

SAFETY DATA SHEET



SureVector E. coli C-terminal Promoter kit, 5 rxn, Part Number G7518C

Section 1. Identification

Product identifier	: SureVector E. coli C-terminal Promoter kit, 5 rxn, Part Number G7518C	
Part no. (chemical kit)	: G7518C	
Part no.	5X SureSolution	5190-8625
	SureVector AmpR Selectable Marker	5190-8807
	SureVector pUC Origin	5190-8810
	SureVector XP1 Linker	5190-8811
	SureVector LacI Repressor	5190-8812
	SureVector T7 E. coli Promoter	5190-8818
	SureVector Tac E. coli Promoter	5190-8820
	SureVector Rhamnose E. coli Promoter	5190-8822
	SureVector HIS6 Expression Tag C-Term	5190-8823
	SureVector LacZ E. coli Control (C-term)	5190-7819
	SureVector Enzyme Mix	5190-8621
	10X SureVector Buffer	5190-8622
	dNTP Mix	200518-56
	DpnI	5190-8624

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

Material uses	: Analytical reagent.	
	5X SureSolution	0.1 ml (15 reactions)
	SureVector AmpR Selectable Marker	0.01 ml (5 reactions)
	SureVector pUC Origin	0.01 ml (5 reactions)
	SureVector XP1 Linker	0.01 ml (5 reactions)
	SureVector LacI Repressor	0.01 ml (5 reactions)
	SureVector T7 E. coli Promoter	0.01 ml (5 reactions)
	SureVector Tac E. coli Promoter	0.01 ml (5 reactions)
	SureVector Rhamnose E. coli Promoter	0.01 ml (5 reactions)
	SureVector HIS6 Expression Tag C-Term	0.01 ml (5 reactions)
	SureVector LacZ E. coli Control (C-term)	0.01 ml (5 reactions)
	SureVector Enzyme Mix	0.015 ml (15 reactions)
	10X SureVector Buffer	0.03 ml (15 reactions)
	dNTP Mix	0.03 ml
	DpnI	0.015 ml (15 reactions)

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

5X SureSolution
H227 FLAMMABLE LIQUIDS - Category 4

GHS label elements

Section 2. Hazard(s) identification

Signal word	: <input checked="" type="checkbox"/> SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector Tac E. coli Promoter SureVector Rhamnose E. coli Promoter SureVector HIS6 Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI	WARNING No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word. No signal word.
Hazard statements	: <input checked="" type="checkbox"/> SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector Tac E. coli Promoter SureVector Rhamnose E. coli Promoter SureVector HIS6 Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI	H227 - Combustible liquid. 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. 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.
Precautionary statements		
Prevention	: <input checked="" type="checkbox"/> SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector Tac E. coli Promoter SureVector Rhamnose E. coli Promoter SureVector HIS6 Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI	P210 - Keep away from flames and hot surfaces. No smoking. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.

Section 2. Hazard(s) identification

Response	: 5X SureSolution	Not applicable.
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Storage	: 5X SureSolution	P403 + P235 - Store in a well-ventilated place. Keep cool.
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Disposal	: 5X SureSolution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.

Section 2. Hazard(s) identification

Supplemental label elements

Additional warning phrases	: 5X SureSolution	Not applicable.
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.

Other hazards which do not result in classification	: 5X SureSolution	None known.
	SureVector AmpR	None known.
	Selectable Marker	
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector Tac E. coli Promoter	None known.
	SureVector Rhamnose E. coli Promoter	None known.
	SureVector HIS6 Expression Tag C-Term	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.

Section 3. Composition and ingredient information

Substance/mixture	: 5X SureSolution	Substance
	SureVector AmpR	Mixture
	Selectable Marker	
	SureVector pUC Origin	Mixture
	SureVector XP1 Linker	Mixture
	SureVector LacI Repressor	Mixture
	SureVector T7 E. coli Promoter	Mixture
	SureVector Tac E. coli Promoter	Mixture
	SureVector Rhamnose E. coli Promoter	Mixture
	SureVector HIS6 Expression Tag C-Term	Mixture
	SureVector LacZ E. coli Control (C-term)	Mixture
	SureVector Enzyme Mix	Mixture

Section 3. Composition and ingredient information

10X SureVector Buffer	Mixture
dNTP Mix	Mixture
DpnI	Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
5X SureSolution Dimethyl sulfoxide	100	67-68-5
SureVector Enzyme Mix Glycerol	≥30 - ≤60	56-81-5
DpnI 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 as hazardous to health or the environment and hence require reporting in this section.


