Conforms to US OSHA Hazard Communication 29CFR1910.1200

SAFETY DATA SHEET

Agilent Technologies

SideStep II QRT-PCR Master Mix Kit - 1-Step, Part Number 400917

Section 1. Identification

1.1 Product identifier

Product name : SideStep II QRT-PCR Master Mix Kit - 1-Step, Part Number 400917

Part no. (chemical kit) : 400917

Part no. :

SideStep Lysis & Stabilization Buffer	400900-21
SideStep II Neutralization Buffer	400916-53
SideStep II DNase I	400916-51
SideStep II DNase Digestion Buffer 10X	400916-52
QPCR Normalization Primer 1	400916-54
QPCR Normalization Primer 2	400916-55
QPCR Normalization Primer 3	400916-56
2X Brilliant II QRT-PCR Master Mix	600809-51
Reference Dye	600530-53
RT/RNase Block Enzyme Mixture	600809-52

Validation date : 11/23/2022

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

Identified uses : Analytical reagent.

SideStep Lysis & Stabilization Buffer	10 ml
SideStep II Neutralization Buffer	0.1 ml
SideStep II DNase I	0.05 ml (500 U 10 U/µl)
SideStep II DNase Digestion Buffer 10X	0.1 ml
QPCR Normalization Primer 1	0.0125 ml (45 µM 12.5 µl)
QPCR Normalization Primer 2	0.0125 ml (30 µM 12.5 µl)
QPCR Normalization Primer 3	0.0125 ml (45 µM 12.5 µl)
2X Brilliant II QRT-PCR Master Mix	2 x 2.5 ml
Reference Dye	0.1 ml (100 µl 1 mM)
RT/RNase Block Enzyme Mixture	0.4 ml

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer : Agilent Technologies, Inc.
5301 Stevens Creek Blvd
Santa Clara, CA 95051, USA
800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status :

SideStep Lysis & Stabilization Buffer	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
SideStep II Neutralization Buffer	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SideStep II DNase I	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
SideStep II DNase Digestion Buffer 10X	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR

Section 2. Hazards identification

	1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
QPCR Normalization Primer 1	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
QPCR Normalization Primer 2	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
QPCR Normalization Primer 3	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
2X Brilliant II QRT-PCR Master Mix	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
Reference Dye	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
RT/RNase Block Enzyme Mixture	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

SideStep Lysis & Stabilization Buffer

H319	EYE IRRITATION - Category 2A
H412	AQUATIC HAZARD (LONG-TERM) - Category 3

SideStep II DNase I

H320	EYE IRRITATION - Category 2B

2X Brilliant II QRT-PCR Master Mix

H320	EYE IRRITATION - Category 2B

RT/RNase Block Enzyme Mixture

H320	EYE IRRITATION - Category 2B

SideStep II DNase Digestion Buffer 10X	Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 1.2%

2.2 GHS label elements

Hazard pictograms : SideStep Lysis & Stabilization Buffer

Section 2. Hazards identification

Signal word :

SideStep Lysis & Stabilization Buffer	Warning
SideStep II Neutralization Buffer	No signal word.
SideStep II DNase I	Warning
SideStep II DNase Digestion Buffer 10X	No signal word.
QPCR Normalization Primer 1	No signal word.
QPCR Normalization Primer 2	No signal word.
QPCR Normalization Primer 3	No signal word.
2X Brilliant II QRT-PCR Master Mix	Warning
Reference Dye	No signal word.
RT/RNase Block Enzyme Mixture	Warning

Hazard statements :

SideStep Lysis & Stabilization Buffer	H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.
SideStep II Neutralization Buffer	No known significant effects or critical hazards.
SideStep II DNase I	H320 - Causes eye irritation.
SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
QPCR Normalization Primer 1	No known significant effects or critical hazards.
QPCR Normalization Primer 2	No known significant effects or critical hazards.
QPCR Normalization Primer 3	No known significant effects or critical hazards.
2X Brilliant II QRT-PCR Master Mix	H320 - Causes eye irritation.
Reference Dye	No known significant effects or critical hazards.
RT/RNase Block Enzyme Mixture	H320 - Causes eye irritation.

Precautionary statements

Prevention :

SideStep Lysis & Stabilization Buffer	P280 - Wear eye or face protection. P273 - Avoid release to the environment.
SideStep II Neutralization Buffer	Not applicable.
SideStep II DNase I	Not applicable.
SideStep II DNase Digestion Buffer 10X	Not applicable.
QPCR Normalization Primer 1	Not applicable.
QPCR Normalization Primer 2	Not applicable.
QPCR Normalization Primer 3	Not applicable.
2X Brilliant II QRT-PCR Master Mix	Not applicable.
Reference Dye	Not applicable.
RT/RNase Block Enzyme Mixture	Not applicable.

Response :

SideStep Lysis & Stabilization Buffer	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
SideStep II Neutralization Buffer	Not applicable.
SideStep II DNase I	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
SideStep II DNase Digestion Buffer 10X	Not applicable.
QPCR Normalization Primer 1	Not applicable.
QPCR Normalization Primer 2	Not applicable.
QPCR Normalization Primer 3	Not applicable.
2X Brilliant II QRT-PCR Master Mix	P305 + P351 + P338 - IF IN EYES: Rinse

