Conforms to Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals

SAFETY DATA SHEET

Agilent Technologies

Agilent NGS FFPE QC Kit, EA, 16 Reactions, Part Number 5190-8833

Section 1. Identification

Product identifier : Agilent NGS FFPE QC Kit, EA, 16 Reactions, Part Number 5190-8833

Part no. (chemical kit) : 5190-8833

Part no. :

Primer Set A 42 bp	5190-8853
Primer Set B 123 bp	5190-8854
DNA Standard 1 16 Samples	5190-8855
DNA Standard 2 16 Samples	5190-8856
DNA Standard 3 16 Samples	5190-8857
DNA Standard 4 16 Samples	5190-8858
DNA Standard 5 16 Samples	5190-8859
Reference DNA	5190-9313
2X Brilliant III SYBR® Green QPCR Master Mix	600882-51
Reference Dye	600530-53

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

Material uses : Analytical reagent.

Primer Set A 42 bp	0.09 ml (16 sample)
Primer Set B 123 bp	0.06 ml (16 sample)
DNA Standard 1 16 Samples	0.024 ml (2500 pg/µl)
DNA Standard 2 16 Samples	0.024 ml (625 pg/µl)
DNA Standard 3 16 Samples	0.024 ml (156.25 pg/µl)
DNA Standard 4 16 Samples	0.024 ml (39.06 pg/µl)
DNA Standard 5 16 Samples	0.024 ml (9.77 pg/µl)
Reference DNA	0.048 ml (16 sample)
2X Brilliant III SYBR® Green QPCR Master Mix	2.0 ml
Reference Dye	0.1 ml (100 µl 1 mM)

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

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

Not classified.

2X 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% Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
Reference Dye	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2.4%

Section 2. Hazard(s) identification

GHS label elements

Signal word

Primer Set A 42 bp	No signal word.
Primer Set B 123 bp	No signal word.
DNA Standard 1 16 Samples	No signal word.
DNA Standard 2 16 Samples	No signal word.
DNA Standard 3 16 Samples	No signal word.
DNA Standard 4 16 Samples	No signal word.
DNA Standard 5 16 Samples	No signal word.
Reference DNA	No signal word.
2X Brilliant III SYBR® Green QPCR Master Mix	No signal word.
Reference Dye	No signal word.

Hazard statements

Primer Set A 42 bp	No known significant effects or critical hazards.
Primer Set B 123 bp	No known significant effects or critical hazards.
DNA Standard 1 16 Samples	No known significant effects or critical hazards.
DNA Standard 2 16 Samples	No known significant effects or critical hazards.
DNA Standard 3 16 Samples	No known significant effects or critical hazards.
DNA Standard 4 16 Samples	No known significant effects or critical hazards.
DNA Standard 5 16 Samples	No known significant effects or critical hazards.
Reference DNA	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.

Precautionary statements

Prevention

Primer Set A 42 bp	Not applicable.
Primer Set B 123 bp	Not applicable.
DNA Standard 1 16 Samples	Not applicable.
DNA Standard 2 16 Samples	Not applicable.
DNA Standard 3 16 Samples	Not applicable.
DNA Standard 4 16 Samples	Not applicable.
DNA Standard 5 16 Samples	Not applicable.
Reference DNA	Not applicable.
2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
Reference Dye	Not applicable.

Response

Primer Set A 42 bp	Not applicable.
Primer Set B 123 bp	Not applicable.
DNA Standard 1 16 Samples	Not applicable.
DNA Standard 2 16 Samples	Not applicable.
DNA Standard 3 16 Samples	Not applicable.
DNA Standard 4 16 Samples	Not applicable.
DNA Standard 5 16 Samples	Not applicable.
Reference DNA	Not applicable.
2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
Reference Dye	Not applicable.

Storage

Primer Set A 42 bp	Not applicable.
Primer Set B 123 bp	Not applicable.
DNA Standard 1 16 Samples	Not applicable.
DNA Standard 2 16 Samples	Not applicable.
DNA Standard 3 16 Samples	Not applicable.
DNA Standard 4 16 Samples	Not applicable.
DNA Standard 5 16 Samples	Not applicable.
Reference DNA	Not applicable.
2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
Reference Dye	Not applicable.

Section 2. Hazard(s) identification

Disposal :

Primer Set A 42 bp	Not applicable.
Primer Set B 123 bp	Not applicable.
DNA Standard 1 16 Samples	Not applicable.
DNA Standard 2 16 Samples	Not applicable.
DNA Standard 3 16 Samples	Not applicable.
DNA Standard 4 16 Samples	Not applicable.
DNA Standard 5 16 Samples	Not applicable.
Reference DNA	Not applicable.
2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
Reference Dye	Not applicable.

Supplemental label elements

Additional warning phrases :

Primer Set A 42 bp	Not applicable.
Primer Set B 123 bp	Not applicable.
DNA Standard 1 16 Samples	Not applicable.
DNA Standard 2 16 Samples	Not applicable.
DNA Standard 3 16 Samples	Not applicable.
DNA Standard 4 16 Samples	Not applicable.
DNA Standard 5 16 Samples	Not applicable.
Reference DNA	Not applicable.
2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
Reference Dye	Not applicable.

