

SAFETY DATA SHEET



QPCR NGS Library Quant Kit AB SOLiD, Part Number G4881A

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

1.1 Product identifier

Product name : QPCR NGS Library Quant Kit AB SOLiD, Part Number G4881A
Part no. (chemical kit) : G4881A
Part no. : 2X Brilliant III SYBR® 600882-51
Green QPCR Master Mix
Reference Dye 600530-53
50x AB SOLiD Primer 5190-2391
Mix
100 pM AB SOLiD DNA 5190-2392
Standard
200X Dilution Buffer 5190-2377
10X GC Additive 5190-2378

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

Material uses : Analytical reagent.
 2X Brilliant III SYBR® Green QPCR Master Mix 2 ml
Mix
Reference Dye 0.1 ml (100 µl 1 mM)
50x AB SOLiD Primer Mix 0.2 ml
100 pM AB SOLiD DNA Standard 0.02 ml
200X Dilution Buffer 0.5 ml
10X GC Additive 1 ml

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
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 : 2X Brilliant III SYBR® Mixture
Green QPCR Master Mix
Reference Dye Mixture
50x AB SOLiD Primer Mixture
Mix
100 pM AB SOLiD DNA Mixture
Standard
200X Dilution Buffer Mixture
10X GC Additive Mixture

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

Date of issue/Date of revision : 03/07/2018

SECTION 2: Hazards identification

10X GC Additive

H302 ACUTE TOXICITY (oral) - Category 4

Ingredients of unknown toxicity	: <input checked="" type="checkbox"/> Brilliant III SYBR® Green QPCR Master Mix	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
	Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
	200X Dilution Buffer	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
Ingredients of unknown ecotoxicity	: <input checked="" type="checkbox"/> Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.4%

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

Hazard pictograms : 10X GC Additive



Signal word	: <input checked="" type="checkbox"/> Brilliant III SYBR® Green QPCR Master Mix	No signal word.
	Reference Dye	No signal word.
	50x AB SOLiD Primer Mix	No signal word.
	100 pM AB SOLiD DNA Standard	No signal word.
	200X Dilution Buffer	No signal word.
	10X GC Additive	Warning

Hazard statements	: <input checked="" type="checkbox"/> Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	H302 - Harmful if swallowed.

Precautionary statements

Prevention	: <input checked="" type="checkbox"/> Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
	Reference Dye	Not applicable.
	50x AB SOLiD Primer Mix	Not applicable.
	100 pM AB SOLiD DNA Standard	Not applicable.
	200X Dilution Buffer	Not applicable.
	10X GC Additive	P270 - Do not eat, drink or smoke when using this product. P264 - Wash hands thoroughly after handling.

SECTION 2: Hazards identification

Response	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.
Storage	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Disposal	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: Reference Dye 10X GC Additive	Not applicable. - ethanediol
Supplemental label elements	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Safety data sheet available on request. Not applicable. Not applicable. Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Special packaging requirements		
Tactile warning of danger	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

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SECTION 2: Hazards identification

2.3 Other hazards

Other hazards which do not result in classification	2X Brilliant III SYBR® Green QPCR Master Mix	None known.
	Reference Dye	None known.
	50x AB SOLiD Primer Mix	None known.
	100 pM AB SOLiD DNA Standard	None known.
	200X Dilution Buffer	None known.
	10X GC Additive	None known.

SECTION 3: Composition/information on ingredients

3.1 Substances	<input checked="" type="checkbox"/> 2X Brilliant III SYBR® Green QPCR Master Mix	Mixture
	Reference Dye	Mixture
	50x AB SOLiD Primer Mix	Mixture
	100 pM AB SOLiD DNA Standard	Mixture
	200X Dilution Buffer	Mixture
	10X GC Additive	Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
<input checked="" type="checkbox"/> 2X Brilliant III SYBR® Green QPCR Master Mix Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified.	[2]
Reference Dye 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1]
10X GC Additive Ethanediol	EC: 203-473-3 CAS: 107-21-1 Index: 603-027-00-1	≥50 - ≤75	Acute Tox. 4, H302 See Section 16 for the full text of the H statements declared above.	[1] [2]

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.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