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			cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
		Reference Dye	Not applicable.
		RT/RNase Block Enzyme Mixture	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
Storage	:	SideStep Lysis & Stabilization Buffer	Not applicable.
		SideStep II Neutralization Buffer	Not applicable.
		SideStep II DNase I	Not applicable.
		SideStep II DNase Digestion Buffer 10X	Not applicable.
		QPCR Normalization Primer 1	Not applicable.
		QPCR Normalization Primer 2	Not applicable.
		QPCR Normalization Primer 3	Not applicable.
		2X Brilliant II QRT-PCR Master Mix	Not applicable.
		Reference Dye	Not applicable.
		RT/RNase Block Enzyme Mixture	Not applicable.
Disposal	:	SideStep Lysis & Stabilization Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		SideStep II Neutralization Buffer	Not applicable.
		SideStep II DNase I	Not applicable.
		SideStep II DNase Digestion Buffer 10X	Not applicable.
		QPCR Normalization Primer 1	Not applicable.
		QPCR Normalization Primer 2	Not applicable.
		QPCR Normalization Primer 3	Not applicable.
		2X Brilliant II QRT-PCR Master Mix	Not applicable.
		Reference Dye	Not applicable.
		RT/RNase Block Enzyme Mixture	Not applicable.
Supplemental label elements	:	SideStep Lysis & Stabilization Buffer	None known.
		SideStep II Neutralization Buffer	None known.
		SideStep II DNase I	None known.
		SideStep II DNase Digestion Buffer 10X	None known.
		QPCR Normalization Primer 1	None known.
		QPCR Normalization Primer 2	None known.
		QPCR Normalization Primer 3	None known.
		2X Brilliant II QRT-PCR Master Mix	None known.
		Reference Dye	None known.
		RT/RNase Block Enzyme Mixture	None known.

2.3 Other hazards

Hazards not otherwise classified	:	SideStep Lysis & Stabilization Buffer	None known.
		SideStep II Neutralization Buffer	None known.
		SideStep II DNase I	None known.
		SideStep II DNase Digestion Buffer 10X	None known.
		QPCR Normalization Primer 1	None known.
		QPCR Normalization Primer 2	None known.
		QPCR Normalization Primer 3	None known.

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2X Brilliant II QRT-PCR Master Mix	None known.
Reference Dye	None known.
RT/RNase Block Enzyme Mixture	None known.

Section 3. Composition/information on ingredients

Substance/mixture :

SideStep Lysis & Stabilization Buffer	Mixture
SideStep II Neutralization Buffer	Mixture
SideStep II DNase I	Mixture
SideStep II DNase Digestion Buffer 10X	Mixture
QPCR Normalization Primer 1	Mixture
QPCR Normalization Primer 2	Mixture
QPCR Normalization Primer 3	Mixture
2X Brilliant II QRT-PCR Master Mix	Mixture
Reference Dye	Mixture
RT/RNase Block Enzyme Mixture	Mixture

Ingredient name	%	CAS number
SideStep Lysis & Stabilization Buffer		
Polyoxyethylene octyl phenyl ether	<2.5	9002-93-1
SideStep II DNase I		
Glycerol	≥50 - ≤75	56-81-5
2X Brilliant II QRT-PCR Master Mix		
Glycerol	≥10 - ≤25	56-81-5
Polyethylene glycol	≥10 - ≤25	25322-68-3
Dimethyl sulfoxide	≤3	67-68-5
Magnesium chloride	<0.25	7786-30-3
Reference Dye		
Potassium chloride	≤5	7447-40-7
RT/RNase Block Enzyme Mixture		
Glycerol	≥50 - ≤75	56-81-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

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

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact	:	SideStep Lysis & Stabilization Buffer	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.
		SideStep II Neutralization 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.
		SideStep II DNase I	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. If irritation persists, get medical attention.
		SideStep II DNase Digestion Buffer 10X	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.
		QPCR Normalization Primer 1	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.
		QPCR Normalization Primer 2	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.
		QPCR Normalization Primer 3	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 II QRT-PCR Master Mix	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. If irritation persists, get medical attention.
		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.
		RT/RNase Block Enzyme Mixture	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. If irritation persists, get medical attention.
Inhalation	:	SideStep Lysis & Stabilization Buffer	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.
		SideStep II Neutralization Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

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	attention if symptoms occur.
SideStep II DNase I	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.
SideStep II DNase Digestion Buffer 10X	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
QPCR Normalization Primer 1	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
QPCR Normalization Primer 2	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
QPCR Normalization Primer 3	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
2X Brilliant II QRT-PCR Master Mix	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.
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.
RT/RNase Block Enzyme Mixture	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.

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Skin contact	:	SideStep Lysis & Stabilization Buffer	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.
		SideStep II Neutralization Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		SideStep II DNase I	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.
		SideStep II DNase Digestion Buffer 10X	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		QPCR Normalization Primer 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		QPCR Normalization Primer 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		QPCR Normalization Primer 3	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		2X Brilliant II QRT-PCR Master Mix	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.
		Reference Dye	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		RT/RNase Block Enzyme Mixture	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	:	SideStep Lysis & Stabilization Buffer	Wash out mouth with water. Remove dentures if any. 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 adverse health effects persist or are severe. 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.
		SideStep II Neutralization Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
		SideStep II DNase I	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the

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	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 adverse health effects persist or are severe. 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.
SideStep II DNase Digestion Buffer 10X	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
QPCR Normalization Primer 1	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
QPCR Normalization Primer 2	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
QPCR Normalization Primer 3	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
2X Brilliant II QRT-PCR Master Mix	Wash out mouth with water. Remove dentures if any. 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 adverse health effects persist or are severe. 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.
Reference Dye	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
RT/RNase Block Enzyme Mixture	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels

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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 adverse health effects persist or are severe. 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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	SideStep Lysis & Stabilization Buffer	Causes serious eye irritation.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	Causes eye irritation.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	Causes eye irritation.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	Causes eye irritation.
Inhalation	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
Skin contact	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
Ingestion	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.

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2X Brilliant II QRT-PCR Master Mix		No known significant effects or critical hazards.
Reference Dye		No known significant effects or critical hazards.
RT/RNase Block Enzyme Mixture		No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	:	SideStep Lysis & Stabilization Buffer	Adverse symptoms may include the following: pain or irritation watering redness
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	Adverse symptoms may include the following: irritation watering redness
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	Adverse symptoms may include the following: irritation watering redness
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	Adverse symptoms may include the following: irritation watering redness
Inhalation	:	SideStep Lysis & Stabilization Buffer	No specific data.
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	No specific data.
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	No specific data.
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	No specific data.
Skin contact	:	SideStep Lysis & Stabilization Buffer	No specific data.
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	No specific data.
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	No specific data.
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	No specific data.