Other hazards which do not result in classification :

Primer Set A 42 bp	None known.
Primer Set B 123 bp	None known.
DNA Standard 1 16 Samples	None known.
DNA Standard 2 16 Samples	None known.
DNA Standard 3 16 Samples	None known.
DNA Standard 4 16 Samples	None known.
DNA Standard 5 16 Samples	None known.
Reference DNA	None known.
2X Brilliant III SYBR® Green QPCR Master Mix	None known.
Reference Dye	None known.

Section 3. Composition and ingredient information

Substance/mixture :

Primer Set A 42 bp	Mixture
Primer Set B 123 bp	Mixture
DNA Standard 1 16 Samples	Mixture
DNA Standard 2 16 Samples	Mixture
DNA Standard 3 16 Samples	Mixture
DNA Standard 4 16 Samples	Mixture
DNA Standard 5 16 Samples	Mixture
Reference DNA	Mixture
2X Brilliant III SYBR® Green QPCR Master Mix	Mixture
Reference Dye	Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
2X Brilliant III SYBR® Green QPCR Master Mix		
Glycerol	≥10 - ≤30	56-81-5
Dimethyl sulfoxide	≤10	67-68-5

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

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	Primer Set A 42 bp	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.
		Primer Set B 123 bp	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.
		DNA Standard 1 16 Samples	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.
		DNA Standard 2 16 Samples	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.
		DNA Standard 3 16 Samples	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.
		DNA Standard 4 16 Samples	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.
		DNA Standard 5 16 Samples	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 DNA	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.
		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.
Inhalation	:	Primer Set A 42 bp	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		Primer Set B 123 bp	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		DNA Standard 1 16 Samples	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		DNA Standard 2 16 Samples	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		DNA Standard 3 16 Samples	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		DNA Standard 4 16 Samples	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		DNA Standard 5 16 Samples	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Section 4. First aid measures

	Reference DNA	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	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.
Skin contact :	Primer Set A 42 bp	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Primer Set B 123 bp	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	DNA Standard 1 16 Samples	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	DNA Standard 2 16 Samples	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	DNA Standard 3 16 Samples	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	DNA Standard 4 16 Samples	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	DNA Standard 5 16 Samples	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Reference DNA	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	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.
Ingestion :	Primer Set A 42 bp	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.
	Primer Set B 123 bp	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.
	DNA Standard 1 16 Samples	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.

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DNA Standard 2 16 Samples	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.
DNA Standard 3 16 Samples	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.
DNA Standard 4 16 Samples	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.
DNA Standard 5 16 Samples	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 DNA	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.
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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact :

Primer Set A 42 bp	No known significant effects or critical hazards.
Primer Set B 123 bp	No known significant effects or critical hazards.
DNA Standard 1 16 Samples	No known significant effects or critical hazards.
DNA Standard 2 16 Samples	No known significant effects or critical hazards.
DNA Standard 3 16 Samples	No known significant effects or critical hazards.
DNA Standard 4 16 Samples	No known significant effects or critical hazards.
DNA Standard 5 16 Samples	No known significant effects or critical hazards.
Reference DNA	No known significant effects or critical hazards.
2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.

Section 4. First aid measures

		Reference Dye	No known significant effects or critical hazards.
Inhalation	:	Primer Set A 42 bp	No known significant effects or critical hazards.
		Primer Set B 123 bp	No known significant effects or critical hazards.
		DNA Standard 1 16 Samples	No known significant effects or critical hazards.
		DNA Standard 2 16 Samples	No known significant effects or critical hazards.
		DNA Standard 3 16 Samples	No known significant effects or critical hazards.
		DNA Standard 4 16 Samples	No known significant effects or critical hazards.
		DNA Standard 5 16 Samples	No known significant effects or critical hazards.
		Reference DNA	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.
Skin contact	:	Primer Set A 42 bp	No known significant effects or critical hazards.
		Primer Set B 123 bp	No known significant effects or critical hazards.
		DNA Standard 1 16 Samples	No known significant effects or critical hazards.
		DNA Standard 2 16 Samples	No known significant effects or critical hazards.
		DNA Standard 3 16 Samples	No known significant effects or critical hazards.
		DNA Standard 4 16 Samples	No known significant effects or critical hazards.
		DNA Standard 5 16 Samples	No known significant effects or critical hazards.
		Reference DNA	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.
Ingestion	:	Primer Set A 42 bp	No known significant effects or critical hazards.
		Primer Set B 123 bp	No known significant effects or critical hazards.
		DNA Standard 1 16 Samples	No known significant effects or critical hazards.
		DNA Standard 2 16 Samples	No known significant effects or critical hazards.
		DNA Standard 3 16 Samples	No known significant effects or critical hazards.
		DNA Standard 4 16 Samples	No known significant effects or critical hazards.
		DNA Standard 5 16 Samples	No known significant effects or critical hazards.
		Reference DNA	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.

