) of unknown acute inhalation toxicity: 30 - 60%
	Reference Dye	Percentage of the mixture consisting of ingredient (s) of unknown acute dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient (s) of unknown acute inhalation toxicity: 1 - 10%
	100 mM DTT	Percentage of the mixture consisting of ingredient (s) of unknown acute oral toxicity: 1 - 10% Percentage of the mixture consisting of ingredient (s) of unknown acute dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient (s) of unknown acute inhalation toxicity: 1 - 10%
	Reference Dye	Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 2.4%

### 2.2 GHS label elements

<b>Signal word</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Warning Warning No signal word. No signal word.
<b>Hazard statements</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	H320 - Causes eye irritation. H320 - Causes eye irritation. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	P264 - Wash hands thoroughly after handling. P264 - Wash hands thoroughly after handling. Not applicable. Not applicable.
<b>Response</b>	: 2X Brilliant III QRT-PCR Master Mix  RT/RNase Block  Reference Dye	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention. Not applicable.

## Section 2. Hazards identification

	100 mM DTT	Not applicable.
<b>Storage</b>	: 2X Brilliant III QRT-PCR Master Mix	Not applicable.
	RT/RNase Block	Not applicable.
	Reference Dye	Not applicable.
	100 mM DTT	Not applicable.
<b>Disposal</b>	: 2X Brilliant III QRT-PCR Master Mix	Not applicable.
	RT/RNase Block	Not applicable.
	Reference Dye	Not applicable.
	100 mM DTT	Not applicable.
<b>Supplemental label elements</b>	: 2X Brilliant III QRT-PCR Master Mix	None known.
	RT/RNase Block	None known.
	Reference Dye	None known.
	100 mM DTT	None known.
<b>2.3 Other hazards</b>		
<b>Hazards not otherwise classified</b>	: 2X Brilliant III QRT-PCR Master Mix	None known.
	Mix	
	RT/RNase Block	None known.
	Reference Dye	None known.
	100 mM DTT	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: 2X Brilliant III QRT-PCR Master Mix	Mixture
	RT/RNase Block	Mixture
	Reference Dye	Mixture
	100 mM DTT	Mixture

Ingredient name	%	CAS number
<b>2X Brilliant III QRT-PCR Master Mix</b>		
Glycerol	≥10 - ≤25	56-81-5
Polyethylene glycol	≤10	25322-68-3
Potassium chloride	≤3	7447-40-7
<b>RT/RNase Block</b>		
Glycerol	≥50 - ≤75	56-81-5
<b>Reference Dye</b>		
Potassium chloride	≤5	7447-40-7
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	≤3	1185-53-1
<b>100 mM DTT</b>		
(R*,R*)-1,4-Dimercaptobutane-2,3-diol	≤3	3483-12-3

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.**

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

<b>Eye contact</b>	: 2X Brilliant III QRT-PCR Master 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.
	RT/RNase Block	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.
	Reference Dye	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.
	100 mM DTT	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.
<b>Inhalation</b>	: 2X Brilliant III QRT-PCR Master Mix	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.
	RT/RNase Block	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.
	Reference Dye	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. 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	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

<b>Skin contact</b>	: 2X Brilliant III QRT-PCR Master Mix	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.
	RT/RNase Block	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.
	Reference Dye	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	100 mM DTT	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
<b>Ingestion</b>	: 2X Brilliant III QRT-PCR Master Mix	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.
	RT/RNase Block	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.
	Reference Dye	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.
	100 mM DTT	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

## Section 4. First aid measures

quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

#### Potential acute health effects

<b>Eye contact</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Causes eye irritation.  Causes eye irritation. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Skin contact</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Ingestion</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No known significant effects or critical hazards.  No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: 2X Brilliant III QRT-PCR Master Mix  RT/RNase Block  Reference Dye 100 mM DTT	Adverse symptoms may include the following:  irritation watering redness Adverse symptoms may include the following: irritation watering redness No specific data. No specific data.
<b>Inhalation</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No specific data.  No specific data. No specific data. No specific data.
<b>Skin contact</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No specific data.  No specific data. No specific data. No specific data.
<b>Ingestion</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No specific data.  No specific data. No specific data. No specific data.