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Ingestion	:	SideStep Lysis & Stabilization Buffer	No specific data.
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	No specific data.
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	No specific data.
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	No specific data.

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

Notes to physician	:	SideStep Lysis & Stabilization Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SideStep II Neutralization Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SideStep II DNase I	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SideStep II DNase Digestion Buffer 10X	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		QPCR Normalization Primer 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		QPCR Normalization Primer 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		QPCR Normalization Primer 3	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		2X Brilliant II QRT-PCR 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.
		RT/RNase Block Enzyme Mixture	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	SideStep Lysis & Stabilization Buffer	No specific treatment.
		SideStep II Neutralization Buffer	No specific treatment.
		SideStep II DNase I	No specific treatment.
		SideStep II DNase Digestion Buffer 10X	No specific treatment.
		QPCR Normalization Primer 1	No specific treatment.
		QPCR Normalization Primer 2	No specific treatment.
		QPCR Normalization Primer 3	No specific treatment.
		2X Brilliant II QRT-PCR Master Mix	No specific treatment.
		Reference Dye	No specific treatment.
		RT/RNase Block Enzyme Mixture	No specific treatment.

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Protection of first-aiders	:	SideStep Lysis & Stabilization Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
		SideStep II Neutralization Buffer	No action shall be taken involving any personal risk or without suitable training.
		SideStep II DNase I	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
		SideStep II DNase Digestion Buffer 10X	No action shall be taken involving any personal risk or without suitable training.
		QPCR Normalization Primer 1	No action shall be taken involving any personal risk or without suitable training.
		QPCR Normalization Primer 2	No action shall be taken involving any personal risk or without suitable training.
		QPCR Normalization Primer 3	No action shall be taken involving any personal risk or without suitable training.
		2X Brilliant II QRT-PCR Master Mix	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
		Reference Dye	No action shall be taken involving any personal risk or without suitable training.
		RT/RNase Block Enzyme Mixture	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	SideStep Lysis & Stabilization Buffer	Use an extinguishing agent suitable for the surrounding fire.
		SideStep II Neutralization Buffer	Use an extinguishing agent suitable for the surrounding fire.
		SideStep II DNase I	Use an extinguishing agent suitable for the surrounding fire.
		SideStep II DNase Digestion Buffer 10X	Use an extinguishing agent suitable for the surrounding fire.
		QPCR Normalization Primer 1	Use an extinguishing agent suitable for the surrounding fire.
		QPCR Normalization Primer 2	Use an extinguishing agent suitable for the surrounding fire.
		QPCR Normalization Primer 3	Use an extinguishing agent suitable for the surrounding fire.
		2X Brilliant II QRT-PCR Master Mix	Use an extinguishing agent suitable for the surrounding fire.
		Reference Dye	Use an extinguishing agent suitable for the surrounding fire.
		RT/RNase Block Enzyme Mixture	Use an extinguishing agent suitable for the surrounding fire.

Section 5. Fire-fighting measures

Unsuitable extinguishing media	:	SideStep Lysis & Stabilization Buffer	None known.
		SideStep II Neutralization Buffer	None known.
		SideStep II DNase I	None known.
		SideStep II DNase Digestion Buffer 10X	None known.
		QPCR Normalization Primer 1	None known.
		QPCR Normalization Primer 2	None known.
		QPCR Normalization Primer 3	None known.
		2X Brilliant II QRT-PCR Master Mix	None known.
		Reference Dye	None known.
		RT/RNase Block Enzyme Mixture	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	:	SideStep Lysis & Stabilization Buffer	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
		SideStep II Neutralization Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
		SideStep II DNase I	In a fire or if heated, a pressure increase will occur and the container may burst.
		SideStep II DNase Digestion Buffer 10X	In a fire or if heated, a pressure increase will occur and the container may burst.
		QPCR Normalization Primer 1	In a fire or if heated, a pressure increase will occur and the container may burst.
		QPCR Normalization Primer 2	In a fire or if heated, a pressure increase will occur and the container may burst.
		QPCR Normalization Primer 3	In a fire or if heated, a pressure increase will occur and the container may burst.
		2X Brilliant II QRT-PCR 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.
		RT/RNase Block Enzyme Mixture	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	:	SideStep Lysis & Stabilization Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	Decomposition products may include the following materials: carbon dioxide carbon monoxide
		SideStep II DNase Digestion Buffer 10X	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides

Section 5. Fire-fighting measures

	Reference Dye	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	RT/RNase Block Enzyme Mixture	Decomposition products may include the following materials: carbon dioxide carbon monoxide

5.3 Advice for firefighters

Special protective actions for fire-fighters	:	SideStep Lysis & Stabilization 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.
		SideStep II Neutralization 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.
		SideStep II DNase I	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.
		SideStep II DNase Digestion Buffer 10X	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.
		QPCR Normalization Primer 1	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.
		QPCR Normalization Primer 2	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.
		QPCR Normalization Primer 3	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 II QRT-PCR 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.
		RT/RNase Block Enzyme Mixture	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

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Special protective equipment for fire-fighters	:	SideStep Lysis & Stabilization Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		SideStep II Neutralization Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		SideStep II DNase I	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		SideStep II DNase Digestion Buffer 10X	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		QPCR Normalization Primer 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		QPCR Normalization Primer 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		QPCR Normalization Primer 3	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
		2X Brilliant II QRT-PCR 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.
		RT/RNase Block Enzyme Mixture	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:	SideStep Lysis & Stabilization 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
		SideStep II Neutralization 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 spilled material. Put on appropriate personal protective equipment.
		SideStep II DNase I	No action shall be taken involving any personal