Over-exposure signs/symptoms

Eye contact	:	Primer Set A 42 bp	No specific data.
		Primer Set B 123 bp	No specific data.
		DNA Standard 1 16 Samples	No specific data.
		DNA Standard 2 16 Samples	No specific data.
		DNA Standard 3 16 Samples	No specific data.
		DNA Standard 4 16 Samples	No specific data.
		DNA Standard 5 16 Samples	No specific data.
		Reference DNA	No specific data.
		2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
		Reference Dye	No specific data.
Inhalation	:	Primer Set A 42 bp	No specific data.
		Primer Set B 123 bp	No specific data.
		DNA Standard 1 16 Samples	No specific data.
		DNA Standard 2 16 Samples	No specific data.
		DNA Standard 3 16 Samples	No specific data.
		DNA Standard 4 16 Samples	No specific data.
		DNA Standard 5 16 Samples	No specific data.
		Reference DNA	No specific data.
		2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
		Reference Dye	No specific data.

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Skin contact	:	Primer Set A 42 bp	No specific data.
		Primer Set B 123 bp	No specific data.
		DNA Standard 1 16 Samples	No specific data.
		DNA Standard 2 16 Samples	No specific data.
		DNA Standard 3 16 Samples	No specific data.
		DNA Standard 4 16 Samples	No specific data.
		DNA Standard 5 16 Samples	No specific data.
		Reference DNA	No specific data.
		2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
		Reference Dye	No specific data.
Ingestion	:	Primer Set A 42 bp	No specific data.
		Primer Set B 123 bp	No specific data.
		DNA Standard 1 16 Samples	No specific data.
		DNA Standard 2 16 Samples	No specific data.
		DNA Standard 3 16 Samples	No specific data.
		DNA Standard 4 16 Samples	No specific data.
		DNA Standard 5 16 Samples	No specific data.
		Reference DNA	No specific data.
		2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
		Reference Dye	No specific data.

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

Notes to physician	:	Primer Set A 42 bp	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Primer Set B 123 bp	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		DNA Standard 1 16 Samples	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		DNA Standard 2 16 Samples	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		DNA Standard 3 16 Samples	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		DNA Standard 4 16 Samples	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		DNA Standard 5 16 Samples	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Reference DNA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		2X Brilliant III SYBR® Green QPCR Master Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		Reference Dye	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

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Specific treatments :

Primer Set A 42 bp	No specific treatment.
Primer Set B 123 bp	No specific treatment.
DNA Standard 1 16 Samples	No specific treatment.
DNA Standard 2 16 Samples	No specific treatment.
DNA Standard 3 16 Samples	No specific treatment.
DNA Standard 4 16 Samples	No specific treatment.
DNA Standard 5 16 Samples	No specific treatment.
Reference DNA	No specific treatment.
2X Brilliant III SYBR® Green QPCR Master Mix	No specific treatment.
Reference Dye	No specific treatment.

Protection of first-aiders :

Primer Set A 42 bp	No action shall be taken involving any personal risk or without suitable training.
Primer Set B 123 bp	No action shall be taken involving any personal risk or without suitable training.
DNA Standard 1 16 Samples	No action shall be taken involving any personal risk or without suitable training.
DNA Standard 2 16 Samples	No action shall be taken involving any personal risk or without suitable training.
DNA Standard 3 16 Samples	No action shall be taken involving any personal risk or without suitable training.
DNA Standard 4 16 Samples	No action shall be taken involving any personal risk or without suitable training.
DNA Standard 5 16 Samples	No action shall be taken involving any personal risk or without suitable training.
Reference DNA	No action shall be taken involving any personal risk or without suitable training.
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.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media :

Primer Set A 42 bp	Use an extinguishing agent suitable for the surrounding fire.
Primer Set B 123 bp	Use an extinguishing agent suitable for the surrounding fire.
DNA Standard 1 16 Samples	Use an extinguishing agent suitable for the surrounding fire.
DNA Standard 2 16 Samples	Use an extinguishing agent suitable for the surrounding fire.
DNA Standard 3 16 Samples	Use an extinguishing agent suitable for the surrounding fire.
DNA Standard 4 16 Samples	Use an extinguishing agent suitable for the surrounding fire.
DNA Standard 5 16 Samples	Use an extinguishing agent suitable for the surrounding fire.
Reference DNA	Use an extinguishing agent suitable for the surrounding fire.
2X Brilliant III SYBR® Green QPCR Master Mix	Use an extinguishing agent suitable for the surrounding fire.
Reference Dye	Use an extinguishing agent suitable for the surrounding fire.

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Unsuitable extinguishing media :

Primer Set A 42 bp	None known.
Primer Set B 123 bp	None known.
DNA Standard 1 16 Samples	None known.
DNA Standard 2 16 Samples	None known.
DNA Standard 3 16 Samples	None known.
DNA Standard 4 16 Samples	None known.
DNA Standard 5 16 Samples	None known.
Reference DNA	None known.
2X Brilliant III SYBR® Green QPCR Master Mix	None known.
Reference Dye	None known.