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

## Section 4. First aid measures

<b>Notes to physician</b>	<b>:</b> 2X Brilliant III 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.
<b>Specific treatments</b>	<b>:</b> 2X Brilliant III QRT-PCR Master Mix	No specific treatment.
	RT/RNase Block	No specific treatment.
	Reference Dye	No specific treatment.
	100 mM DTT	No specific treatment.
<b>Protection of first-aiders</b>	<b>:</b> 2X Brilliant III QRT-PCR Master Mix	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.
	RT/RNase Block	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.
	Reference Dye	No action shall be taken involving any personal risk or without suitable training.
	100 mM DTT	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	<b>:</b> 2X Brilliant III 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.
<b>Unsuitable extinguishing media</b>	<b>:</b> 2X Brilliant III QRT-PCR Master Mix	None known.
	RT/RNase Block	None known.
	Reference Dye	None known.
	100 mM DTT	None known.

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

## Section 5. Fire-fighting measures

<b>Specific hazards arising from the chemical</b>	<p>: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block</p> <p>Reference Dye</p> <p>100 mM DTT</p>	<p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p> <p>In a fire or if heated, a pressure increase will occur and the container may burst.</p>
<b>Hazardous thermal decomposition products</b>	<p>: 2X Brilliant III QRT-PCR Master Mix</p> <p>RT/RNase Block</p> <p>Reference Dye</p> <p>100 mM DTT</p>	<p>Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides</p> <p>Decomposition products may include the following materials: carbon dioxide carbon monoxide</p> <p>Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides</p> <p>Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides</p>

### 5.3 Advice for firefighters

<b>Special protective actions for fire-fighters</b>	<p>: 2X Brilliant III QRT-PCR Master Mix</p> <p>RT/RNase Block</p> <p>Reference Dye</p> <p>100 mM DTT</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
<b>Special protective equipment for fire-fighters</b>	<p>: 2X Brilliant III QRT-PCR Master Mix</p> <p>RT/RNase Block</p> <p>Reference Dye</p>	<p>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</p> <p>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</p> <p>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus</p>



## Section 5. Fire-fighting measures

100 mM DTT

(SCBA) with a full face-piece operated in positive pressure mode. 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

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

: 2X Brilliant III 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Put on appropriate personal protective equipment. 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. 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 spilled material. Put on appropriate personal protective equipment.

**For emergency responders**

: 2X Brilliant III QRT-PCR Master Mix

RT/RNase Block

If specialized 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". If specialized 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". If specialized 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". If specialized 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

100 mM DTT

## Section 6. Accidental release measures

<b>6.2 Environmental precautions</b>	: 2X Brilliant III QRT-PCR Master Mix	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).
	RT/RNase Block	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).
	Reference Dye	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).
	100 mM DTT	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).

### 6.3 Methods and materials for containment and cleaning up

<b>Methods for cleaning up</b>	: 2X Brilliant III QRT-PCR 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	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.
	Reference Dye	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.
	100 mM DTT	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

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: 2X Brilliant III QRT-PCR Master 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.
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## Section 7. Handling and storage

	RT/RNase Block	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.
	Reference Dye	Put on appropriate personal protective equipment (see Section 8).
	100 mM DTT	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: 2X Brilliant III QRT-PCR Master Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	RT/RNase Block	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.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	: 2X Brilliant III 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	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

## Section 7. Handling and storage

Reference Dye

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

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 unlabeled 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 QRT-PCR Master Mix  
RT/RNase Block  
Reference Dye  
100 mM DTT

Industrial applications, Professional applications.  
Industrial applications, Professional applications.  
Industrial applications, Professional applications.  
Industrial applications, Professional applications.