Section 6. Accidental release measures

	risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
SideStep II DNase Digestion Buffer 10X	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 spilled material. Put on appropriate personal protective equipment.
QPCR Normalization Primer 1	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 spilled material. Put on appropriate personal protective equipment.
QPCR Normalization Primer 2	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 spilled material. Put on appropriate personal protective equipment.
QPCR Normalization Primer 3	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 spilled material. Put on appropriate personal protective equipment.
2X Brilliant II QRT-PCR 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Put on appropriate personal protective equipment.
RT/RNase Block Enzyme Mixture	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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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For emergency responders :	SideStep Lysis & Stabilization Buffer	If specialized 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".
	SideStep II Neutralization Buffer	If specialized 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".
	SideStep II DNase I	If specialized 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".
	SideStep II DNase Digestion Buffer 10X	If specialized 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".
	QPCR Normalization Primer 1	If specialized 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".
	QPCR Normalization Primer 2	If specialized 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".
	QPCR Normalization Primer 3	If specialized 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 II QRT-PCR Master Mix	If specialized 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 specialized 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".
	RT/RNase Block Enzyme Mixture	If specialized 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 :	SideStep Lysis & Stabilization Buffer	Avoid dispersal of spilled 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). Water polluting material. May be harmful to the environment if released in large quantities.
	SideStep II Neutralization Buffer	Avoid dispersal of spilled 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).
	SideStep II DNase I	Avoid dispersal of spilled 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).
	SideStep II DNase Digestion Buffer 10X	Avoid dispersal of spilled 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).
QPCR Normalization Primer 1	Avoid dispersal of spilled 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).
QPCR Normalization Primer 2	Avoid dispersal of spilled 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).
QPCR Normalization Primer 3	Avoid dispersal of spilled 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 II QRT-PCR Master Mix	Avoid dispersal of spilled 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 spilled 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).
RT/RNase Block Enzyme Mixture	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	: SideStep Lysis & Stabilization 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.
	SideStep II Neutralization 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.
	SideStep II DNase I	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.
	SideStep II DNase Digestion Buffer 10X	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.

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QPCR Normalization Primer 1	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.
QPCR Normalization Primer 2	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.
QPCR Normalization Primer 3	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 II QRT-PCR 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.
RT/RNase Block Enzyme Mixture	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

7.1 Precautions for safe handling

Protective measures	:	SideStep Lysis & Stabilization Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. 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.
		SideStep II Neutralization Buffer	Put on appropriate personal protective equipment (see Section 8).
		SideStep II DNase I	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor 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.
		SideStep II DNase Digestion	Put on appropriate personal protective equipment

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	Buffer 10X	(see Section 8).
	QPCR Normalization Primer 1	Put on appropriate personal protective equipment (see Section 8).
	QPCR Normalization Primer 2	Put on appropriate personal protective equipment (see Section 8).
	QPCR Normalization Primer 3	Put on appropriate personal protective equipment (see Section 8).
	2X Brilliant II QRT-PCR Master Mix	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor 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.
	Reference Dye	Put on appropriate personal protective equipment (see Section 8).
	RT/RNase Block Enzyme Mixture	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor 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.
Advice on general occupational hygiene :	SideStep Lysis & Stabilization 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.
	SideStep II Neutralization 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.
	SideStep II DNase I	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.
	SideStep II DNase Digestion Buffer 10X	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.
	QPCR Normalization Primer 1	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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	QPCR Normalization Primer 2	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.
	QPCR Normalization Primer 3	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 II QRT-PCR 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.
	RT/RNase Block Enzyme Mixture	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 :	SideStep Lysis & Stabilization 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SideStep II Neutralization 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SideStep II DNase I	Store in accordance with local regulations. Store in original container protected from direct sunlight in a

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	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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
SideStep II DNase Digestion Buffer 10X	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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
QPCR Normalization Primer 1	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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
QPCR Normalization Primer 2	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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
QPCR Normalization Primer 3	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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
2X Brilliant II QRT-PCR 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

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	to prevent leakage. Do not store in unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
RT/RNase Block Enzyme Mixture	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 unlabeled 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	:	SideStep Lysis & Stabilization Buffer	Industrial applications, Professional applications.
		SideStep II Neutralization Buffer	Industrial applications, Professional applications.
		SideStep II DNase I	Industrial applications, Professional applications.
		SideStep II DNase Digestion Buffer 10X	Industrial applications, Professional applications.
		QPCR Normalization Primer 1	Industrial applications, Professional applications.
		QPCR Normalization Primer 2	Industrial applications, Professional applications.
		QPCR Normalization Primer 3	Industrial applications, Professional applications.
		2X Brilliant II QRT-PCR Master Mix	Industrial applications, Professional applications.
		Reference Dye	Industrial applications, Professional applications.
		RT/RNase Block Enzyme Mixture	Industrial applications, Professional applications.
Industrial sector specific solutions	:	SideStep Lysis & Stabilization Buffer	Not available.
		SideStep II Neutralization Buffer	Not available.
		SideStep II DNase I	Not available.
		SideStep II DNase Digestion Buffer 10X	Not available.
		QPCR Normalization Primer 1	Not available.
		QPCR Normalization Primer 2	Not available.
		QPCR Normalization Primer 3	Not available.
		2X Brilliant II QRT-PCR Master Mix	Not available.
		Reference Dye	Not available.
		RT/RNase Block Enzyme Mixture	Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
SideStep Lysis & Stabilization Buffer	
Polyoxyethylene octyl phenyl ether	None.
SideStep II DNase I	
Glycerol	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust
2X Brilliant II QRT-PCR Master Mix	
Glycerol	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust
Polyethylene glycol	**OARS WEEL (United States, 1/2021).** TWA: 10 mg/m³ 8 hours.
Dimethyl sulfoxide	**OARS WEEL (United States, 1/2021).** TWA: 250 ppm 8 hours.
Magnesium chloride	None.
Reference Dye	
Potassium chloride	None.
RT/RNase Block Enzyme Mixture	
Glycerol	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

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.