Specific hazards arising from the chemical :

Primer Set A 42 bp	In a fire or if heated, a pressure increase will occur and the container may burst.
Primer Set B 123 bp	In a fire or if heated, a pressure increase will occur and the container may burst.
DNA Standard 1 16 Samples	In a fire or if heated, a pressure increase will occur and the container may burst.
DNA Standard 2 16 Samples	In a fire or if heated, a pressure increase will occur and the container may burst.
DNA Standard 3 16 Samples	In a fire or if heated, a pressure increase will occur and the container may burst.
DNA Standard 4 16 Samples	In a fire or if heated, a pressure increase will occur and the container may burst.
DNA Standard 5 16 Samples	In a fire or if heated, a pressure increase will occur and the container may burst.
Reference DNA	In a fire or if heated, a pressure increase will occur and the container may burst.
2X Brilliant III SYBR® Green QPCR Master Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
Reference Dye	In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products :

Primer Set A 42 bp	No specific data.
Primer Set B 123 bp	No specific data.
DNA Standard 1 16 Samples	No specific data.
DNA Standard 2 16 Samples	No specific data.
DNA Standard 3 16 Samples	No specific data.
DNA Standard 4 16 Samples	No specific data.
DNA Standard 5 16 Samples	No specific data.
Reference DNA	No specific data.
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

Special protective actions for fire-fighters :

Primer Set A 42 bp	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.
Primer Set B 123 bp	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

Section 5. Firefighting measures

		without suitable training.
	DNA Standard 1 16 Samples	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.
	DNA Standard 2 16 Samples	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.
	DNA Standard 3 16 Samples	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.
	DNA Standard 4 16 Samples	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.
	DNA Standard 5 16 Samples	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 DNA	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	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.
Special protective equipment for fire-fighters :	Primer Set A 42 bp	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Primer Set B 123 bp	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	DNA Standard 1 16 Samples	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	DNA Standard 2 16 Samples	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	DNA Standard 3 16 Samples	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	DNA Standard 4 16 Samples	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	DNA Standard 5 16 Samples	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	Reference DNA	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

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	(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.
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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: Primer Set A 42 bp	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.
	Primer Set B 123 bp	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.
	DNA Standard 1 16 Samples	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.
	DNA Standard 2 16 Samples	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.
	DNA Standard 3 16 Samples	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.
	DNA Standard 4 16 Samples	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.
	DNA Standard 5 16 Samples	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 DNA	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

Section 6. Accidental release measures

		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.
For emergency responders :	Primer Set A 42 bp	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".
	Primer Set B 123 bp	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".
	DNA Standard 1 16 Samples	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".
	DNA Standard 2 16 Samples	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".
	DNA Standard 3 16 Samples	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".
	DNA Standard 4 16 Samples	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".
	DNA Standard 5 16 Samples	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 DNA	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".
	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".
Environmental precautions :	Primer Set A 42 bp	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).
	Primer Set B 123 bp	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).
	DNA Standard 1 16 Samples	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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	Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
DNA Standard 2 16 Samples	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).
DNA Standard 3 16 Samples	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).
DNA Standard 4 16 Samples	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).
DNA Standard 5 16 Samples	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 DNA	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).
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).

Methods and material for containment and cleaning up

Methods for cleaning up	: Primer Set A 42 bp	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.
	Primer Set B 123 bp	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.
	DNA Standard 1 16 Samples	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.
	DNA Standard 2 16 Samples	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

Section 6. Accidental release measures

	disposal contractor.
DNA Standard 3 16 Samples	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.
DNA Standard 4 16 Samples	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.
DNA Standard 5 16 Samples	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 DNA	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.
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.

Section 7. Handling and storage

Precautions for safe handling

Protective measures :

Primer Set A 42 bp	Put on appropriate personal protective equipment (see Section 8).
Primer Set B 123 bp	Put on appropriate personal protective equipment (see Section 8).
DNA Standard 1 16 Samples	Put on appropriate personal protective equipment (see Section 8).
DNA Standard 2 16 Samples	Put on appropriate personal protective equipment (see Section 8).
DNA Standard 3 16 Samples	Put on appropriate personal protective equipment (see Section 8).
DNA Standard 4 16 Samples	Put on appropriate personal protective equipment (see Section 8).
DNA Standard 5 16 Samples	Put on appropriate personal protective equipment (see Section 8).
Reference DNA	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).
Reference Dye	Put on appropriate personal protective equipment (see Section 8).

Section 7. Handling and storage

Advice on general occupational hygiene	: Primer Set A 42 bp	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.
	Primer Set B 123 bp	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.
	DNA Standard 1 16 Samples	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.
	DNA Standard 2 16 Samples	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.
	DNA Standard 3 16 Samples	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.
	DNA Standard 4 16 Samples	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.
	DNA Standard 5 16 Samples	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 DNA	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.

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	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.
Conditions for safe storage, including any incompatibilities :	Primer Set A 42 bp	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.
	Primer Set B 123 bp	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.
	DNA Standard 1 16 Samples	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.
	DNA Standard 2 16 Samples	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.
	DNA Standard 3 16 Samples	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.
	DNA Standard 4 16 Samples	Store in accordance with local regulations. Store in

Section 7. Handling and storage

	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.
DNA Standard 5 16 Samples	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 DNA	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.
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.

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
2X Brilliant III SYBR® Green QPCR Master Mix Glycerol Dimethyl sulfoxide	**Safe Work Australia (Australia, 1/2014).** TWA: 10 mg/m³ 8 hours. **DFG MAC-values list (Germany, 7/2015). Absorbed through skin.** PEAK: 320 mg/m³, 4 times per shift, 15 minutes. TWA: 160 mg/m³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours.