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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	: 5X SureSolution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
	SureVector AmpR Selectable Marker	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.
	SureVector pUC Origin	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.
	SureVector XP1 Linker	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.
	SureVector LacI Repressor	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.
	SureVector T7 E. coli Promoter	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.
	SureVector Tac E. coli Promoter	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.
	SureVector Rhamnose E. coli Promoter	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.
	SureVector HIS6 Expression Tag C-Term	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.
	SureVector LacZ E. coli	Immediately flush eyes with plenty of water,

Section 4. First aid measures

Control (C-term)	occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Enzyme Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
10X SureVector 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.
dNTP Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Dpnl	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	
:  SureSolution	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.
SureVector AmpR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector pUC Origin	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector XP1 Linker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacI Repressor	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector T7 E. coli Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Tac E. coli Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Rhamnose E. coli Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector HIS6 Expression Tag C-Term	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacZ E. coli Control (C-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Enzyme Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
10X SureVector Buffer	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

Section 4. First aid measures

decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

dNTP Mix

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

DpnI

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact

:  SureSolution

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.

SureVector AmpR Selectable Marker

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector pUC Origin

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector XP1 Linker

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector LacI Repressor

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector T7 E. coli Promoter

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector Tac E. coli Promoter

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector Rhamnose E. coli Promoter

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector HIS6 Expression Tag C-Term

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector LacZ E. coli Control (C-term)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SureVector Enzyme Mix

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

10X SureVector Buffer

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

dNTP Mix

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

DpnI

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion

:  SureSolution

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

Section 4. First aid measures

	medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
SureVector AmpR Selectable Marker	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.
SureVector pUC Origin	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.
SureVector XP1 Linker	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.
SureVector LacI Repressor	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.
SureVector T7 E. coli Promoter	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.
SureVector Tac E. coli Promoter	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.
SureVector Rhamnose E. coli Promoter	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.
SureVector HIS6 Expression Tag C-Term	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.
SureVector LacZ E. coli Control (C-term)	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.
SureVector Enzyme Mix	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.
10X SureVector 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.
dNTP Mix	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.

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DpnI

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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

: 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.
10X SureVector Buffer	No known significant effects or critical hazards.
dNTP Mix	No known significant effects or critical hazards.
DpnI	No known significant effects or critical hazards.

Inhalation

: 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.
10X SureVector Buffer	No known significant effects or critical hazards.
dNTP Mix	No known significant effects or critical hazards.
DpnI	No known significant effects or critical hazards.

Skin contact

: 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.

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	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.
Ingestion	: 5X SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
	SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
	SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector Tac E. coli Promoter	No specific data.
	SureVector Rhamnose E. coli Promoter	No specific data.
	SureVector HIS6 Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Inhalation	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector Tac E. coli Promoter	No specific data.
	SureVector Rhamnose E. coli Promoter	No specific data.
	SureVector HIS6 Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.

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	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Skin contact	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector Tac E. coli Promoter	No specific data.
	SureVector Rhamnose E. coli Promoter	No specific data.
	SureVector HIS6 Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Ingestion	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector Tac E. coli Promoter	No specific data.
	SureVector Rhamnose E. coli Promoter	No specific data.
	SureVector HIS6 Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.