SECTION 4: First aid measures

4.1 Description of first aid measures

SECTION 4: First aid measures

Eye contact	: 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.
	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.
	50x AB SOLiD Primer 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.
	100 pM AB SOLiD DNA Standard	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.
	200X Dilution Buffer	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.
	10X GC Additive	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. Get medical attention if irritation occurs.
Inhalation	: 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.
	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.
	50x AB SOLiD Primer Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	100 pM AB SOLiD DNA Standard	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	200X Dilution Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	10X GC Additive	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.
Skin contact	: 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.
	Reference Dye	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	50x AB SOLiD Primer Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	100 pM AB SOLiD DNA Standard	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	200X Dilution Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if

SECTION 4: First aid measures

		symptoms occur. 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.
Ingestion	10X GC Additive	
	: 2X Brilliant III SYBR® Green QPCR Master Mix	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.
	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.
	50x AB SOLiD Primer Mix	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 pM AB SOLiD DNA Standard	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.
	200X Dilution Buffer	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.
	10X GC Additive	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 necessary, call a poison center or physician. 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.
Protection of first-aiders	: 2X Brilliant III SYBR® Green QPCR Master Mix	No action shall be taken involving any personal risk or without suitable training.
	Reference Dye	No action shall be taken involving any personal risk or without suitable training.
	50x AB SOLiD Primer Mix	No action shall be taken involving any personal risk or without suitable training.
	100 pM AB SOLiD DNA Standard	No action shall be taken involving any personal risk or without suitable training.
	200X Dilution Buffer	No action shall be taken involving any personal risk or without suitable training.
	10X GC Additive	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person

SECTION 4: First aid measures

providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Inhalation	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. 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 SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. 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 SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
Inhalation	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.

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Skin contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
Ingestion	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment. No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire.
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SECTION 5: Firefighting measures

Unsuitable extinguishing media	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	None known.
	50x AB SOLiD Primer Mix	None known.
	100 pM AB SOLiD DNA Standard	None known.
	200X Dilution Buffer	None known.
	10X GC Additive	None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	In a fire or if heated, a pressure increase will occur and the container may burst.
	50x AB SOLiD Primer Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	100 pM AB SOLiD DNA Standard	In a fire or if heated, a pressure increase will occur and the container may burst.
	200X Dilution Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	10X GC Additive	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous combustion products	: 2X Brilliant III SYBR® Green QPCR Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides
	Reference Dye	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	50x AB SOLiD Primer Mix	No specific data.
	100 pM AB SOLiD DNA Standard	No specific data.
	200X Dilution Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	10X GC Additive	Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special precautions for fire-fighters	: 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.
	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.
	50x AB SOLiD Primer 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.
	100 pM AB SOLiD DNA Standard	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.

SECTION 5: Firefighting measures

Special protective equipment for fire-fighters

200X Dilution Buffer		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.
10X GC Additive		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.
: 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
50x AB SOLiD Primer Mix		Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
100 pM AB SOLiD DNA Standard		Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
200X Dilution Buffer		Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
10X GC Additive		Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 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.
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.
50x AB SOLiD Primer 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.
100 pM AB SOLiD DNA		No action shall be taken involving any personal risk or

SECTION 6: Accidental release measures

	Standard	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.
	200X Dilution Buffer	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.
	10X GC Additive	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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders	: 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".
	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".
	50x AB SOLiD Primer 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".
	100 pM AB SOLiD DNA Standard	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".
	200X Dilution Buffer	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".
	10X GC Additive	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	: 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).
	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).
	50x AB SOLiD Primer 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).
	100 pM AB SOLiD DNA Standard	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).
	200X Dilution Buffer	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).

SECTION 6: Accidental release measures

10X GC Additive	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).
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6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: 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.
	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.
	50x AB SOLiD Primer 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.
	100 pM AB SOLiD DNA Standard	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.
	200X Dilution Buffer	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.
	10X GC Additive	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.
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SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: 2X Brilliant III 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).
	50x AB SOLiD Primer Mix	Put on appropriate personal protective equipment (see Section 8).
	100 pM AB SOLiD DNA Standard	Put on appropriate personal protective equipment (see Section 8).
	200X Dilution Buffer	Put on appropriate personal protective equipment (see Section 8).
	10X GC Additive	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour 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.