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

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

Individual protection measures

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

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

Section 9. Physical and chemical properties

Appearance

Section 9. Physical and chemical properties

Physical state :

Primer Set A 42 bp	Liquid.
Primer Set B 123 bp	Liquid.
DNA Standard 1 16 Samples	Liquid.
DNA Standard 2 16 Samples	Liquid.
DNA Standard 3 16 Samples	Liquid.
DNA Standard 4 16 Samples	Liquid.
DNA Standard 5 16 Samples	Liquid.
Reference DNA	Liquid.
2X Brilliant III SYBR® Green QPCR Master Mix	Liquid.
Reference Dye	Liquid.

Colour :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
Reference Dye	Not available.

Odour :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
Reference Dye	Not available.

Odour threshold :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
Reference Dye	Not available.

pH :

Primer Set A 42 bp	7.8
Primer Set B 123 bp	7.8
DNA Standard 1 16 Samples	7.8
DNA Standard 2 16 Samples	7.8
DNA Standard 3 16 Samples	7.8
DNA Standard 4 16 Samples	7.8
DNA Standard 5 16 Samples	7.8
Reference DNA	7.8
2X Brilliant III SYBR® Green QPCR Master Mix	7.8
Reference Dye	Not available.

Melting point :

Primer Set A 42 bp	0°C (32°F)
Primer Set B 123 bp	0°C (32°F)
DNA Standard 1 16 Samples	0°C (32°F)
DNA Standard 2 16 Samples	0°C (32°F)
DNA Standard 3 16 Samples	0°C (32°F)
DNA Standard 4 16 Samples	0°C (32°F)
DNA Standard 5 16 Samples	0°C (32°F)

Section 9. Physical and chemical properties

		Reference DNA	0°C (32°F)
		2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
		Reference Dye	Not available.
Boiling point	:	Primer Set A 42 bp	100°C (212°F)
		Primer Set B 123 bp	100°C (212°F)
		DNA Standard 1 16 Samples	100°C (212°F)
		DNA Standard 2 16 Samples	100°C (212°F)
		DNA Standard 3 16 Samples	100°C (212°F)
		DNA Standard 4 16 Samples	100°C (212°F)
		DNA Standard 5 16 Samples	100°C (212°F)
		Reference DNA	100°C (212°F)
		2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
		Reference Dye	Not available.
Flash point	:	Primer Set A 42 bp	Not available.
		Primer Set B 123 bp	Not available.
		DNA Standard 1 16 Samples	Not available.
		DNA Standard 2 16 Samples	Not available.
		DNA Standard 3 16 Samples	Not available.
		DNA Standard 4 16 Samples	Not available.
		DNA Standard 5 16 Samples	Not available.
		Reference DNA	Not available.
		2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
		Reference Dye	Not available.
Evaporation rate	:	Primer Set A 42 bp	Not available.
		Primer Set B 123 bp	Not available.
		DNA Standard 1 16 Samples	Not available.
		DNA Standard 2 16 Samples	Not available.
		DNA Standard 3 16 Samples	Not available.
		DNA Standard 4 16 Samples	Not available.
		DNA Standard 5 16 Samples	Not available.
		Reference DNA	Not available.
		2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
		Reference Dye	Not available.
Flammability (solid, gas)	:	Primer Set A 42 bp	Not applicable.
		Primer Set B 123 bp	Not applicable.
		DNA Standard 1 16 Samples	Not applicable.
		DNA Standard 2 16 Samples	Not applicable.
		DNA Standard 3 16 Samples	Not applicable.
		DNA Standard 4 16 Samples	Not applicable.
		DNA Standard 5 16 Samples	Not applicable.
		Reference DNA	Not applicable.
		2X Brilliant III SYBR® Green QPCR Master Mix	Not applicable.
		Reference Dye	Not applicable.
Lower and upper explosive (flammable) limits	:	Primer Set A 42 bp	Not available.
		Primer Set B 123 bp	Not available.
		DNA Standard 1 16 Samples	Not available.
		DNA Standard 2 16 Samples	Not available.
		DNA Standard 3 16 Samples	Not available.
		DNA Standard 4 16 Samples	Not available.
		DNA Standard 5 16 Samples	Not available.
		Reference DNA	Not available.
		2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
		Reference Dye	Not available.

Section 9. Physical and chemical properties

Vapour pressure :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
Reference Dye	Not available.

Vapour density :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
Reference Dye	Not available.

Relative density :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Not available.
Reference Dye	Not available.

Solubility :

Primer Set A 42 bp	Easily soluble in the following materials: cold water and hot water.
Primer Set B 123 bp	Easily soluble in the following materials: cold water and hot water.
DNA Standard 1 16 Samples	Easily soluble in the following materials: cold water and hot water.
DNA Standard 2 16 Samples	Easily soluble in the following materials: cold water and hot water.
DNA Standard 3 16 Samples	Easily soluble in the following materials: cold water and hot water.
DNA Standard 4 16 Samples	Easily soluble in the following materials: cold water and hot water.
DNA Standard 5 16 Samples	Easily soluble in the following materials: cold water and hot water.
Reference DNA	Easily soluble in the following materials: cold water and hot water.
2X Brilliant III SYBR® Green QPCR Master Mix	Soluble in the following materials: cold water and hot water.
Reference Dye	Easily soluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/water :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green	Not available.