#### Industrial sector specific solutions

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

Not applicable.  
Not applicable.  
Not applicable.  
Not applicable.

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
2X Brilliant III QRT-PCR Master Mix	<p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p> <p><b>AIHA WEEL (United States, 7/2018).</b> TWA: 10 mg/m<sup>3</sup> 8 hours.</p> <p>None.</p>
Glycerol	
Polyethylene glycol	
Potassium chloride	

## Section 8. Exposure controls/personal protection

<p><b>RT/RNase Block</b> Glycerol</p>	<p><b>OSHA PEL 1989 (United States, 3/1989).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 10 mg/m<sup>3</sup> 8 hours. Form: Total dust <b>OSHA PEL (United States, 5/2018).</b> TWA: 5 mg/m<sup>3</sup> 8 hours. Form: Respirable fraction TWA: 15 mg/m<sup>3</sup> 8 hours. Form: Total dust</p>
<p><b>Reference Dye</b> Potassium chloride 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</p>	<p>None. None.</p>
<p><b>100 mM DTT</b> (R*,R*)-1,4-Dimercaptobutane-2,3-diol</p>	<p>None.</p>

### 8.2 Exposure controls

#### 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: 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

- : 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

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: 2X Brilliant III QRT-PCR Master Mix	Liquid.
	RT/RNase Block	Liquid.
	Reference Dye	Liquid.
	100 mM DTT	Liquid.
<b>Color</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	Not available.
<b>Odor</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	Not available.
<b>Odor threshold</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	Not available.
<b>pH</b>	: 2X Brilliant III QRT-PCR Master Mix	7.8
	RT/RNase Block	8
	Reference Dye	8
	100 mM DTT	Not available.
<b>Melting point</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	0°C (32°F)
<b>Boiling point</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	100°C (212°F)
<b>Flash point</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	Not available.
<b>Evaporation rate</b>	: 2X Brilliant III QRT-PCR Master Mix	Not available.
	RT/RNase Block	Not available.
	Reference Dye	Not available.
	100 mM DTT	Not available.
<b>Flammability (solid, gas)</b>	: 2X Brilliant III QRT-PCR Master Mix	Not applicable.
	RT/RNase Block	Not applicable.
	Reference Dye	Not applicable.
	100 mM DTT	Not applicable.

## Section 9. Physical and chemical properties

<b>Lower and upper explosive (flammable) limits</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Vapor pressure</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Vapor density</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Relative density</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Solubility</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block  Reference Dye  100 mM DTT	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.  Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Auto-ignition temperature</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Decomposition temperature</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.
<b>Viscosity</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	Not available. Not available. Not available. Not available.

## Section 10. Stability and reactivity

<b>10.1 Reactivity</b>	<ul style="list-style-type: none"> <li>: 2X Brilliant III QRT-PCR Master Mix</li> <li>RT/RNase Block</li>   <li>Reference Dye</li>   <li>100 mM DTT</li> </ul>	<p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p> <p>No specific test data related to reactivity available for this product or its ingredients.</p>
<b>10.2 Chemical stability</b>	<ul style="list-style-type: none"> <li>: 2X Brilliant III QRT-PCR Master Mix</li> <li>RT/RNase Block</li> <li>Reference Dye</li> <li>100 mM DTT</li> </ul>	<p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p> <p>The product is stable.</p>
<b>10.3 Possibility of hazardous reactions</b>	<ul style="list-style-type: none"> <li>: 2X Brilliant III QRT-PCR Master Mix</li> <li>RT/RNase Block</li>   <li>Reference Dye</li>   <li>100 mM DTT</li> </ul>	<p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p> <p>Under normal conditions of storage and use, hazardous reactions will not occur.</p>
<b>10.4 Conditions to avoid</b>	<ul style="list-style-type: none"> <li>: 2X Brilliant III QRT-PCR Master Mix</li> <li>RT/RNase Block</li> <li>Reference Dye</li> <li>100 mM DTT</li> </ul>	<p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p> <p>No specific data.</p>
<b>10.5 Incompatible materials</b>	<ul style="list-style-type: none"> <li>: 2X Brilliant III QRT-PCR Master Mix</li> <li>RT/RNase Block</li>   <li>Reference Dye</li>   <li>100 mM DTT</li> </ul>	<p>May react or be incompatible with oxidizing materials.</p> <p>May react or be incompatible with oxidizing materials.</p> <p>May react or be incompatible with oxidizing materials.</p> <p>May react or be incompatible with oxidizing materials.</p>
<b>10.6 Hazardous decomposition products</b>	<ul style="list-style-type: none"> <li>: 2X Brilliant III QRT-PCR Master Mix</li>   <li>RT/RNase Block</li>   <li>Reference Dye</li>   <li>100 mM DTT</li> </ul>	<p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p> <p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p> <p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p> <p>Under normal conditions of storage and use, hazardous decomposition products should not be produced.</p>