Section 8. Exposure controls/personal protection

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: chemical splash goggles.

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.

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 and safety characteristics

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

Appearance

Physical state :

SideStep Lysis & Stabilization Buffer	Liquid.
SideStep II Neutralization Buffer	Liquid.
SideStep II DNase I	Liquid.
SideStep II DNase Digestion Buffer 10X	Liquid.
QPCR Normalization Primer 1	Liquid.
QPCR Normalization Primer 2	Liquid.
QPCR Normalization Primer 3	Liquid.
2X Brilliant II QRT-PCR Master Mix	Liquid.
Reference Dye	Liquid.
RT/RNase Block Enzyme Mixture	Liquid.

Color :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Section 9. Physical and chemical properties and safety characteristics

Odor	:	SideStep Lysis & Stabilization Buffer	Not available.
		SideStep II Neutralization Buffer	Not available.
		SideStep II DNase I	Not available.
		SideStep II DNase Digestion Buffer 10X	Not available.
		QPCR Normalization Primer 1	Not available.
		QPCR Normalization Primer 2	Not available.
		QPCR Normalization Primer 3	Not available.
		2X Brilliant II QRT-PCR Master Mix	Not available.
		Reference Dye	Not available.
		RT/RNase Block Enzyme Mixture	Not available.
Odor threshold	:	SideStep Lysis & Stabilization Buffer	Not available.
		SideStep II Neutralization Buffer	Not available.
		SideStep II DNase I	Not available.
		SideStep II DNase Digestion Buffer 10X	Not available.
		QPCR Normalization Primer 1	Not available.
		QPCR Normalization Primer 2	Not available.
		QPCR Normalization Primer 3	Not available.
		2X Brilliant II QRT-PCR Master Mix	Not available.
		Reference Dye	Not available.
		RT/RNase Block Enzyme Mixture	Not available.
pH	:	SideStep Lysis & Stabilization Buffer	Not available.
		SideStep II Neutralization Buffer	Not available.
		SideStep II DNase I	7.5
		SideStep II DNase Digestion Buffer 10X	Not available.
		QPCR Normalization Primer 1	Not available.
		QPCR Normalization Primer 2	Not available.
		QPCR Normalization Primer 3	Not available.
		2X Brilliant II QRT-PCR Master Mix	8
		Reference Dye	8
		RT/RNase Block Enzyme Mixture	8
Melting point/freezing point	:	SideStep Lysis & Stabilization Buffer	0°C (32°F)
		SideStep II Neutralization Buffer	0°C (32°F)
		SideStep II DNase I	Not available.
		SideStep II DNase Digestion Buffer 10X	0°C (32°F)
		QPCR Normalization Primer 1	0°C (32°F)
		QPCR Normalization Primer 2	0°C (32°F)
		QPCR Normalization Primer 3	0°C (32°F)
		2X Brilliant II QRT-PCR Master Mix	Not available.
		Reference Dye	Not available.
		RT/RNase Block Enzyme Mixture	Not available.
Boiling point, initial boiling point, and boiling range	:	SideStep Lysis & Stabilization Buffer	100°C (212°F)
		SideStep II Neutralization Buffer	100°C (212°F)
		SideStep II DNase I	Not available.
		SideStep II DNase Digestion Buffer 10X	100°C (212°F)
		QPCR Normalization Primer 1	100°C (212°F)
		QPCR Normalization Primer 2	100°C (212°F)
		QPCR Normalization Primer 3	100°C (212°F)
		2X Brilliant II QRT-PCR Master Mix	Not available.
		Reference Dye	Not available.

Section 9. Physical and chemical properties and safety characteristics

RT/RNase Block Enzyme Mixture Not available.

Flash point :

Ingredient name	Closed cup °C	Closed cup °F	Closed cup Method	Open cup °C	Open cup °F	Open cup Method
SideStep Lysis & Stabilization Buffer						
Polyoxyethylene octyl phenyl ether	251	483.8				
SideStep II DNase I						
Glycerol				177	350.6	
2X Brilliant II QRT-PCR Master Mix						
Dimethyl sulfoxide	87	188.6	ASTM D 93	87	188.6	
Polyethylene glycol	171 to 235	339.8 to 455		199 to 238	390.2 to 460.4	
RT/RNase Block Enzyme Mixture						
Glycerol				177	350.6	

Evaporation rate :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Flammability :

SideStep Lysis & Stabilization Buffer	Not applicable.
SideStep II Neutralization Buffer	Not applicable.
SideStep II DNase I	Not applicable.
SideStep II DNase Digestion Buffer 10X	Not applicable.
QPCR Normalization Primer 1	Not applicable.
QPCR Normalization Primer 2	Not applicable.
QPCR Normalization Primer 3	Not applicable.
2X Brilliant II QRT-PCR Master Mix	Not applicable.
Reference Dye	Not applicable.
RT/RNase Block Enzyme Mixture	Not applicable.

Section 9. Physical and chemical properties and safety characteristics

Lower and upper explosion limit/flammability limit :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Vapor pressure :

Ingredient name	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
SideStep Lysis & Stabilization Buffer						
water	23.8	3.2		92.258	12.3	
Polyoxyethylene octyl phenyl ether	0.997581	0.13				
SideStep II Neutralization Buffer						
water	23.8	3.2		92.258	12.3	
SideStep II DNase I						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
SideStep II DNase Digestion Buffer 10X						
water	23.8	3.2		92.258	12.3	
QPCR Normalization Primer 1						
water	23.8	3.2		92.258	12.3	
QPCR Normalization Primer 2						
water	23.8	3.2		92.258	12.3	
QPCR						

