

# SAFETY DATA SHEET

Brilliant II SYBR Green QPCR Master Mix

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

### 1.1 Product identifier

**Product name** : Brilliant II SYBR Green QPCR Master Mix  
**Part no. (chemical kit)** : 600828  
**Part no.** : 2X Brilliant II SYBR® Green QPCR Master Mix 600828-51  
 Reference Dye 600530-53

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

**Identified uses** :  Analytical reagent.  
 Brilliant II SYBR® Green QPCR Master Mix 2 x 2.5 ml  
 Reference Dye 0.1 ml (100 µl 1 mM)  
**Uses advised against** : None known.

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

Agilent Technologies LDA UK Ltd.  
 5500 Lakeside Cheadle Royal Business Park,  
 Cheadle, Cheshire, SK8 3GR  
 United Kingdom  
 Tel: +44 (0) 345 712 5292

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

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

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : 2X Brilliant II SYBR® Mixture  
 Green QPCR Master Mix  
 Reference Dye Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

Brilliant II SYBR® Green QPCR Master Mix The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.  
 Reference Dye The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

**Ingredients of unknown toxicity** :  Brilliant II SYBR® Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%  
 Green QPCR Master Mix Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%  
 Reference Dye Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 2: Hazards identification**

<b>Signal word</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No signal word. No signal word.
<b>Hazard statements</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No known significant effects or critical hazards. No known significant effects or critical hazards.
<b><u>Precautionary statements</u></b>		
<b>Prevention</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.
<b>Response</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.
<b>Storage</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.
<b>Disposal</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.
<b>Supplemental label elements</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Safety data sheet available on request. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.
<b><u>Special packaging requirements</u></b>		
<b>Containers to be fitted with child-resistant fastenings</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.
<b>Tactile warning of danger</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not applicable. Not applicable.

**2.3 Other hazards**

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	This mixture does not contain any substances that are assessed to be a PBT or a vPvB. This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
<b>Other hazards which do not result in classification</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	None known. None known.

**SECTION 3: Composition/information on ingredients**

<b>3.1 Substances</b>	: 2X Brilliant II SYBR® Green	Mixture
	QPCR Master Mix	
	Reference Dye	Mixture

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 3: Composition/information on ingredients**

Product/ingredient name	Identifiers	%	Classification	Type
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified.  <b>See Section 16 for the full text of the H statements declared above.</b>	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

Brilliant II SYBR® Green QPCR Master Mix [1] Substance with a workplace exposure limit  
Occupational exposure limits, if available, are listed in Section 8.

**SECTION 4: First aid measures**

**4.1 Description of first aid measures**

- Eye contact** :  Brilliant II SYBR® Green QPCR Master Mix 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. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
- Inhalation** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye  
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  
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.
- Skin contact** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.  
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
- Ingestion** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye  
Wash out mouth with water. 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.  
Wash out mouth with water. 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.
- Protection of first-aiders** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye  
No action shall be taken involving any personal risk or without suitable training.  
No action shall be taken involving any personal risk or without suitable training.

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

Over-exposure signs/symptoms

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 4: First aid measures**

<b>Eye contact</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No specific data. No specific data.
<b>Inhalation</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No specific data. No specific data.
<b>Skin contact</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No specific data. No specific data.
<b>Ingestion</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No specific data. No specific data.

**4.3 Indication of any immediate medical attention and special treatment needed**

<b>Notes to physician</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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.
<b>Specific treatments</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	No specific treatment. No specific treatment.

**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	None known. None known.

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

<b>Hazards from the substance or mixture</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Reference Dye	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix  Reference Dye	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides

**5.3 Advice for firefighters**

<b>Special protective actions for fire-fighters</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix  Reference Dye	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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.
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**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 5: Firefighting measures**

**Special protective equipment for fire-fighters** :  Brilliant II SYBR® Green QPCR Master Mix  
Reference Dye

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.  
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** :  Brilliant II SYBR® Green QPCR Master Mix  
Reference Dye

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.  
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

**For emergency responders** :  Brilliant II SYBR® Green QPCR Master Mix  
Reference Dye

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".  
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".

**6.2 Environmental precautions**

:  Brilliant II SYBR® Green QPCR Master Mix  
Reference Dye

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

**6.3 Methods and material for containment and cleaning up**

**Methods for cleaning up** : 2X Brilliant II SYBR® Green QPCR Master Mix  
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.  
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.

**6.4 Reference to other sections**

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

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

<b>Protective measures</b>	: 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix  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. 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.

**7.2 Conditions for safe storage, including any incompatibilities**

<b>Storage</b>	: <input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix  Reference Dye	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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**7.3 Specific end use(s)**

<b>Recommendations</b>	: 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Industrial applications, Professional applications. Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye	Not available. Not available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

**Occupational exposure limits**

Product/ingredient name	Exposure limit values
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

**Biological exposure indices**

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 8: Exposure controls/personal protection**

No exposure indices known.

**Recommended monitoring procedures** : Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

**DNELs/DMELs**

No DNELs/DMELs available.