Section 9. Physical and chemical properties

		QPCR Master Mix Reference Dye	Not available.
Auto-ignition temperature	:	Primer Set A 42 bp	Not available.
		Primer Set B 123 bp	Not available.
		DNA Standard 1 16 Samples	Not available.
		DNA Standard 2 16 Samples	Not available.
		DNA Standard 3 16 Samples	Not available.
		DNA Standard 4 16 Samples	Not available.
		DNA Standard 5 16 Samples	Not available.
		Reference DNA	Not available.
		2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	Not available.
Decomposition temperature	:	Primer Set A 42 bp	Not available.
		Primer Set B 123 bp	Not available.
		DNA Standard 1 16 Samples	Not available.
		DNA Standard 2 16 Samples	Not available.
		DNA Standard 3 16 Samples	Not available.
		DNA Standard 4 16 Samples	Not available.
		DNA Standard 5 16 Samples	Not available.
		Reference DNA	Not available.
		2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	Not available.
Viscosity	:	Primer Set A 42 bp	Not available.
		Primer Set B 123 bp	Not available.
		DNA Standard 1 16 Samples	Not available.
		DNA Standard 2 16 Samples	Not available.
		DNA Standard 3 16 Samples	Not available.
		DNA Standard 4 16 Samples	Not available.
		DNA Standard 5 16 Samples	Not available.
		Reference DNA	Not available.
		2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	Not available.

Section 10. Stability and reactivity

Reactivity	:	Primer Set A 42 bp	No specific test data related to reactivity available for this product or its ingredients.
		Primer Set B 123 bp	No specific test data related to reactivity available for this product or its ingredients.
		DNA Standard 1 16 Samples	No specific test data related to reactivity available for this product or its ingredients.
		DNA Standard 2 16 Samples	No specific test data related to reactivity available for this product or its ingredients.
		DNA Standard 3 16 Samples	No specific test data related to reactivity available for this product or its ingredients.
		DNA Standard 4 16 Samples	No specific test data related to reactivity available for this product or its ingredients.
		DNA Standard 5 16 Samples	No specific test data related to reactivity available for this product or its ingredients.
		Reference DNA	No specific test data related to reactivity available for this product or its ingredients.
		2X Brilliant III SYBR® Green QPCR Master Mix Reference Dye	No specific test data related to reactivity available for this product or its ingredients.

Section 10. Stability and reactivity

Chemical stability :

Primer Set A 42 bp	The product is stable.
Primer Set B 123 bp	The product is stable.
DNA Standard 1 16 Samples	The product is stable.
DNA Standard 2 16 Samples	The product is stable.
DNA Standard 3 16 Samples	The product is stable.
DNA Standard 4 16 Samples	The product is stable.
DNA Standard 5 16 Samples	The product is stable.
Reference DNA	The product is stable.
2X Brilliant III SYBR® Green QPCR Master Mix	The product is stable.
Reference Dye	The product is stable.

Possibility of hazardous reactions :

Primer Set A 42 bp	Under normal conditions of storage and use, hazardous reactions will not occur.
Primer Set B 123 bp	Under normal conditions of storage and use, hazardous reactions will not occur.
DNA Standard 1 16 Samples	Under normal conditions of storage and use, hazardous reactions will not occur.
DNA Standard 2 16 Samples	Under normal conditions of storage and use, hazardous reactions will not occur.
DNA Standard 3 16 Samples	Under normal conditions of storage and use, hazardous reactions will not occur.
DNA Standard 4 16 Samples	Under normal conditions of storage and use, hazardous reactions will not occur.
DNA Standard 5 16 Samples	Under normal conditions of storage and use, hazardous reactions will not occur.
Reference DNA	Under normal conditions of storage and use, hazardous reactions will not occur.
2X Brilliant III SYBR® Green QPCR Master Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
Reference Dye	Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid :

Primer Set A 42 bp	No specific data.
Primer Set B 123 bp	No specific data.
DNA Standard 1 16 Samples	No specific data.
DNA Standard 2 16 Samples	No specific data.
DNA Standard 3 16 Samples	No specific data.
DNA Standard 4 16 Samples	No specific data.
DNA Standard 5 16 Samples	No specific data.
Reference DNA	No specific data.
2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
Reference Dye	No specific data.

Incompatible materials :

Primer Set A 42 bp	May react or be incompatible with oxidising materials.
Primer Set B 123 bp	May react or be incompatible with oxidising materials.
DNA Standard 1 16 Samples	May react or be incompatible with oxidising materials.
DNA Standard 2 16 Samples	May react or be incompatible with oxidising materials.
DNA Standard 3 16 Samples	May react or be incompatible with oxidising materials.
DNA Standard 4 16 Samples	May react or be incompatible with oxidising materials.
DNA Standard 5 16 Samples	May react or be incompatible with oxidising materials.
Reference DNA	May react or be incompatible with oxidising materials.
2X Brilliant III SYBR® Green QPCR Master Mix	May react or be incompatible with oxidising materials.
Reference Dye	May react or be incompatible with oxidising materials.