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

Notes to physician	: 5X SureSolution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector AmpR	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector pUC Origin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector XP1 Linker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector LacI Repressor	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector T7 E. coli	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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Promoter		specialist immediately if large quantities have been ingested or inhaled.
SureVector Tac E. coli Promoter		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector Rhamnose E. coli Promoter		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector HIS6 Expression Tag C-Term		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector LacZ E. coli Control (C-term)		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector Enzyme Mix		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
10X SureVector Buffer		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.
dNTP Mix		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
DpnI		Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	:	
5X SureSolution		No specific treatment.
SureVector AmpR Selectable Marker		No specific treatment.
SureVector pUC Origin		No specific treatment.
SureVector XP1 Linker		No specific treatment.
SureVector LacI Repressor		No specific treatment.
SureVector T7 E. coli Promoter		No specific treatment.
SureVector Tac E. coli Promoter		No specific treatment.
SureVector Rhamnose E. coli Promoter		No specific treatment.
SureVector HIS6 Expression Tag C-Term		No specific treatment.
SureVector LacZ E. coli Control (C-term)		No specific treatment.
SureVector Enzyme Mix		No specific treatment.
10X SureVector Buffer		No specific treatment.
dNTP Mix		No specific treatment.
DpnI		No specific treatment.
Protection of first-aiders	:	
5X SureSolution		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.
SureVector AmpR Selectable Marker		No action shall be taken involving any personal risk or without suitable training.
SureVector pUC Origin		No action shall be taken involving any personal risk or without suitable training.
SureVector XP1 Linker		No action shall be taken involving any personal risk or without suitable training.
SureVector LacI Repressor		No action shall be taken involving any personal risk or without suitable training.
SureVector T7 E. coli Promoter		No action shall be taken involving any personal risk or without suitable training.
SureVector Tac E. coli Promoter		No action shall be taken involving any personal risk or without suitable training.

Section 4. First aid measures

SureVector Rhamnose E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
SureVector HIS6 Expression Tag C-Term	No action shall be taken involving any personal risk or without suitable training.
SureVector LacZ E. coli Control (C-term)	No action shall be taken involving any personal risk or without suitable training.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training.
10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training.
dNTP Mix	No action shall be taken involving any personal risk or without suitable training.
DpnI	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: 5X SureSolution	Use dry chemical, CO ₂ , water spray (fog) or foam.
	SureVector AmpR	Use an extinguishing agent suitable for the surrounding fire.
	Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
	SureVector pUC Origin	Use an extinguishing agent suitable for the surrounding fire.
	SureVector XP1 Linker	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacI Repressor	Use an extinguishing agent suitable for the surrounding fire.
	SureVector T7 E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Tac E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Rhamnose E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.
	SureVector HIS6 Expression Tag C-Term	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacZ E. coli Control (C-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Enzyme Mix	Use an extinguishing agent suitable for the surrounding fire.
	10X SureVector Buffer	Use an extinguishing agent suitable for the surrounding fire.
	dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.
	DpnI	Use an extinguishing agent suitable for the surrounding fire.
	Unsuitable extinguishing media	: 5X SureSolution
SureVector AmpR		None known.
Selectable Marker		None known.
SureVector pUC Origin		None known.
SureVector XP1 Linker		None known.
SureVector LacI Repressor		None known.
SureVector T7 E. coli Promoter		None known.
SureVector Tac E. coli Promoter		None known.
SureVector Rhamnose E. coli Promoter		None known.
SureVector HIS6 Expression Tag C-Term		None known.
SureVector LacZ E. coli	None known.	

Section 5. Firefighting measures

	Control (C-term)	
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	Dpnl	None known.
Specific hazards arising from the chemical	: 5X SureSolution	Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
	SureVector AmpR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector pUC Origin	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector XP1 Linker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector LacI Repressor	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector T7 E. coli Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector Tac E. coli Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector Rhamnose E. coli Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector HIS6 Expression Tag C-Term	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector LacZ E. coli Control (C-term)	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector Enzyme Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	10X SureVector Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	dNTP Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	Dpnl	In a fire or if heated, a pressure increase will occur and the container may burst.
Hazardous thermal decomposition products	: 5X SureSolution	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
	SureVector AmpR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector Tac E. coli Promoter	No specific data.
	SureVector Rhamnose E. coli Promoter	No specific data.
	SureVector HIS6 Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.
	SureVector Enzyme Mix	Decomposition products may include the following materials:

Section 5. Firefighting measures

10X SureVector Buffer	carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
dNTP Mix DpnI	No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
Special protective actions for fire-fighters : 5X SureSolution	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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
SureVector AmpR Selectable Marker	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.
SureVector pUC Origin	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.
SureVector XP1 Linker	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.
SureVector LacI Repressor	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.
SureVector T7 E. coli Promoter	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.
SureVector Tac E. coli Promoter	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.
SureVector Rhamnose E. coli Promoter	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.
SureVector HIS6 Expression Tag C-Term	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.
SureVector LacZ E. coli Control (C-term)	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.
SureVector Enzyme 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

Section 5. Firefighting measures

Special protective equipment for fire-fighters

10X SureVector Buffer	without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
dNTP 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.
DpnI	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.
5X SureSolution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector AmpR Selectable Marker	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector pUC Origin	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector XP1 Linker	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector LacI Repressor	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector T7 E. coli Promoter	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Tac E. coli Promoter	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Rhamnose E. coli Promoter	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector HIS6 Expression Tag C-Term	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector LacZ E. coli Control (C-term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Enzyme Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
10X SureVector Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
dNTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

Section 5. Firefighting measures

Dpnl

(SCBA) with a full face-piece operated in positive 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.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

:  SureSolution

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

SureVector AmpR Selectable Marker

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.

SureVector pUC Origin

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.

SureVector XP1 Linker

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.

SureVector LacI Repressor

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.

SureVector T7 E. coli Promoter

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.

SureVector Tac E. coli Promoter

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.

SureVector Rhamnose E. coli Promoter

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.

SureVector HIS6 Expression

No action shall be taken involving any personal risk

Section 6. Accidental release measures

Tag C-Term	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.
SureVector LacZ E. coli Control (C-term)	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.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
10X SureVector 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.
dNTP Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
DpnI	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
For emergency responders : 5X SureSolution	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".
SureVector AmpR Selectable Marker	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".
SureVector pUC Origin	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".
SureVector XP1 Linker	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".
SureVector LacI Repressor	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".
SureVector T7 E. coli Promoter	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".
SureVector Tac E. coli Promoter	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".

Section 6. Accidental release measures

SureVector Rhamnose E. coli Promoter	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".
SureVector HIS6 Expression Tag C-Term	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".
SureVector LacZ E. coli Control (C-term)	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".
SureVector Enzyme 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".
10X SureVector 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".
dNTP 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".
DpnI	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : 5X SureSolution	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).
SureVector AmpR Selectable Marker	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).
SureVector pUC Origin	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).
SureVector XP1 Linker	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).
SureVector LacI Repressor	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).
SureVector T7 E. coli Promoter	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).
SureVector Tac E. coli Promoter	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Section 6. Accidental release measures

SureVector Rhamnose E. coli Promoter	soil or air). Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector HIS6 Expression Tag C-Term	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).
SureVector LacZ E. coli Control (C-term)	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).
SureVector Enzyme 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).
10X SureVector 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).
dNTP 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).
DpnI	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Methods for cleaning up : 5X SureSolution

SureVector AmpR Selectable Marker	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. 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.
SureVector pUC Origin	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.
SureVector XP1 Linker	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 6. Accidental release measures

SureVector LacI Repressor	disposal contractor. Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector T7 E. coli Promoter	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.
SureVector Tac E. coli Promoter	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.
SureVector Rhamnose E. coli Promoter	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.
SureVector HIS6 Expression Tag C-Term	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.
SureVector LacZ E. coli Control (C-term)	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.
SureVector Enzyme 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.
10X SureVector 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.
dNTP 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.
Dpnl	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	: 5X SureSolution	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureVector AmpR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
	SureVector pUC Origin	Put on appropriate personal protective equipment (see Section 8).
	SureVector XP1 Linker	Put on appropriate personal protective equipment (see Section 8).
	SureVector LacI Repressor	Put on appropriate personal protective equipment (see Section 8).
	SureVector T7 E. coli Promoter	Put on appropriate personal protective equipment (see Section 8).
	SureVector Tac E. coli Promoter	Put on appropriate personal protective equipment (see Section 8).
	SureVector Rhamnose E. coli Promoter	Put on appropriate personal protective equipment (see Section 8).
	SureVector HIS6 Expression Tag C-Term	Put on appropriate personal protective equipment (see Section 8).
	SureVector LacZ E. coli Control (C-term)	Put on appropriate personal protective equipment (see Section 8).
	SureVector Enzyme Mix	Put on appropriate personal protective equipment (see Section 8).
	10X SureVector Buffer	Put on appropriate personal protective equipment (see Section 8).
	dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
	DpnI	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene	: 5X SureSolution	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.
	SureVector AmpR Selectable Marker	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.
	SureVector pUC Origin	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