Section 9. Physical and chemical properties and safety characteristics

Normalization Primer 3						
water	23.8	3.2		92.258	12.3	
2X Brilliant II QRT-PCR Master Mix						
water	23.8	3.2		92.258	12.3	
Dimethyl sulfoxide	0.42	0.056	EU A.4			
Reference Dye						
water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
RT/RNase Block Enzyme Mixture						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	

Relative vapor density :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Relative density :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Section 9. Physical and chemical properties and safety characteristics

Solubility(ies) :

Media	Result
SideStep Lysis & Stabilization Buffer	
water	Soluble
SideStep II Neutralization Buffer	
water	Soluble
SideStep II DNase I	
water	Soluble
SideStep II DNase Digestion Buffer 10X	
water	Soluble
QPCR Normalization Primer 1	
water	Soluble
QPCR Normalization Primer 2	
water	Soluble
QPCR Normalization Primer 3	
water	Soluble
2X Brilliant II QRT-PCR Master Mix	
cold water	Soluble
hot water	Soluble
Reference Dye	
water	Soluble
RT/RNase Block Enzyme Mixture	
water	Soluble

Partition coefficient: n-octanol/water :

SideStep Lysis & Stabilization Buffer	Not applicable.
SideStep II Neutralization Buffer	Not applicable.
SideStep II DNase I	Not applicable.
SideStep II DNase Digestion Buffer 10X	Not applicable.
QPCR Normalization Primer 1	Not applicable.
QPCR Normalization Primer 2	Not applicable.
QPCR Normalization Primer 3	Not applicable.
2X Brilliant II QRT-PCR Master Mix	Not applicable.
Reference Dye	Not applicable.
RT/RNase Block Enzyme Mixture	Not applicable.

Auto-ignition temperature :

Ingredient name	°C	°F	Method
SideStep II DNase I			
Glycerol	370	698	
2X Brilliant II QRT-PCR Master Mix			
Dimethyl sulfoxide	300 to 302	572 to 575.6	
Polyethylene glycol	360	680	
RT/RNase Block Enzyme Mixture			

Section 9. Physical and chemical properties and safety characteristics

	Glycerol	370	698	

Decomposition temperature :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Viscosity :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Not available.

Particle characteristics

Median particle size :

SideStep Lysis & Stabilization Buffer	Not applicable.
SideStep II Neutralization Buffer	Not applicable.
SideStep II DNase I	Not applicable.
SideStep II DNase Digestion Buffer 10X	Not applicable.
QPCR Normalization Primer 1	Not applicable.
QPCR Normalization Primer 2	Not applicable.
QPCR Normalization Primer 3	Not applicable.
2X Brilliant II QRT-PCR Master Mix	Not applicable.
Reference Dye	Not applicable.
RT/RNase Block Enzyme Mixture	Not applicable.

Section 10. Stability and reactivity

10.1 Reactivity :

SideStep Lysis & Stabilization Buffer	No specific test data related to reactivity available for this product or its ingredients.
SideStep II Neutralization Buffer	No specific test data related to reactivity available for this product or its ingredients.
SideStep II DNase I	No specific test data related to reactivity available for this product or its ingredients.
SideStep II DNase Digestion Buffer 10X	No specific test data related to reactivity available for this product or its ingredients.
QPCR Normalization Primer 1	No specific test data related to reactivity available for this product or its ingredients.
QPCR Normalization Primer 2	No specific test data related to reactivity available for this product or its ingredients.
QPCR Normalization Primer 3	No specific test data related to reactivity available for this product or its ingredients.
2X Brilliant II QRT-PCR Master Mix	No specific test data related to reactivity available for this product or its ingredients.
Reference Dye	No specific test data related to reactivity available for this product or its ingredients.

Section 10. Stability and reactivity

	RT/RNase Block Enzyme Mixture	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability :	SideStep Lysis & Stabilization Buffer	The product is stable.
	SideStep II Neutralization Buffer	The product is stable.
	SideStep II DNase I	The product is stable.
	SideStep II DNase Digestion Buffer 10X	The product is stable.
	QPCR Normalization Primer 1	The product is stable.
	QPCR Normalization Primer 2	The product is stable.
	QPCR Normalization Primer 3	The product is stable.
	2X Brilliant II QRT-PCR Master Mix	The product is stable.
	Reference Dye	The product is stable.
	RT/RNase Block Enzyme Mixture	The product is stable.
10.3 Possibility of hazardous reactions :	SideStep Lysis & Stabilization Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	SideStep II Neutralization Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	SideStep II DNase I	Under normal conditions of storage and use, hazardous reactions will not occur.
	SideStep II DNase Digestion Buffer 10X	Under normal conditions of storage and use, hazardous reactions will not occur.
	QPCR Normalization Primer 1	Under normal conditions of storage and use, hazardous reactions will not occur.
	QPCR Normalization Primer 2	Under normal conditions of storage and use, hazardous reactions will not occur.
	QPCR Normalization Primer 3	Under normal conditions of storage and use, hazardous reactions will not occur.
	2X Brilliant II QRT-PCR 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.
	RT/RNase Block Enzyme Mixture	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid :	SideStep Lysis & Stabilization Buffer	No specific data.
	SideStep II Neutralization Buffer	No specific data.
	SideStep II DNase I	No specific data.
	SideStep II DNase Digestion Buffer 10X	No specific data.
	QPCR Normalization Primer 1	No specific data.
	QPCR Normalization Primer 2	No specific data.
	QPCR Normalization Primer 3	No specific data.
	2X Brilliant II QRT-PCR Master Mix	No specific data.
	Reference Dye	No specific data.
	RT/RNase Block Enzyme Mixture	No specific data.
10.5 Incompatible materials :	SideStep Lysis & Stabilization Buffer	May react or be incompatible with oxidizing materials.
	SideStep II Neutralization Buffer	May react or be incompatible with oxidizing materials.
	SideStep II DNase I	May react or be incompatible with oxidizing materials.
	SideStep II DNase Digestion Buffer 10X	May react or be incompatible with oxidizing materials.