Section 10. Stability and reactivity

Hazardous decomposition products :	Primer Set A 42 bp	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Primer Set B 123 bp	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	DNA Standard 1 16 Samples	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	DNA Standard 2 16 Samples	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	DNA Standard 3 16 Samples	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	DNA Standard 4 16 Samples	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	DNA Standard 5 16 Samples	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Reference DNA	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	2X Brilliant III SYBR® Green QPCR Master Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Reference Dye	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

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	-
Dimethyl sulfoxide	LD50 Dermal	Rat	40000 mg/kg	-
	LD50 Oral	Rat	14500 mg/kg	-

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 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 milligrams	-

Sensitisation

Not available.

Section 11. Toxicological information

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure :

Primer Set A 42 bp	Not available.
Primer Set B 123 bp	Not available.
DNA Standard 1 16 Samples	Not available.
DNA Standard 2 16 Samples	Not available.
DNA Standard 3 16 Samples	Not available.
DNA Standard 4 16 Samples	Not available.
DNA Standard 5 16 Samples	Not available.
Reference DNA	Not available.
2X Brilliant III SYBR® Green QPCR Master Mix	Routes of entry anticipated: Oral, Dermal, Inhalation.
Reference Dye	Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact :

Primer Set A 42 bp	No known significant effects or critical hazards.
Primer Set B 123 bp	No known significant effects or critical hazards.
DNA Standard 1 16 Samples	No known significant effects or critical hazards.
DNA Standard 2 16 Samples	No known significant effects or critical hazards.
DNA Standard 3 16 Samples	No known significant effects or critical hazards.
DNA Standard 4 16 Samples	No known significant effects or critical hazards.
DNA Standard 5 16 Samples	No known significant effects or critical hazards.
Reference DNA	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.

Inhalation :

Primer Set A 42 bp	No known significant effects or critical hazards.
Primer Set B 123 bp	No known significant effects or critical hazards.
DNA Standard 1 16 Samples	No known significant effects or critical hazards.
DNA Standard 2 16 Samples	No known significant effects or critical hazards.
DNA Standard 3 16 Samples	No known significant effects or critical hazards.
DNA Standard 4 16 Samples	No known significant effects or critical hazards.
DNA Standard 5 16 Samples	No known significant effects or critical hazards.
Reference DNA	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.

Skin contact :

Primer Set A 42 bp	No known significant effects or critical hazards.
Primer Set B 123 bp	No known significant effects or critical hazards.
DNA Standard 1 16 Samples	No known significant effects or critical hazards.
DNA Standard 2 16 Samples	No known significant effects or critical hazards.
DNA Standard 3 16 Samples	No known significant effects or critical hazards.
DNA Standard 4 16 Samples	No known significant effects or critical hazards.
DNA Standard 5 16 Samples	No known significant effects or critical hazards.
Reference DNA	No known significant effects or critical hazards.

Section 11. Toxicological information

	2X Brilliant III SYBR® Green QPCR Master Mix	No known significant effects or critical hazards.
	Reference Dye	No known significant effects or critical hazards.
Ingestion :	Primer Set A 42 bp	No known significant effects or critical hazards.
	Primer Set B 123 bp	No known significant effects or critical hazards.
	DNA Standard 1 16 Samples	No known significant effects or critical hazards.
	DNA Standard 2 16 Samples	No known significant effects or critical hazards.
	DNA Standard 3 16 Samples	No known significant effects or critical hazards.
	DNA Standard 4 16 Samples	No known significant effects or critical hazards.
	DNA Standard 5 16 Samples	No known significant effects or critical hazards.
	Reference DNA	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.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact :	Primer Set A 42 bp	No specific data.
	Primer Set B 123 bp	No specific data.
	DNA Standard 1 16 Samples	No specific data.
	DNA Standard 2 16 Samples	No specific data.
	DNA Standard 3 16 Samples	No specific data.
	DNA Standard 4 16 Samples	No specific data.
	DNA Standard 5 16 Samples	No specific data.
	Reference DNA	No specific data.
	2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
	Reference Dye	No specific data.
Inhalation :	Primer Set A 42 bp	No specific data.
	Primer Set B 123 bp	No specific data.
	DNA Standard 1 16 Samples	No specific data.
	DNA Standard 2 16 Samples	No specific data.
	DNA Standard 3 16 Samples	No specific data.
	DNA Standard 4 16 Samples	No specific data.
	DNA Standard 5 16 Samples	No specific data.
	Reference DNA	No specific data.
	2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
	Reference Dye	No specific data.
Skin contact :	Primer Set A 42 bp	No specific data.
	Primer Set B 123 bp	No specific data.
	DNA Standard 1 16 Samples	No specific data.
	DNA Standard 2 16 Samples	No specific data.
	DNA Standard 3 16 Samples	No specific data.
	DNA Standard 4 16 Samples	No specific data.
	DNA Standard 5 16 Samples	No specific data.
	Reference DNA	No specific data.
	2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
	Reference Dye	No specific data.
Ingestion :	Primer Set A 42 bp	No specific data.
	Primer Set B 123 bp	No specific data.
	DNA Standard 1 16 Samples	No specific data.
	DNA Standard 2 16 Samples	No specific data.
	DNA Standard 3 16 Samples	No specific data.
	DNA Standard 4 16 Samples	No specific data.
	DNA Standard 5 16 Samples	No specific data.
	Reference DNA	No specific data.
	2X Brilliant III SYBR® Green QPCR Master Mix	No specific data.
	Reference Dye	No specific data.

