

SAFETY DATA SHEET



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

Section 1. Identification

Product identifier	: 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

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

Identified uses	: <input checked="" type="checkbox"/> Analytical reagent.	
	<input checked="" type="checkbox"/> 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

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

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

Section 2. Hazard(s) identification

Classification of the substance or mixture

SideStep Lysis & Stabilization Buffer	
H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
H412	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
SideStep II DNase I	
H320	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B
2X Brilliant II QRT-PCR Master Mix	
H320	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B
RT/RNase Block Enzyme Mixture	
H320	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B

Section 2. Hazard(s) identification

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

GHS label elements

Hazard pictograms

: SideStep Lysis & Stabilization Buffer



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.
 SideStep II Neutralization Buffer H412 - Harmful to aquatic life with long lasting effects. 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.
 SideStep II Neutralization Buffer P273 - Avoid release to the environment. 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.

Section 2. Hazard(s) identification

	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 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.

Section 2. Hazard(s) identification

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

Additional warning phrases

: 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.

Other hazards which do not result in classification

: 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.

Section 3. Composition and ingredient information

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	Mixture

Section 3. Composition and ingredient information

2	QPCR Normalization Primer	Mixture
3	2X Brilliant II QRT-PCR Master Mix	Mixture
	Reference Dye	Mixture
	RT/RNase Block Enzyme	Mixture
	Mixture	

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
SideStep Lysis & Stabilization Buffer		
Polyoxyethylene octyl phenyl ether	<2.5	9002-93-1
SideStep II DNase I		
Glycerol	≥30 - ≤60	56-81-5
2X Brilliant II QRT-PCR Master Mix		
Glycerol	≥10 - ≤30	56-81-5
Polyethylene glycol	≥10 - ≤30	25322-68-3
Dimethyl sulfoxide	≤3	67-68-5
RT/RNase Block Enzyme Mixture		
Glycerol	≥30 - ≤60	56-81-5

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.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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

Section 4. First aid measures

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.

Section 4. First aid measures

		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 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

Section 4. First aid measures

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.

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.

Section 4. First aid measures

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 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

Section 4. First aid measures

Reference Dye	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.
RT/RNase Block Enzyme Mixture	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. Wash out mouth with water. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

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

Section 4. First aid measures

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.	
<u>Over-exposure signs/symptoms</u>				
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.	

Section 4. First aid measures

	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.
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.

[Indication of immediate medical attention and special treatment needed, if necessary](#)

Section 4. First aid measures

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.
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.

Section 4. First aid measures

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. Firefighting measures

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.	
	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.	

Section 5. Firefighting measures

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
	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

Section 5. Firefighting measures

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.
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.

Section 5. Firefighting measures

QPCR Normalization Primer 3	pressure mode. 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

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 spilt material. Avoid breathing vapour 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 spilt material. Put on appropriate personal protective equipment.
SideStep II DNase I	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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 spilt 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 spilt 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 spilt 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

Section 6. Accidental release measures

		areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	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 spilt material. Avoid breathing vapour 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 spilt 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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders :	SideStep Lysis & Stabilization Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SideStep II Neutralization Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SideStep II DNase I	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SideStep II DNase Digestion Buffer 10X	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	QPCR Normalization Primer 1	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	QPCR Normalization Primer 2	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	QPCR Normalization Primer 3	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	2X Brilliant II QRT-PCR Master Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Reference Dye	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	RT/RNase Block Enzyme	If specialised clothing is required to deal with the

Section 6. Accidental release measures

Mixture spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions	: <input checked="" type="checkbox"/> SideStep Lysis & Stabilization Buffer	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
	SideStep II Neutralization Buffer	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SideStep II DNase I	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SideStep II DNase Digestion Buffer 10X	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	QPCR Normalization Primer 1	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	QPCR Normalization Primer 2	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	QPCR Normalization Primer 3	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	2X Brilliant II QRT-PCR Master Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	Reference Dye	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	RT/RNase Block Enzyme Mixture	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

[Methods and material for containment and cleaning up](#)

Section 6. Accidental release measures

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.
	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

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 vapour 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 SideStep II DNase I	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SideStep II DNase Digestion Buffer 10X QPCR Normalization Primer 1 QPCR Normalization Primer 2 QPCR Normalization Primer 3 2X Brilliant II QRT-PCR Master Mix	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	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 vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
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

Section 7. Handling and storage

SideStep II DNase Digestion Buffer 10X	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.
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.

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 unlabelled containers. Use appropriate containment to avoid

Section 7. Handling and storage

SideStep II Neutralization Buffer

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

SideStep II DNase I

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

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 unlabelled 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 unlabelled 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 unlabelled 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

Section 7. Handling and storage

2X Brilliant II QRT-PCR
Master Mix

Reference Dye

RT/RNase Block Enzyme
Mixture

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

Section 8. Exposure controls and personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
SideStep II DNase I Glycerol	Safe Work Australia (Australia, 12/2019). TWA: 10 mg/m ³ 8 hours.
2X Brilliant II QRT-PCR Master Mix Glycerol Polyethylene glycol	Safe Work Australia (Australia, 12/2019). TWA: 10 mg/m ³ 8 hours. DFG MAC-values list (Germany, 10/2021). PEAK: 400 mg/m ³ , 4 times per shift, 15 minutes. Form: inhalable fraction TWA: 200 mg/m ³ 8 hours. Form: inhalable fraction
Dimethyl sulfoxide	DFG MAC-values list (Germany, 10/2021). Absorbed through skin. PEAK: 320 mg/m ³ , 4 times per shift, 15 minutes. TWA: 160 mg/m ³ 8 hours.