Section 10. Stability and reactivity

	QPCR Normalization Primer 1	May react or be incompatible with oxidizing materials.
	QPCR Normalization Primer 2	May react or be incompatible with oxidizing materials.
	QPCR Normalization Primer 3	May react or be incompatible with oxidizing materials.
	2X Brilliant II QRT-PCR Master Mix	May react or be incompatible with oxidizing materials.
	Reference Dye	May react or be incompatible with oxidizing materials.
	RT/RNase Block Enzyme Mixture	May react or be incompatible with oxidizing materials.
10.6 Hazardous decomposition products :	SideStep Lysis & Stabilization Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SideStep II Neutralization Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SideStep II DNase I	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SideStep II DNase Digestion Buffer 10X	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	QPCR Normalization Primer 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	QPCR Normalization Primer 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	QPCR Normalization Primer 3	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	2X Brilliant II QRT-PCR 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.
	RT/RNase Block Enzyme Mixture	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
SideStep Lysis & Stabilization Buffer				
Polyoxyethylene octyl phenyl ether	LD50 Oral	Rat	1800 mg/kg	-
SideStep II DNase I				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
2X Brilliant II QRT-PCR Master Mix				

Section 11. Toxicological information

Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Dimethyl sulfoxide	LD50 Dermal	Rat	40000 mg/kg	-
	LD50 Oral	Rat	14500 mg/kg	-
Magnesium chloride	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-
Reference Dye				
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
RT/RNase Block Enzyme Mixture				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
SideStep Lysis & Stabilization Buffer					
Polyoxyethylene octyl phenyl ether	Skin - Mild irritant	Rabbit	-	24 hours 500 uL	-
SideStep II DNase I					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
2X Brilliant II QRT-PCR Master Mix					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Polyethylene glycol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	500 mg	-
Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Reference Dye					
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
RT/RNase Block Enzyme Mixture					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

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 the likely routes of exposure :

SideStep Lysis & Stabilization Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Routes of entry anticipated: Oral, Dermal, Inhalation.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact :

SideStep Lysis & Stabilization Buffer	Causes serious eye irritation.
SideStep II Neutralization Buffer	No known significant effects or critical hazards.
SideStep II DNase I	Causes eye irritation.
SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
QPCR Normalization Primer 1	No known significant effects or critical hazards.
QPCR Normalization Primer 2	No known significant effects or critical hazards.
QPCR Normalization Primer 3	No known significant effects or critical hazards.
2X Brilliant II QRT-PCR Master Mix	Causes eye irritation.
Reference Dye	No known significant effects or critical hazards.
RT/RNase Block Enzyme Mixture	Causes eye irritation.

Inhalation :

SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
SideStep II Neutralization Buffer	No known significant effects or critical hazards.
SideStep II DNase I	No known significant effects or critical hazards.
SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
QPCR Normalization Primer 1	No known significant effects or critical hazards.
QPCR Normalization Primer 2	No known significant effects or critical hazards.
QPCR Normalization Primer 3	No known significant effects or critical hazards.
2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
Reference Dye	No known significant effects or critical hazards.

Section 11. Toxicological information

		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
Skin contact	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
Ingestion	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	SideStep Lysis & Stabilization Buffer	Adverse symptoms may include the following: pain or irritation watering redness
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	Adverse symptoms may include the following: irritation watering redness
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	Adverse symptoms may include the following: irritation watering redness
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	Adverse symptoms may include the following: irritation watering redness
Inhalation	:	SideStep Lysis & Stabilization Buffer	No specific data.
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	No specific data.
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.

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		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	No specific data.
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	No specific data.
Skin contact	:	SideStep Lysis & Stabilization Buffer	No specific data.
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	No specific data.
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	No specific data.
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	No specific data.
Ingestion	:	SideStep Lysis & Stabilization Buffer	No specific data.
		SideStep II Neutralization Buffer	No specific data.
		SideStep II DNase I	No specific data.
		SideStep II DNase Digestion Buffer 10X	No specific data.
		QPCR Normalization Primer 1	No specific data.
		QPCR Normalization Primer 2	No specific data.
		QPCR Normalization Primer 3	No specific data.
		2X Brilliant II QRT-PCR Master Mix	No specific data.
		Reference Dye	No specific data.
		RT/RNase Block Enzyme Mixture	No specific data.

Delayed and immediate effects and also 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	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.

Section 11. Toxicological information

Carcinogenicity	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
Mutagenicity	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.
Reproductive toxicity	:	SideStep Lysis & Stabilization Buffer	No known significant effects or critical hazards.
		SideStep II Neutralization Buffer	No known significant effects or critical hazards.
		SideStep II DNase I	No known significant effects or critical hazards.
		SideStep II DNase Digestion Buffer 10X	No known significant effects or critical hazards.
		QPCR Normalization Primer 1	No known significant effects or critical hazards.
		QPCR Normalization Primer 2	No known significant effects or critical hazards.
		QPCR Normalization Primer 3	No known significant effects or critical hazards.
		2X Brilliant II QRT-PCR Master Mix	No known significant effects or critical hazards.
		Reference Dye	No known significant effects or critical hazards.
		RT/RNase Block Enzyme Mixture	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SideStep Lysis & Stabilization Buffer					
SideStep Lysis & Stabilization Buffer	180000.0	N/A	N/A	N/A	N/A
Polyoxyethylene octyl phenyl ether	1800	N/A	N/A	N/A	N/A
SideStep II DNase I					
Glycerol	12600	N/A	N/A	N/A	N/A
2X Brilliant II QRT-PCR Master Mix					
Glycerol	12600	N/A	N/A	N/A	N/A
Polyethylene glycol	28000	N/A	N/A	N/A	N/A
Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A
Magnesium chloride	2800	2500	N/A	N/A	N/A
Reference Dye					
Reference Dye	70270.3	N/A	N/A	N/A	N/A

Section 11. Toxicological information

Potassium chloride	2600	N/A	N/A	N/A	N/A
RT/RNase Block Enzyme Mixture					
Glycerol	12600	N/A	N/A	N/A	N/A

Other information :

SideStep Lysis & Stabilization Buffer	Not available.
SideStep II Neutralization Buffer	Not available.
SideStep II DNase I	Not available.
SideStep II DNase Digestion Buffer 10X	Not available.
QPCR Normalization Primer 1	Not available.
QPCR Normalization Primer 2	Not available.
QPCR Normalization Primer 3	Not available.
2X Brilliant II QRT-PCR Master Mix	Not available.
Reference Dye	Not available.
RT/RNase Block Enzyme Mixture	Adverse symptoms may include the following: May cause skin sensitization.