Section 11. Toxicological information

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	: Primer Set A 42 bp	No known significant effects or critical hazards.
	Primer Set B 123 bp	No known significant effects or critical hazards.
	DNA Standard 1 16 Samples	No known significant effects or critical hazards.
	DNA Standard 2 16 Samples	No known significant effects or critical hazards.
	DNA Standard 3 16 Samples	No known significant effects or critical hazards.
	DNA Standard 4 16 Samples	No known significant effects or critical hazards.
	DNA Standard 5 16 Samples	No known significant effects or critical hazards.
	Reference DNA	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.
Carcinogenicity	: Primer Set A 42 bp	No known significant effects or critical hazards.
	Primer Set B 123 bp	No known significant effects or critical hazards.
	DNA Standard 1 16 Samples	No known significant effects or critical hazards.
	DNA Standard 2 16 Samples	No known significant effects or critical hazards.
	DNA Standard 3 16 Samples	No known significant effects or critical hazards.
	DNA Standard 4 16 Samples	No known significant effects or critical hazards.
	DNA Standard 5 16 Samples	No known significant effects or critical hazards.
	Reference DNA	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.
Mutagenicity	: Primer Set A 42 bp	No known significant effects or critical hazards.
	Primer Set B 123 bp	No known significant effects or critical hazards.
	DNA Standard 1 16 Samples	No known significant effects or critical hazards.
	DNA Standard 2 16 Samples	No known significant effects or critical hazards.
	DNA Standard 3 16 Samples	No known significant effects or critical hazards.
	DNA Standard 4 16 Samples	No known significant effects or critical hazards.
	DNA Standard 5 16 Samples	No known significant effects or critical hazards.
	Reference DNA	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.
Teratogenicity	: Primer Set A 42 bp	No known significant effects or critical hazards.
	Primer Set B 123 bp	No known significant effects or critical hazards.
	DNA Standard 1 16 Samples	No known significant effects or critical hazards.
	DNA Standard 2 16 Samples	No known significant effects or critical hazards.
	DNA Standard 3 16 Samples	No known significant effects or critical hazards.
	DNA Standard 4 16 Samples	No known significant effects or critical hazards.
	DNA Standard 5 16 Samples	No known significant effects or critical hazards.
	Reference DNA	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.

Section 11. Toxicological information

Developmental effects	:	Primer Set A 42 bp	No known significant effects or critical hazards.
		Primer Set B 123 bp	No known significant effects or critical hazards.
		DNA Standard 1 16 Samples	No known significant effects or critical hazards.
		DNA Standard 2 16 Samples	No known significant effects or critical hazards.
		DNA Standard 3 16 Samples	No known significant effects or critical hazards.
		DNA Standard 4 16 Samples	No known significant effects or critical hazards.
		DNA Standard 5 16 Samples	No known significant effects or critical hazards.
		Reference DNA	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.
Fertility effects	:	Primer Set A 42 bp	No known significant effects or critical hazards.
		Primer Set B 123 bp	No known significant effects or critical hazards.
		DNA Standard 1 16 Samples	No known significant effects or critical hazards.
		DNA Standard 2 16 Samples	No known significant effects or critical hazards.
		DNA Standard 3 16 Samples	No known significant effects or critical hazards.
		DNA Standard 4 16 Samples	No known significant effects or critical hazards.
		DNA Standard 5 16 Samples	No known significant effects or critical hazards.
		Reference DNA	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.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
2X Brilliant III SYBR® Green QPCR Master Mix			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 100 ul/L Marine water	Algae - Ulva lactuca	72 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2X Brilliant III SYBR® Green QPCR Master Mix				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
2X Brilliant III SYBR® Green QPCR Master Mix			
Glycerol	-1.76	-	low
Dimethyl sulfoxide	-1.35	3.16	low

Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{OC}) : Not available.

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

Section 13. Disposal considerations

Disposal methods : 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.

Section 14. Transport information

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

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

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

6

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

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 : All components are listed or exempted.

Canada : All components are listed or exempted.

China : All components are listed or exempted.

Section 15. Regulatory information

Europe : Not determined.

Japan : **Japan inventory (ENCS)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.

Malaysia : All components are listed or exempted.

New Zealand : All components are listed or exempted.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 21/08/2018

Date of previous issue : 03/04/2015

Version : 2

Key to abbreviations : ADG = Australian Dangerous Goods
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
NOHSC = National Occupational Health and Safety Commission
SUSMP = Standard Uniform Schedule of Medicine and Poisons
UN = United Nations

Procedure used to derive the classification

Classification	Justification
Not classified.	

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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