Section 7. Handling and storage

SureVector XP1 Linker	additional information on hygiene measures. 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.
SureVector LacI Repressor	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.
SureVector T7 E. coli Promoter	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.
SureVector Tac E. coli Promoter	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.
SureVector Rhamnose E. coli Promoter	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.
SureVector HIS6 Expression Tag C-Term	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.
SureVector LacZ E. coli Control (C-term)	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.
SureVector Enzyme 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.
10X SureVector 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

Section 7. Handling and storage

dNTP Mix

additional information on hygiene measures. 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.

DpnI

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 : 5X SureSolution

Store in accordance with local regulations. Store in a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidising materials. 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.

SureVector AmpR Selectable Marker

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.

SureVector pUC Origin

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.

SureVector XP1 Linker

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.

SureVector LacI Repressor

Store in accordance with local regulations. Store in

Section 7. Handling and storage

SureVector T7 E. coli Promoter

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.

SureVector Tac E. coli Promoter

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.

SureVector Rhamnose E. coli Promoter

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.

SureVector HIS6 Expression Tag C-Term

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.

SureVector LacZ E. coli Control (C-term)

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

SureVector Enzyme Mix

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.

10X SureVector Buffer

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

dNTP Mix

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

Dpnl

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
5X SureSolution Dimethyl sulfoxide	DFG MAC-values list (Germany, 8/2020). Absorbed through skin. PEAK: 320 mg/m ³ , 4 times per shift, 15 minutes. TWA: 160 mg/m ³ 8 hours. PEAK: 100 ppm, 4 times per shift, 15 minutes. TWA: 50 ppm 8 hours.

Section 8. Exposure controls and personal protection

SureVector Enzyme Mix

Glycerol

Safe Work Australia (Australia, 12/2019).TWA: 10 mg/m³ 8 hours.

DpnI

Glycerol

Safe Work Australia (Australia, 12/2019).TWA: 10 mg/m³ 8 hours.

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

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

Physical state	: 5X SureSolution	Liquid. [Clear.]
	SureVector AmpR	Liquid.
	Selectable Marker	
	SureVector pUC Origin	Liquid.
	SureVector XP1 Linker	Liquid.
	SureVector LacI Repressor	Liquid.
	SureVector T7 E. coli Promoter	Liquid.
	SureVector Tac E. coli Promoter	Liquid.
	SureVector Rhamnose E.	Liquid.

Section 9. Physical and chemical properties and safety characteristics

		coli Promoter	
		SureVector HIS6 Expression Tag C-Term	Liquid.
		SureVector LacZ E. coli Control (C-term)	Liquid.
		SureVector Enzyme Mix	Liquid.
		10X SureVector Buffer	Liquid.
		dNTP Mix	Liquid.
		DpnI	Liquid.
Colour	:	5X SureSolution	Blue.
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector Tac E. coli Promoter	Not available.
		SureVector Rhamnose E. coli Promoter	Not available.
		SureVector HIS6 Expression Tag C-Term	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
Odour	:	5X SureSolution	Odourless. [Slight]
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector Tac E. coli Promoter	Not available.
		SureVector Rhamnose E. coli Promoter	Not available.
		SureVector HIS6 Expression Tag C-Term	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
Odour threshold	:	5X SureSolution	Not available.
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector Tac E. coli Promoter	Not available.
		SureVector Rhamnose E. coli Promoter	Not available.