## Section 11. Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<b>2X Brilliant III QRT-PCR Master Mix</b>				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
<b>RT/RNase Block</b>				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>Reference Dye</b>				
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>2X Brilliant III QRT-PCR Master Mix</b>					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Polyethylene glycol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>RT/RNase Block</b>					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>Reference Dye</b>					
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

#### Sensitization

Not available.

#### Mutagenicity

**Conclusion/Summary** : Not available.

#### Carcinogenicity

**Conclusion/Summary** : Not available.

#### Reproductive toxicity

**Conclusion/Summary** : Not available.

#### Teratogenicity

**Conclusion/Summary** : Not available.

## Section 11. Toxicological information

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>2X Brilliant III QRT-PCR Master Mix</b> Polyethylene glycol	Category 3	Not applicable.	Respiratory tract irritation
<b>Reference Dye</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation
<b>100 mM DTT</b> (R*,R*)-1,4-Dimercaptobutane-2,3-diol	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

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

Routes of entry anticipated: Oral, Dermal, Inhalation.  
Routes of entry anticipated: Oral, Dermal, Inhalation.  
Routes of entry anticipated: Oral, Dermal, Inhalation.  
Routes of entry anticipated: Oral, Dermal, Inhalation.

### Potential acute health effects

#### Eye contact

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

Causes eye irritation.  
Causes eye irritation.  
No known significant effects or critical hazards.  
No known significant effects or critical hazards.

#### Inhalation

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

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

#### Skin contact

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

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

#### Ingestion

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

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

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

## Section 11. Toxicological information

<b>Eye contact</b>	: 2X Brilliant III QRT-PCR Master Mix	Adverse symptoms may include the following: irritation watering redness
	RT/RNase Block	Adverse symptoms may include the following: irritation watering redness
	Reference Dye 100 mM DTT	No specific data. No specific data.
<b>Inhalation</b>	: 2X Brilliant III QRT-PCR Master Mix	No specific data.
	RT/RNase Block	No specific data.
	Reference Dye 100 mM DTT	No specific data. No specific data.
<b>Skin contact</b>	: 2X Brilliant III QRT-PCR Master Mix	No specific data.
	RT/RNase Block	No specific data.
	Reference Dye 100 mM DTT	No specific data. No specific data.
<b>Ingestion</b>	: 2X Brilliant III QRT-PCR Master Mix	No specific data.
	RT/RNase Block	No specific data.
	Reference Dye 100 mM DTT	No specific data. No specific data.

