

SAFETY DATA SHEET



Brilliant III Ultra-Fast SYBR Green QPCR Master Mix, Part Number 600883

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

1.1 Product identifier

Product name : Brilliant III Ultra-Fast SYBR Green QPCR Master Mix, Part Number 600883
Part no. (chemical kit) : 600883
Part no. : Reference Dye 600530-53
 2X Brilliant III SYBR® 600882-51
 Green QPCR Master Mix

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

Identified uses : Analytical reagent.
 Reference Dye 0.1 ml (100 µl 1 mM)
 2X Brilliant III SYBR® Green QPCR Master Mix 10 x 2 ml
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
 0800 603 1000
e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

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

Not classified.

Ingredients of unknown toxicity : Reference Dye Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
 2X Brilliant III SYBR® Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
 Green QPCR 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%

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

SECTION 2: Hazards identification

Signal word	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No signal word. No signal word.
Hazard statements	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards.

Precautionary statements

Prevention	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.
Response	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.
Storage	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.
Disposal	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.
Supplemental label elements	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Safety data sheet available on request.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.
Tactile warning of danger	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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.
Other hazards which do not result in classification	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	None known. None known.

SECTION 3: Composition/information on ingredients

3.1 Substances	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Mixture Mixture
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SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Type
<input checked="" type="checkbox"/> Brilliant III 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. See Section 16 for the full text of the H statements declared above.	[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 III 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	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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

SECTION 4: First aid measures

Eye contact	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No specific data. No specific data.
Inhalation	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No specific data. No specific data.
Skin contact	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No specific data. No specific data.
Ingestion	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No specific treatment. No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	None known. None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	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.
Hazardous combustion products	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters	: Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. 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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SECTION 5: Firefighting measures

Special protective equipment for fire-fighters	: 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.
	2X Brilliant III SYBR® Green QPCR Master Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: 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.
	2X Brilliant III SYBR® Green QPCR Master Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders	: 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".
	2X Brilliant III SYBR® Green QPCR Master Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: 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).
2X Brilliant III SYBR® Green QPCR Master Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: 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.
	2X Brilliant III SYBR® Green QPCR 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.

6.4 Reference to other sections

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: Reference Dye	Put on appropriate personal protective equipment (see Section 8).
	2X Brilliant III SYBR® Green QPCR Master Mix	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: 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.
	2X Brilliant III SYBR® Green QPCR 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.

7.2 Conditions for safe storage, including any incompatibilities

Storage	: Reference Dye	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	2X Brilliant III SYBR® Green QPCR Master Mix	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations	: Reference Dye	Industrial applications, Professional applications.
	2X Brilliant III SYBR® Green QPCR Master Mix	Industrial applications, Professional applications.
Industrial sector specific solutions	: Reference Dye	Not available.
	2X Brilliant III SYBR® Green QPCR Master Mix	Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
2X Brilliant III SYBR® Green QPCR Master Mix Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist

Biological exposure indices

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

Product/ingredient name	Type	Exposure	Value	Population	Effects
<input checked="" type="checkbox"/> Brilliant III SYBR® Green QPCR Master Mix Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic

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	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Liquid. Liquid.																													
Colour	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
Odour	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
Odour threshold	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
Melting point/freezing point	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
Initial boiling point and boiling range	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
Flammability	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable. Not applicable.																													
Upper/lower flammability or explosive limits	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
Flash point	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th rowspan="2" style="width: 50%;"></th> <th colspan="2" style="text-align: center;">Closed cup</th> <th colspan="2" style="text-align: center;">Open cup</th> </tr> <tr> <th style="text-align: center;">°C</th> <th style="text-align: center;">Method</th> <th style="text-align: center;">°C</th> <th style="text-align: center;">Method</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Ingredient name</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">2X Brilliant III SYBR® Green QPCR Master Mix</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">Dimethyl sulfoxide</td> <td style="text-align: center;">87</td> <td style="text-align: center;">ASTM D 93</td> <td style="text-align: center;">87</td> <td></td> </tr> <tr> <td style="text-align: left;">Glycerol</td> <td></td> <td></td> <td style="text-align: center;">177</td> <td></td> </tr> </tbody> </table>			Closed cup		Open cup		°C	Method	°C	Method	Ingredient name					2X Brilliant III SYBR® Green QPCR Master Mix					Dimethyl sulfoxide	87	ASTM D 93	87		Glycerol			177	
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Auto-ignition temperature	:	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%;"></th> <th style="text-align: center;">°C</th> <th style="text-align: center;">Method</th> </tr> </thead> <tbody> <tr> <td style="text-align: left;">Ingredient name</td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">2X Brilliant III SYBR® Green QPCR Master Mix</td> <td></td> <td></td> </tr> <tr> <td style="text-align: left;">Dimethyl sulfoxide</td> <td style="text-align: center;">300 to 302</td> <td></td> </tr> <tr> <td style="text-align: left;">Glycerol</td> <td style="text-align: center;">370</td> <td></td> </tr> </tbody> </table>			°C	Method	Ingredient name			2X Brilliant III SYBR® Green QPCR Master Mix			Dimethyl sulfoxide	300 to 302		Glycerol	370															
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Dimethyl sulfoxide	300 to 302																															
Glycerol	370																															
Decomposition temperature	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													
pH	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	8 7.8																													
Viscosity	:	Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	Not available. Not available.																													

