

Agilent Technologies Australia Pty Ltd
 679 Springvale Road
 Mulgrave
 Victoria 3170, Australia
 1800 802 402

Brilliant II QPCR Master Mix 10-pack, Part Number 600815

1. Identification of the material and supplier

Names

Product name : Brilliant II QPCR Master Mix 10-pack, Part Number 600815
Part No. (Chemical Kit) : 600815
Part No. : 2× Brilliant II QPCR Master Mix 600804-51
 Reference dye, 1mM 600530-53
ADG : Not regulated as Dangerous Goods according to the ADG Code

Supplier

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
 679 Springvale Road
 Mulgrave
 Victoria 3170, Australia
 1800 802 402

Emergency telephone number : CHEMTREC®: +(61)-290372994

Uses

Area of application : 2× Brilliant II QPCR Master Mix Industrial applications, Professional applications.
 Reference dye, 1mM Industrial applications, Professional applications.
Material uses : Analytical reagent.
 2× Brilliant II QPCR Master Mix 50 ml (20 tubes each containing 2.5 ml)
 Reference dye, 1mM 1 ml

2. Hazards identification

Classification : 2× Brilliant II QPCR Master Mix Not regulated.
 Reference dye, 1mM Not regulated.
Risk phrases : 2× Brilliant II QPCR Master Mix Not classified.
 Reference dye, 1mM Not classified.
Safety phrases : 2× Brilliant II QPCR Master Mix S36- Wear suitable protective clothing.
 Reference dye, 1mM S36- Wear suitable protective clothing.
Statement of hazardous/dangerous nature : 2× Brilliant II QPCR Master Mix NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.
 Reference dye, 1mM NON-HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

3. Composition/information on ingredients

Mixture : 2× Brilliant II QPCR Master Mix Yes.
 Reference dye, 1mM Yes.

Ingredient name	CAS number	Concentration
2× Brilliant II QPCR Master Mix		
Glycerol	56-81-5	10 - <30

Other ingredients, determined not to be hazardous according to Safe Work Australia criteria, and not dangerous according to the ADG Code, make up the product concentration to 100%.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4 . First-aid measures

Inhalation	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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.
Ingestion	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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. 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.
Skin contact	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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.
Eye contact	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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.
Protection of first-aiders	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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.
Advice to doctor	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific treatment. 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.

5 . Fire-fighting measures

Extinguishing media

Suitable	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
Not suitable	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	None known. None known.

5 . Fire-fighting measures

Special exposure hazards	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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.
	2× Brilliant II QPCR Master Mix Reference dye, 1mM	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 thermal decomposition products	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
Special protective equipment for fire-fighters	: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.	

6 . Accidental release measures

Personal precautions	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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 (see Section 8). 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 (see Section 8).
Environmental precautions	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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).
Methods for cleaning up	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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

6 . Accidental release measures

place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

7 . Handling and storage

Handling : 2× Brilliant II QPCR Master Mix

Reference dye, 1mM

Put on appropriate personal protective equipment (see Section 8). 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.

Put on appropriate personal protective equipment (see Section 8). 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.

Storage : 2× Brilliant II QPCR Master Mix

Reference dye, 1mM

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.

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.

8 . Exposure controls/personal protection

Occupational exposure limits

Ingredient name	Exposure limits
2× Brilliant II QPCR Master Mix Glycerol	Safe Work Australia (Australia, 4/2013). TWA: 10 mg/m ³ 8 hours.

No additional exposure standard allocated for other ingredients/components covered by the MSDS other than those listed in the table above.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Exposure controls

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

8 . Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eyes** : 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 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.
- Hands** : 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.
- Respiratory** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
- Skin** : 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.
- 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.

9 . Physical and chemical properties

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|----------------------------------|------------------------------------------------------|----------------------------------|
| Physical state | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Liquid.
Liquid. |
| Colour | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Odour | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Odour threshold | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Boiling point | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Melting point | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Vapour pressure | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Relative density | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Flash point | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Flammable limits | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Vapour density | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| pH | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
8 |
| Viscosity | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Auto-ignition temperature | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |
| Evaporation rate | : 2× Brilliant II QPCR Master Mix Reference dye, 1mM | Not available.
Not available. |

9 . Physical and chemical properties

Solubility	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
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10 . Stability and reactivity

Chemical stability	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	The product is stable. The product is stable.
Possibility of hazardous reactions	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific data. No specific data.
Materials to avoid	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific data. No specific data.
Hazardous decomposition products	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	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.

11 . Toxicological information

Potential acute health effects

Inhalation	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
Ingestion	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Skin contact	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Eye contact	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
2× Brilliant II QPCR Master Mix Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Conclusion/Summary : Not available.

Potential chronic health effects

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2× Brilliant II QPCR Master Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

11 . Toxicological information

Chronic effects	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Developmental effects	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No known significant effects or critical hazards. No known significant effects or critical hazards.
Over-exposure signs/symptoms		
Inhalation	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific data. No specific data.
Ingestion	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific data. No specific data.
Skin	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific data. No specific data.
Eyes	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	No specific data. No specific data.
Other adverse symptoms	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	Not available. Not available.
Target organs	: 2× Brilliant II QPCR Master Mix Reference dye, 1mM	Contains material which may cause damage to the following organs: kidneys, upper respiratory tract, skin, eye, lens or cornea. Contains material which may cause damage to the following organs: gastrointestinal tract, upper respiratory tract, skin, eye, lens or cornea.

12 . Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Other ecological information

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
2× Brilliant II QPCR Master Mix Glycerol	-1.76	-	low

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

13 . Disposal considerations

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. 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. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

14 . Transport information

Regulatory information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

15 . Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Control of Scheduled Carcinogenic Substances

<u>Ingredient name</u>	<u>Schedule</u>
No listed substance	

Australia inventory (AICS) : At least one component is not listed.

16 . Other information

Remarks :

Date of issue : 28/04/2014

Date of previous issue : 05/03/2012.

✔ Indicates information that has changed from previously issued version.

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