### Delayed and immediate effects and also 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

<b>General</b>	: 2X Brilliant III 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.
<b>Carcinogenicity</b>	: 2X Brilliant III 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.
<b>Mutagenicity</b>	: 2X Brilliant III 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 11. Toxicological information

<b>Teratogenicity</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Developmental effects</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Fertility effects</b>	: 2X Brilliant III QRT-PCR Master Mix RT/RNase Block Reference Dye 100 mM DTT	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>2X Brilliant III QRT-PCR Master Mix</b>					
2X Brilliant III QRT-PCR Master Mix	193152.7	N/A	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
Polyethylene glycol	28000	N/A	N/A	N/A	N/A
Potassium chloride	2600	N/A	N/A	N/A	N/A
<b>RT/RNase Block</b>					
Glycerol	12600	N/A	N/A	N/A	N/A
<b>Reference Dye</b>					
Reference Dye	70270.3	N/A	N/A	N/A	N/A
Potassium chloride	2600	N/A	N/A	N/A	N/A
<b>100 mM DTT</b>					
100 mM DTT	33333.3	N/A	N/A	N/A	N/A
(R*,R*)-1,4-Dimercaptobutane-2,3-diol	500	N/A	N/A	N/A	N/A

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>2X Brilliant III QRT-PCR Master Mix</b>			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Polyethylene glycol	Acute LC50 >1000000 µg/l Fresh water	Fish - Salmo salar - Parr	96 hours
Potassium chloride	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 141.46 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 12.92 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours

## Section 12. Ecological information

<b>RT/RNase Block</b> Glycerol	Acute LC50 880 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>Reference Dye</b> Potassium chloride	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 141.46 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 12.92 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
<b>100 mM DTT</b> (R*,R*) -1,4-Dimercaptobutane-2,3-diol	Acute LC50 880 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 27000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>2X Brilliant III QRT-PCR Master Mix</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>RT/RNase Block</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>2X Brilliant III QRT-PCR Master Mix</b> Potassium chloride	-	-	Readily
<b>Reference Dye</b> Potassium chloride	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>2X Brilliant III QRT-PCR Master Mix</b> Glycerol	-1.76	-	low
Polyethylene glycol	-	3.2	low
Potassium chloride	-0.46	-	low
<b>RT/RNase Block</b> Glycerol	-1.76	-	low
<b>Reference Dye</b>			

## Section 12. Ecological information

Potassium chloride	-0.46	-	low
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### 12.4 Mobility in soil

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

**12.5 Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

**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.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

**DOT / TDG / Mexico / IMDG / IATA** : Not regulated.

**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

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

**U.S. Federal regulations** : **TSCA 8(a) PAIR**: Polyoxyethylene octyl phenyl ether; Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-  
**TSCA 8(a) CDR Exempt/Partial exemption**: Not determined  
**Clean Water Act (CWA) 311**: Edetic acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

#### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

#### SARA 311/312

**Classification** : **2X Brilliant III QRT-PCR Master Mix** EYE IRRITATION - Category 2B  
**RT/RNase Block** EYE IRRITATION - Category 2B  
**Reference Dye** Not applicable.  
**100 mM DTT** Not applicable.

#### Composition/information on ingredients

Name	%	Classification
<b>2X Brilliant III QRT-PCR Master Mix</b>		
Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2A
Polyethylene glycol	≤10	EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Potassium chloride	≤3	EYE IRRITATION - Category 2A
<b>RT/RNase Block</b>		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2A
<b>Reference Dye</b>		
Potassium chloride	≤5	EYE IRRITATION - Category 2A
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	≤3	SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
<b>100 mM DTT</b> (R*,R*)-1,4-Dimercaptobutane-2,3-diol	≤3	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

## Section 15. Regulatory information

### State regulations

- Massachusetts** : The following components are listed: GLYCERINE MIST
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: GLYCERIN; 1,2,3-PROPANETRIOL
- Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL
- California Prop. 65**

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

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.
- 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.

## Section 16. Other information

### History

- Date of issue** : 09/17/2019
- Date of previous issue** : 08/21/2017
- Version** : 7



## Section 16. Other information

**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
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<b>2X Brilliant III QRT-PCR Master Mix</b> EYE IRRITATION - Category 2B	Calculation method
<b>RT/RNase Block</b> EYE IRRITATION - Category 2B	Calculation method

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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