SECTION 9: Physical and chemical properties

Solubility(ies)	Media	Result
	Reference Dye water	Soluble
	2X Brilliant III SYBR® Green QPCR Master Mix water	Soluble

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

Vapour pressure	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
		mm Hg	kPa	Method	mm Hg	kPa	Method
	Reference Dye						
	water	23.8	3.2		92.258	12.3	
	2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0	0		0.000007501	0.000001	
	2X Brilliant III SYBR® Green QPCR Master Mix						
	water	23.8	3.2		92.258	12.3	
	Dimethyl sulfoxide	0.42	0.056	EU A.4			

Evaporation rate	Reference Dye	Result
	2X Brilliant III SYBR®	Not available.
	Green QPCR Master Mix	Not available.

Relative density	Reference Dye	Result
	2X Brilliant III SYBR®	Not available.
	Green QPCR Master Mix	Not available.

Vapour density	Reference Dye	Result
	2X Brilliant III SYBR®	Not available.
	Green QPCR Master Mix	Not available.

Explosive properties	Reference Dye	Result
	2X Brilliant III SYBR®	Not available.
	Green QPCR Master Mix	Not available.

Oxidising properties	Reference Dye	Result
	2X Brilliant III SYBR®	Not available.
	Green QPCR Master Mix	Not available.

Particle characteristics

Median particle size	Reference Dye	Result
	2X Brilliant III SYBR®	Not applicable.
	Green QPCR Master Mix	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

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

SECTION 11: Toxicological information

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

<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>Not available. Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.</p>
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Potential acute health effects

<p>Inhalation</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No known significant effects or critical hazards. No known significant effects or critical hazards.</p>
<p>Ingestion</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No known significant effects or critical hazards. No known significant effects or critical hazards.</p>
<p>Skin contact</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No known significant effects or critical hazards. No known significant effects or critical hazards.</p>
<p>Eye contact</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No known significant effects or critical hazards. No known significant effects or critical hazards.</p>

Symptoms related to the physical, chemical and toxicological characteristics

<p>Inhalation</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No specific data. No specific data.</p>
<p>Ingestion</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No specific data. No specific data.</p>
<p>Skin contact</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No specific data. No specific data.</p>
<p>Eye contact</p>	<p>Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix</p>	<p>No specific data. No specific data.</p>

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

SECTION 11: Toxicological information

General	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: <input checked="" type="checkbox"/> Reference Dye 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<input checked="" type="checkbox"/> 2X Brilliant III SYBR® Green QPCR Master Mix Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<input checked="" type="checkbox"/> 2X Brilliant III 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 _{ow}	BCF	Potential
<input checked="" type="checkbox"/> 2X Brilliant III SYBR® Green QPCR Master Mix Glycerol	-1.76	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	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

SECTION 15: Regulatory information

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

Not listed.

Label : Reference Dye Not applicable.
 2X Brilliant III SYBR® Green Not applicable.
 QPCR Master Mix

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

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

- Australia** : Not determined.
- Canada** : Not determined.
- China** : Not determined.
- Eurasian Economic Union** : **Russian Federation inventory**: All components are listed or exempted.
- Japan** : **Japan inventory (CSCL)**: 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.

SECTION 15: Regulatory information

Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: 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
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Procedure used to derive the classification

Not classified.

Full text of abbreviated H statements

Not applicable.

Full text of classifications

Not applicable.

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Notice to reader

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