SECTION 7: Handling and storage

Advice on general occupational hygiene

: 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.
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.
50x AB SOLiD Primer 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.
100 pM AB SOLiD DNA Standard	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.
200X Dilution Buffer	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.
10X GC Additive	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

: 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.
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.
50x AB SOLiD Primer 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 7: Handling and storage

	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.
100 pM AB SOLiD DNA Standard	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.
200X Dilution Buffer	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.
10X GC Additive	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

: 2X Brilliant III SYBR® Green QPCR Master Mix	Industrial applications, Professional applications.
Reference Dye	Industrial applications, Professional applications.
50x AB SOLiD Primer Mix	Industrial applications, Professional applications.
100 pM AB SOLiD DNA Standard	Industrial applications, Professional applications.
200X Dilution Buffer	Industrial applications, Professional applications.
10X GC Additive	Industrial applications, Professional applications.

Industrial sector specific solutions

: 2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
Reference Dye	Not applicable.
50x AB SOLiD Primer Mix	Not applicable.
100 pM AB SOLiD DNA Standard	Not applicable.
200X Dilution Buffer	Not applicable.
10X GC Additive	Not applicable.

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), 12/2011). TWA: 10 mg/m ³ 8 hours. Form: Mist
10X GC Additive Ethanediol	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed through skin. TWA: 10 mg/m ³ 8 hours. Form: Particulate STEL: 104 mg/m ³ 15 minutes. Form: Vapour TWA: 52 mg/m ³ 8 hours. Form: Vapour STEL: 40 ppm 15 minutes. Form: Vapour TWA: 20 ppm 8 hours. Form: Vapour

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 European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances.

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. 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.

SECTION 8: Exposure controls/personal protection

- 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

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : 2X Brilliant III SYBR® Green QPCR Master Mix
Reference Dye
50x AB SOLiD Primer Mix
100 pM AB SOLiD DNA Standard
200X Dilution Buffer
10X GC Additive
Liquid.
Liquid.
Liquid.
Liquid.
Liquid.
Liquid.
- Colour** : 2X Brilliant III SYBR® Green QPCR Master Mix
Reference Dye
50x AB SOLiD Primer Mix
100 pM AB SOLiD DNA Standard
200X Dilution Buffer
10X GC Additive
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
- Odour** : 2X Brilliant III SYBR® Green QPCR Master Mix
Reference Dye
50x AB SOLiD Primer Mix
100 pM AB SOLiD DNA Standard
200X Dilution Buffer
10X GC Additive
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.
- Odour threshold** : 2X Brilliant III SYBR® Green QPCR Master Mix
Reference Dye
50x AB SOLiD Primer Mix
100 pM AB SOLiD DNA Standard
200X Dilution Buffer
10X GC Additive
Not available.
Not available.
Not available.
Not available.
Not available.
Not available.

SECTION 9: Physical and chemical properties

pH	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	7.8 8 Not available. Not available. Not available. Not available.
Melting point/freezing point	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. 0°C 0°C Not available. Not available.
Initial boiling point and boiling range	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. 100°C 100°C Not available. Not available.
Flash point	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. Not available. Not available. Not available. Not available.
Evaporation rate	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. Not available. Not available. Not available. Not available.
Flammability (solid, gas)	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

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SECTION 9: Physical and chemical properties

Upper/lower flammability or explosive limits	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. Not available. Not available. Not available. Not available.
Vapour pressure	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. Not available. Not available. Not available. Not available.
Vapour density	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. Not available. Not available. Not available. Not available.
Relative density	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Not available. Not available. Not available. Not available. Not available. Not available.
Solubility(ies)	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. Easily soluble in the following materials: cold water and hot water. Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA	Not available. Not available. Not available. Not available.

SECTION 9: Physical and chemical properties

	Standard	
	200X Dilution Buffer	Not available.
	10X GC Additive	Not available.
Auto-ignition temperature	: 2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	50x AB SOLiD Primer Mix	Not available.
	100 pM AB SOLiD DNA Standard	Not available.
	200X Dilution Buffer	Not available.
	10X GC Additive	Not available.
Decomposition temperature	: 2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	50x AB SOLiD Primer Mix	Not available.
	100 pM AB SOLiD DNA Standard	Not available.
	200X Dilution Buffer	Not available.
	10X GC Additive	Not available.
Viscosity	: 2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	50x AB SOLiD Primer Mix	Not available.
	100 pM AB SOLiD DNA Standard	Not available.
	200X Dilution Buffer	Not available.
	10X GC Additive	Not available.
Explosive properties	: 2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	50x AB SOLiD Primer Mix	Not available.
	100 pM AB SOLiD DNA Standard	Not available.
	200X Dilution Buffer	Not available.
	10X GC Additive	Not available.
Oxidising properties	: 2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
	Reference Dye	Not available.
	50x AB SOLiD Primer Mix	Not available.
	100 pM AB SOLiD DNA Standard	Not available.
	200X Dilution Buffer	Not available.
	10X GC Additive	Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. 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. 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	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	The product is stable. The product is stable. The product is stable. The product is stable. The product is stable. The product is stable.
10.3 Possibility of hazardous reactions	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. 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	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
10.5 Incompatible materials	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.