Section 8. Exposure controls and personal protection

<p>RT/RNase Block Enzyme Mixture Glycerol</p>	<p>PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours.</p> <p>Safe Work Australia (Australia, 12/2019). TWA: 10 mg/m³ 8 hours.</p>
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Biological exposure indices

No exposure indices known.

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

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: 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

Section 9. Physical and chemical properties and safety characteristics

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.	
	Colour	:	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.	
Odour		:	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

Odour 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.	

Section 9. Physical and chemical properties and safety characteristics

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.
	RT/RNase Block Enzyme Mixture	Not available.

Flash point		Closed cup			Open cup		
		°C	°F	Method	°C	°F	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	Not available.

Section 9. Physical and chemical properties and safety characteristics

	Master Mix	
	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.
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.

Vapour pressure	Ingredient name	Vapour Pressure at 20°C			Vapour 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	

Section 9. Physical and chemical properties and safety characteristics

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 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

Section 9. Physical and chemical properties and safety characteristics

Relative vapour 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.

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

Section 9. Physical and chemical properties and safety characteristics

	hot water	Soluble																																	
	Reference Dye																																		
	water	Soluble																																	
	RT/RNase Block Enzyme Mixture																																		
	water	Soluble																																	
Partition coefficient: n-octanol/water	: <input checked="" type="checkbox"/> 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	: <table border="1"> <thead> <tr> <th>Ingredient name</th> <th>°C</th> <th>°F</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td>SideStep II DNase I</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Glycerol</td> <td>370</td> <td>698</td> <td></td> </tr> <tr> <td>2X Brilliant II QRT-PCR Master Mix</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Dimethyl sulfoxide</td> <td>300 to 302</td> <td>572 to 575.6</td> <td></td> </tr> <tr> <td>Polyethylene glycol</td> <td>360</td> <td>680</td> <td></td> </tr> <tr> <td>RT/RNase Block Enzyme Mixture</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Glycerol</td> <td>370</td> <td>698</td> <td></td> </tr> </tbody> </table>	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				Glycerol	370	698			
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																																			
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.																																	

Section 9. Physical and chemical properties and safety characteristics

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

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.
	RT/RNase Block Enzyme Mixture	No specific test data related to reactivity available for this product or its ingredients.

Section 10. Stability and reactivity

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.
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.
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.

Section 10. Stability and reactivity

Incompatible materials	:	SideStep Lysis & Stabilization Buffer	May react or be incompatible with oxidising materials.
		SideStep II Neutralization Buffer	May react or be incompatible with oxidising materials.
		SideStep II DNase I	May react or be incompatible with oxidising materials.
		SideStep II DNase Digestion Buffer 10X	May react or be incompatible with oxidising materials.
		QPCR Normalization Primer 1	May react or be incompatible with oxidising materials.
		QPCR Normalization Primer 2	May react or be incompatible with oxidising materials.
		QPCR Normalization Primer 3	May react or be incompatible with oxidising materials.
		2X Brilliant II QRT-PCR Master Mix	May react or be incompatible with oxidising materials.
		Reference Dye	May react or be incompatible with oxidising materials.
		RT/RNase Block Enzyme Mixture	May react or be incompatible with oxidising materials.
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

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

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 Glycerol Dimethyl sulfoxide	LD50 Oral	Rat	12600 mg/kg	-
	LD50 Dermal	Rat	40000 mg/kg	-
	LD50 Oral	Rat	14500 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 Skin - Mild irritant	Rabbit Rabbit	- -	500 mg 24 hours 500 mg	- -
Dimethyl sulfoxide	Skin - Mild irritant	Rabbit	-	500 mg	-
	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
RT/RNase Block Enzyme Mixture Glycerol	Skin - Mild irritant	Rabbit	-	100 mg	-
	Skin - 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	-

Sensitisation

Not available.

Mutagenicity

Section 11. Toxicological information

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure	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.

Section 11. Toxicological information

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
		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
		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

Section 11. Toxicological information

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.		

Section 11. Toxicological information

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: 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.
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	No known significant effects or critical hazards.

Section 11. Toxicological information

	2	QPCR Normalization Primer	No known significant effects or critical hazards.
	3	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 (vapours) (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

Section 11. Toxicological information

Dimethyl sulfoxide	14500	40000	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 sensitisation.

Section 12. Ecological information

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 Polyethylene glycol Dimethyl sulfoxide	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute LC50 >1000000 µg/l Fresh water	Fish - Salmo salar - Parr	96 hours
	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 µl/L Marine water Chronic NOEC 100 µl/L Fresh water	Algae - Ulva lactuca Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	72 hours 21 days
RT/RNase Block Enzyme Mixture Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Section 12. Ecological information

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

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
RT/RNase Block Enzyme Mixture			

Section 12. Ecological information

Glycerol	-1.76	-	low
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Mobility in soil

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

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

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

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

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines and Poisons

6

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

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.

Section 15. Regulatory information

Canada	: Not determined.
China	: Not determined.
Eurasian Economic Union	: Russian Federation inventory : All components are listed or exempted.
Japan	: Japan inventory (CSCL) : Not determined. Japan inventory (ISHL) : Not determined.
New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: Not determined.
Thailand	: Not determined.
Turkey	: Not determined.
United States	: Not determined.
Viet Nam	: Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 23/11/2022

Date of previous issue : 07/05/2020

Version : 7

Key to abbreviations

: ADG = Australian Dangerous Goods
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 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
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

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

Indicates information that has changed from previously issued version.

Notice to reader

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