Section 9. Physical and chemical properties and safety characteristics

	SureVector HIS6 Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
pH	: 5X SureSolution	Not available.
	SureVector AmpR	8
	Selectable Marker	
	SureVector pUC Origin	8
	SureVector XP1 Linker	8
	SureVector LacI Repressor	8
	SureVector T7 E. coli Promoter	8
	SureVector Tac E. coli Promoter	8
	SureVector Rhamnose E. coli Promoter	8
	SureVector HIS6 Expression Tag C-Term	8
	SureVector LacZ E. coli Control (C-term)	8
	SureVector Enzyme Mix	8.2
	10X SureVector Buffer	8.8
	dNTP Mix	7.5
	DpnI	7.5
Melting point/freezing point	: 5X SureSolution	18.5°C (65.3°F)
	SureVector AmpR	0°C (32°F)
	Selectable Marker	
	SureVector pUC Origin	0°C (32°F)
	SureVector XP1 Linker	0°C (32°F)
	SureVector LacI Repressor	0°C (32°F)
	SureVector T7 E. coli Promoter	0°C (32°F)
	SureVector Tac E. coli Promoter	0°C (32°F)
	SureVector Rhamnose E. coli Promoter	0°C (32°F)
	SureVector HIS6 Expression Tag C-Term	0°C (32°F)
	SureVector LacZ E. coli Control (C-term)	0°C (32°F)
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	0°C (32°F)
	DpnI	Not available.
Boiling point, initial boiling point, and boiling range	: 5X SureSolution	189°C (372.2°F)
	SureVector AmpR	100°C (212°F)
	Selectable Marker	
	SureVector pUC Origin	100°C (212°F)
	SureVector XP1 Linker	100°C (212°F)
	SureVector LacI Repressor	100°C (212°F)
	SureVector T7 E. coli Promoter	100°C (212°F)
	SureVector Tac E. coli Promoter	100°C (212°F)
	SureVector Rhamnose E. coli Promoter	100°C (212°F)
	SureVector HIS6 Expression	100°C (212°F)

Section 9. Physical and chemical properties and safety characteristics

Flash point

Tag C-Term
 SureVector LacZ E. coli Control (C-term) 100°C (212°F)
 SureVector Enzyme Mix 10X SureVector Buffer Not available.
 dNTP Mix 100°C (212°F)
 DpnI Not available.
 SureSolution Closed cup: 87°C (188.6°F) [ASTM D 93]
 Open cup: 87°C (188.6°F)
 SureVector AmpR Selectable Marker Not available.
 SureVector pUC Origin Not available.
 SureVector XP1 Linker Not available.
 SureVector LacI Repressor Not available.
 SureVector T7 E. coli Promoter Not available.
 SureVector Tac E. coli Promoter Not available.
 SureVector Rhamnose E. coli Promoter Not available.
 SureVector HIS6 Expression Not available.
 Tag C-Term
 SureVector LacZ E. coli Control (C-term) Not available.
 SureVector Enzyme Mix 10X SureVector Buffer Not available.
 dNTP Mix Not available.
 DpnI Not available.

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
SureVector AmpR Selectable Marker						
Edetic acid	>100	>212	DIN 51758			
SureVector pUC Origin						
Edetic acid	>100	>212	DIN 51758			
SureVector XP1 Linker						
Edetic acid	>100	>212	DIN 51758			
SureVector LacI Repressor						
Edetic acid	>100	>212	DIN 51758			
SureVector T7 E. coli Promoter						
Edetic acid	>100	>212	DIN 51758			
SureVector Tac E. coli Promoter						
Edetic acid	>100	>212	DIN 51758			
SureVector Rhamnose E. coli Promoter						
Edetic acid	>100	>212	DIN 51758			

Section 9. Physical and chemical properties and safety characteristics

SureVector HIS6 Expression Tag C-Term				
Edetic acid	>100	>212	DIN 51758	
SureVector LacZ E. coli Control (C-term)				
Edetic acid	>100	>212	DIN 51758	
SureVector Enzyme Mix				
Edetic acid	>100	>212	DIN 51758	
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	>109.85	>229.7		
10X SureVector Buffer				
Polyoxyethylene octyl phenyl ether	>109.85	>229.7		
dNTP Mix				
Edetic acid	>100	>212	DIN 51758	
Dpnl				
Edetic acid	>100	>212	DIN 51758	
(R*,R*)-1,4-Dimercaptobutane-2,3-diol	>110	>230		