**PNECs**

No PNECs available

**8.2 Exposure controls**

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

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

**SECTION 9: Physical and chemical properties**

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

**9.1 Information on basic physical and chemical properties**

**Appearance**

**Physical state** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Liquid.

**Colour** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.

**Odour** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 9: Physical and chemical properties**

**Odour threshold** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
 Not available.

**Melting point/freezing point** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
 Not available.

**Initial boiling point and boiling range** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
 Not available.

**Flammability** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not applicable.  
 Not applicable.

**Upper/lower flammability or explosive limits** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
 Not available.

Flash point	Ingredient name	Closed cup		Open cup	
		°C	Method	°C	Method
	<b>2X Brilliant II SYBR® Green QPCR Master Mix</b>				
	dimethyl sulfoxide	87	ASTM D 93	87	-
	glycerol	-	-	177	-

Auto-ignition temperature	Ingredient name	°C	Method
	<b>2X Brilliant II SYBR® Green QPCR Master Mix</b>		
	dimethyl sulfoxide	300 to 302	-
	glycerol	370	-

**Decomposition temperature** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
 Not available.

**pH** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
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**Viscosity** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.  
 Not available.

Solubility(ies)	Media	Result
	<b>2X Brilliant II SYBR® Green QPCR Master Mix</b>	
	water	Soluble
	<b>Reference Dye</b>	
	water	Soluble

**Partition coefficient: n-octanol/water** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not applicable.  
 Not applicable.

Vapour pressure	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
		mm Hg	kPa	Method	mm Hg	kPa	Method

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 9: Physical and chemical properties**

<b>2X Brilliant II SYBR® Green QPCR Master Mix</b>							
water	17.5	2.3	-	92.258	12.3	-	
dimethyl sulfoxide	0.42	0.056	EU A.4	-	-	-	
<b>Reference Dye</b>							
water	17.5	2.3	-	92.258	12.3	-	

- Evaporation rate** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.
- Relative density** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.
- Vapour density** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.
- Explosive properties** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.
- Oxidising properties** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not available.
- Particle characteristics**
- Median particle size** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not applicable.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

- 10.1 Reactivity** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye The product is stable.
- 10.3 Possibility of hazardous reactions** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye No specific data.
- 10.5 Incompatible materials** : 2X Brilliant II SYBR® Green QPCR Master Mix Reference Dye May react or be incompatible with oxidising materials.

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 10: Stability and reactivity**

**10.6 Hazardous decomposition products** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	12600	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

**Conclusion/Summary** : Not available.

Sensitiser

**Conclusion/Summary** : Not available.

Mutagenicity

**Conclusion/Summary** : Not available.

Carcinogenicity

**Conclusion/Summary** : Not available.

Reproductive toxicity

**Conclusion/Summary** : Not available.

Teratogenicity

**Conclusion/Summary** : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

**Information on likely routes of exposure**

Brilliant II SYBR® Green QPCR Master Mix Reference Dye Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.  
Not available.

Potential acute health effects

**Inhalation** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.  
No known significant effects or critical hazards.

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 11: Toxicological information**

- Ingestion** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.
- Skin contact** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.
- Eye contact** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

- Inhalation** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No specific data.
- Ingestion** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No specific data.
- Skin contact** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No specific data.
- Eye contact** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No specific data.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

- Conclusion/Summary** : Not available.
- General** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.
- Carcinogenicity** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.
- Mutagenicity** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.
- Reproductive toxicity** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye No known significant effects or critical hazards.

**SECTION 12: Ecological information**

**12.1 Toxicity**

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours

- Conclusion/Summary** : Not available.

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 12: Ecological information**

**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

**Conclusion/Summary** : Not available.

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<input checked="" type="checkbox"/> Brilliant II SYBR® Green QPCR Master Mix Glycerol	-1.76	-	Low

**12.4 Mobility in soil**

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

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

Product

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

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

Packaging

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

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

**Brilliant II SYBR Green QPCR Master Mix**

**SECTION 14: Transport information**

	<b>ADR/RID</b>	<b>IMDG</b>	<b>IATA</b>
<b>14.1 UN number</b>	Not regulated.	Not regulated.	Not regulated.
<b>14.2 UN proper shipping name</b>	-	-	-
<b>14.3 Transport hazard class(es)</b>	-	-	-
<b>14.4 Packing group</b>	-	-	-
<b>14.5 Environmental hazards</b>	No.	No.	No.

Additional information

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

**14.7 Transport in bulk according to IMO instruments** : Not available.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB)/REACH**

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

No listed substance

**Label** :  Brilliant II SYBR® Green QPCR Master Mix Reference Dye Not applicable.  
 Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Brilliant II SYBR Green QPCR Master Mix

## SECTION 15: Regulatory information

**Industrial emissions (integrated pollution prevention and control) - Air** : Listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

**15.2 Chemical safety assessment** : This product contains substances for which Chemical Safety Assessments might still be required.

### 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

**United States** : Not determined.

## SECTION 16: Other information

 Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification

Classification	Justification
Not classified.	

### Full text of abbreviated H statements

Not applicable.

### Full text of classifications

Not applicable.

**Date of issue/ Date of revision** : 17/07/2024

**Date of previous issue** : 15/07/2021

**Version** : 4

### Notice to reader

Brilliant II SYBR Green QPCR Master Mix

## SECTION 16: Other information

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