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SECTION 10: Stability and reactivity

10.6 Hazardous decomposition products	: 2X Brilliant III 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.
	50x AB SOLiD Primer Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	100 pM AB SOLiD DNA Standard	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	200X Dilution Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10X GC Additive	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
10X GC Additive Ethanediol	LD50 Oral	Rat	4700 mg/kg	-

Acute toxicity estimates

Route	ATE value
10X GC Additive Oral	956 mg/kg

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
10X GC Additive Ethanediol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	1 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	6 hours 1440 milligrams	-
	Skin - Mild irritant	Rabbit	-	555 milligrams	-

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)

Product/ingredient name	Category	Route of exposure	Target organs
Reference Dye 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Date of issue/Date of revision : 03/07/2018

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SECTION 11: Toxicological information

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	Routes of entry anticipated: Oral, Dermal, Inhalation.
	50x AB SOLiD Primer Mix	Routes of entry anticipated: Oral, Dermal, Inhalation. Not available.
	100 pM AB SOLiD DNA Standard	Not available.
	200X Dilution Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	10X GC Additive	Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Inhalation	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	No known significant effects or critical hazards.
Ingestion	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	Harmful if swallowed.
Skin contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	No known significant effects or critical hazards.
Eye contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	No specific data.
	50x AB SOLiD Primer Mix	No specific data.
	100 pM AB SOLiD DNA Standard	No specific data.
	200X Dilution Buffer	No specific data.
	10X GC Additive	No specific data.

SECTION 11: Toxicological information

	10X GC Additive	No specific data.
Ingestion	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
Skin contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
Eye contact	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. 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

General	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer 10X GC Additive	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. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Carcinogenicity	: 2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye 50x AB SOLiD Primer Mix 100 pM AB SOLiD DNA Standard 200X Dilution Buffer	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. No known significant effects or critical hazards.

SECTION 11: Toxicological information

	10X GC Additive	No known significant effects or critical hazards.
Mutagenicity	: 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
Teratogenicity	10X GC Additive	No known significant effects or critical hazards.
	: 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
Developmental effects	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	No known significant effects or critical hazards.
	: 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
Fertility effects	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	No known significant effects or critical hazards.
	: 2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
	50x AB SOLiD Primer Mix	No known significant effects or critical hazards.
	100 pM AB SOLiD DNA Standard	No known significant effects or critical hazards.
	200X Dilution Buffer	No known significant effects or critical hazards.
	10X GC Additive	No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
10X GC Additive Ethenediol	Acute LC50 6900000 µg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 41000000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 8050000 µg/l Fresh water	Fish - Pimephales promelas	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
10X GC Additive Ethenediol	OECD 301C Ready Biodegradability - Modified MITI Test (I)	90 to 100 % - 10 days	-	-

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SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
10X GC Additive Ethanediol	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
10X GC Additive Ethanediol	-1.36	-	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

PBT : Not applicable.

vPvB : Not applicable.

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 : The classification of the product may meet the criteria for a hazardous waste.

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. 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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

ADR/RID / IMDG / IATA : Not regulated.

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 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

EU Regulation (EC) No. 1907/2006 (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.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: 2X Brilliant III SYBR® Green	Not applicable.
	QPCR Master Mix	
	Reference Dye	Not applicable.
	50x AB SOLiD Primer Mix	Not applicable.
	100 pM AB SOLiD DNA	Not applicable.
	Standard	
	200X Dilution Buffer	Not applicable.
	10X GC Additive	Not applicable.

Other EU regulations

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

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior 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.
Malaysia	: Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.

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SECTION 15: Regulatory information

Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

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

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]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
10X GC Additive Acute Tox. 4, H302	Calculation method

Full text of abbreviated H statements

Reference Dye H315 H319 H335	Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation.
10X GC Additive H302	Harmful if swallowed.

Full text of classifications [CLP/GHS]

Reference Dye Eye Irrit. 2, H319 Skin Irrit. 2, H315 STOT SE 3, H335	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
10X GC Additive Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4

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Notice to reader

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