Evaporation rate : 5X SureSolution 0.026 (butyl acetate = 1)
 SureVector AmpR Selectable Marker Not available.
 SureVector pUC Origin Not available.
 SureVector XP1 Linker Not available.
 SureVector LacI Repressor Not available.
 SureVector T7 E. coli Promoter Not available.
 SureVector Tac E. coli Promoter Not available.
 SureVector Rhamnose E. coli Promoter Not available.
 SureVector HIS6 Expression Tag C-Term Not available.
 SureVector LacZ E. coli Control (C-term) Not available.
 SureVector Enzyme Mix Not available.
 10X SureVector Buffer Not available.
 dNTP Mix Not available.
 Dpnl Not available.

Flammability : 5X SureSolution Not applicable.
 SureVector AmpR Selectable Marker Not applicable.
 SureVector pUC Origin Not applicable.
 SureVector XP1 Linker Not applicable.
 SureVector LacI Repressor Not applicable.
 SureVector T7 E. coli Not applicable.

Section 9. Physical and chemical properties and safety characteristics

	Promoter	
	SureVector Tac E. coli	Not applicable.
	Promoter	
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Lower and upper explosion limit/flammability limit	: 5X SureSolution	Lower: 2.6% Upper: 28.5%
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Vapour pressure	: 5X SureSolution	0.056 kPa (0.42 mm Hg) [EU A.4]
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.

Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Vapour Pressure at 20 °C			Vapour pressure at 50 °C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
SureVector AmpR Selectable Marker						
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	
SureVector pUC Origin						
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	
SureVector XP1 Linker						
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	
SureVector LacI Repressor						
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	
SureVector T7 E. coli Promoter						
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	
SureVector Tac E. coli Promoter						
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	
SureVector Rhamnose E. coli Promoter						
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	
SureVector HIS6 Expression Tag C-Term						
Water	23.8	3.2		92.258	12.3	

Section 9. Physical and chemical properties and safety characteristics

2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001
SureVector LacZ E. coli Control (C-term)					
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
SureVector Enzyme Mix					
Water	23.8	3.2		92.258	12.3
Sorbitan monolaurate, ethoxylated	<1	<0.13			
10X SureVector Buffer					
Water	23.8	3.2		92.258	12.3
Polyoxyethylene octyl phenyl ether	<1	<0.13			
dNTP Mix					
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
DpnI					
Water	23.8	3.2		92.258	12.3
Glycerol	0.000075	0.00001		0.0025	0.00033

Relative vapour density : 5X SureSolution 2.7 [Air = 1]
 SureVector AmpR Not available.
 Selectable Marker
 SureVector pUC Origin Not available.
 SureVector XP1 Linker Not available.
 SureVector LacI Repressor Not available.
 SureVector T7 E. coli Promoter Not available.
 SureVector Tac E. coli Promoter Not available.
 SureVector Rhamnose E. coli Promoter Not available.
 SureVector HIS6 Expression Tag C-Term Not available.
 SureVector LacZ E. coli Control (C-term) Not available.
 SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI Not available.

Section 9. Physical and chemical properties and safety characteristics

Relative density	: 5X SureSolution	1.1
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Solubility	: <input checked="" type="checkbox"/> 5X SureSolution	Easily soluble in the following materials: cold water and hot water.
	SureVector AmpR	Easily soluble in the following materials: cold water and hot water.
	Selectable Marker	Easily soluble in the following materials: cold water and hot water.
	SureVector pUC Origin	Easily soluble in the following materials: cold water and hot water.
	SureVector XP1 Linker	Easily soluble in the following materials: cold water and hot water.
	SureVector LacI Repressor	Easily soluble in the following materials: cold water and hot water.
	SureVector T7 E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
	SureVector Tac E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
	SureVector Rhamnose E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
	SureVector HIS6 Expression Tag C-Term	Easily soluble in the following materials: cold water and hot water.
	SureVector LacZ E. coli Control (C-term)	Easily soluble in the following materials: cold water and hot water.
	SureVector Enzyme Mix	Soluble in the following materials: cold water and hot water.
	10X SureVector Buffer	Easily soluble in the following materials: cold water and hot water.
	dNTP Mix	Easily soluble in the following materials: cold water and hot water.
	DpnI	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: <input checked="" type="checkbox"/> 5X SureSolution	-1.35
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.