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
SideStep Lysis & Stabilization Buffer			
Polyoxyethylene octyl phenyl ether	Acute LC50 5.85 mg/l Fresh water	Crustaceans - Ceriodaphnia rigaudi - Neonate	48 hours
	Acute LC50 11.2 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4500 µg/l Fresh water	Fish - Pimephales promelas	96 hours
SideStep II DNase I			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
2X Brilliant II QRT-PCR Master Mix			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Polyethylene glycol	Acute LC50 >1000000 µg/l Fresh water	Fish - Salmo salar - Parr	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
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	21 days
Magnesium chloride	Acute EC50 >100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 180000 µg/l Fresh water	Crustaceans - Eudiaptomus padanus ssp. padanus - Adult	48 hours
	Acute IC50 6.8 mg/l Fresh water	Aquatic plants - Lemna aequinoctialis	96 hours
	Acute LC50 32000 µg/l Fresh water	Daphnia - Daphnia hyalina - Adult	48 hours
	Acute LC50 2120 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Cyprinus carpio	35 days

Section 12. Ecological information

Reference Dye			
Potassium chloride	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 83000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
	Acute LC50 509.65 mg/l Fresh water	Fish - Danio rerio	96 hours
RT/RNase Block Enzyme Mixture			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
SideStep II DNase I				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
2X Brilliant II QRT-PCR Master Mix				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Polyethylene glycol	OECD 301D Ready Biodegradability - Closed Bottle Test	74.85 % - Readily - 28 days	4 mg/l	-
Dimethyl sulfoxide	OECD 301D Ready Biodegradability - Closed Bottle Test	31 % - Not readily - 28 days	-	-
RT/RNase Block Enzyme Mixture				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
SideStep Lysis & Stabilization Buffer			
Polyoxyethylene octyl phenyl ether	-	-	Readily
2X Brilliant II QRT-PCR Master Mix			
Polyethylene glycol	-	-	Readily
Dimethyl sulfoxide	-	-	Not readily
Reference Dye			
Potassium chloride	-	-	Readily

Section 12. Ecological information

12.3 Bioaccumulative potential

Product/ingredient name	$LogP_{ow}$	BCF	Potential
SideStep Lysis & Stabilization Buffer			
Polyoxyethylene octyl phenyl ether	4.86	-	high
SideStep II DNase I			
Glycerol	-1.76	-	low
2X Brilliant II QRT-PCR Master Mix			
Glycerol	-1.76	-	low
Polyethylene glycol	-	3.2	low
Dimethyl sulfoxide	-1.35	3.16	low
Reference Dye			
Potassium chloride	-0.46	-	low
RT/RNase Block Enzyme Mixture			
Glycerol	-1.76	-	low

12.4 Mobility in soil

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

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

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized 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. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / IATA : Not regulated.

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 IMO instruments : Not available.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

U.S. Federal regulations : **TSCA 8(a) PAIR**: Polyoxyethylene octyl phenyl ether; Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Water Act (CWA) 311: Edetic acid; Ammonia

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification :

SideStep Lysis & Stabilization Buffer	EYE IRRITATION - Category 2A
SideStep II Neutralization Buffer	Not applicable.
SideStep II DNase I	EYE IRRITATION - Category 2B
SideStep II DNase Digestion Buffer 10X	Not applicable.
QPCR Normalization Primer 1	Not applicable.
QPCR Normalization Primer 2	Not applicable.
QPCR Normalization Primer 3	Not applicable.
2X Brilliant II QRT-PCR Master Mix	EYE IRRITATION - Category 2B
Reference Dye	Not applicable.
RT/RNase Block Enzyme Mixture	EYE IRRITATION - Category 2B

Composition/information on ingredients

Section 15. Regulatory information

Name	%	Classification
SideStep Lysis & Stabilization Buffer		
Polyoxyethylene octyl phenyl ether	<2.5	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
SideStep II DNase I		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
2X Brilliant II QRT-PCR Master Mix		
Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2B
Polyethylene glycol	≥10 - ≤25	EYE IRRITATION - Category 2B
Dimethyl sulfoxide	≤3	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2B
Reference Dye		
Potassium chloride	≤5	EYE IRRITATION - Category 2B
RT/RNase Block Enzyme Mixture		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; DIMETHYL SULFOXIDE

Pennsylvania : The following components are listed: 1,2,3-PROPANETRIOL

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Eurasian Economic Union : **Russian Federation inventory**: All components are listed or exempted.

Japan : **Japan inventory (CSCL)**: Not determined.
Japan inventory (ISHL): Not determined.

New Zealand : Not determined.

Section 15. Regulatory information

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. Other information

Procedure used to derive the classification

Classification	Justification
SideStep Lysis & Stabilization Buffer	
EYE IRRITATION - Category 2A	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method
SideStep II DNase I	
EYE IRRITATION - Category 2B	Calculation method
2X Brilliant II QRT-PCR Master Mix	
EYE IRRITATION - Category 2B	Calculation method
RT/RNase Block Enzyme Mixture	
EYE IRRITATION - Category 2B	Calculation method

History

Date of issue : 11/23/2022
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Version : 7

Key to abbreviations : 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)
N/A = Not available
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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