Section 9. Physical and chemical properties and safety characteristics

	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Auto-ignition temperature	: 5X SureSolution	300 to 302°C (572 to 575.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.

Ingredient name	°C	°F	Method
SureVector AmpR Selectable Marker			
Edetic acid	>400	>752	VDI 2263
SureVector pUC Origin			
Edetic acid	>400	>752	VDI 2263
SureVector XP1 Linker			
Edetic acid	>400	>752	VDI 2263
SureVector LacI Repressor			
Edetic acid	>400	>752	VDI 2263
SureVector T7 E. coli Promoter			
Edetic acid	>400	>752	VDI 2263
SureVector Tac E. coli Promoter			
Edetic acid	>400	>752	VDI 2263
SureVector Rhamnose E. coli Promoter			
Edetic acid	>400	>752	VDI 2263
SureVector HIS6 Expression Tag C-Term			
Edetic acid	>400	>752	VDI 2263
SureVector LacZ E. coli Control (C-			

Section 9. Physical and chemical properties and safety characteristics

term)			
Edetic acid	>400	>752	VDI 2263
SureVector Enzyme Mix			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263
dNTP Mix			
Edetic acid	>400	>752	VDI 2263
Dpnl			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263

Decomposition temperature : 5X SureSolution 140 to 189°C (284 to 372.2°F)

SureVector AmpR Not available.
 Selectable Marker
 SureVector pUC Origin Not available.
 SureVector XP1 Linker Not available.
 SureVector LacI Repressor Not available.
 SureVector T7 E. coli Promoter Not available.
 SureVector Tac E. coli Promoter Not available.
 SureVector Rhamnose E. coli Promoter Not available.
 SureVector HIS6 Expression Tag C-Term Not available.
 SureVector LacZ E. coli Control (C-term) Not available.
 SureVector Enzyme Mix Not available.
 10X SureVector Buffer Not available.
 dNTP Mix Not available.
 Dpnl Not available.

Viscosity : 5X SureSolution Dynamic: 2.14 mPa·s (2.14 cP)

SureVector AmpR Not available.
 Selectable Marker
 SureVector pUC Origin Not available.
 SureVector XP1 Linker Not available.
 SureVector LacI Repressor Not available.
 SureVector T7 E. coli Promoter Not available.
 SureVector Tac E. coli Promoter Not available.
 SureVector Rhamnose E. coli Promoter Not available.
 SureVector HIS6 Expression Tag C-Term Not available.
 SureVector LacZ E. coli Control (C-term) Not available.
 SureVector Enzyme Mix Not available.
 10X SureVector Buffer Not available.
 dNTP Mix Not available.
 Dpnl Not available.

Particle characteristics

Section 9. Physical and chemical properties and safety characteristics

Median particle size	: 5X SureSolution	Not applicable.
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.

Section 10. Stability and reactivity

Reactivity	: 5X SureSolution	No specific test data related to reactivity available for this product or its ingredients.
	SureVector AmpR	No specific test data related to reactivity available for this product or its ingredients.
	Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector pUC Origin	No specific test data related to reactivity available for this product or its ingredients.
	SureVector XP1 Linker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacI Repressor	No specific test data related to reactivity available for this product or its ingredients.
	SureVector T7 E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Tac E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Rhamnose E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector HIS6 Expression Tag C-Term	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacZ E. coli Control (C-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Enzyme Mix	No specific test data related to reactivity available for this product or its ingredients.
	10X SureVector Buffer	No specific test data related to reactivity available for this product or its ingredients.
	dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
	DpnI	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: 5X SureSolution	The product is stable.
	SureVector AmpR	The product is stable.
	Selectable Marker	
	SureVector pUC Origin	The product is stable.
	SureVector XP1 Linker	The product is stable.
	SureVector LacI Repressor	The product is stable.
	SureVector T7 E. coli Promoter	The product is stable.
	SureVector Tac E. coli Promoter	The product is stable.

Section 10. Stability and reactivity

SureVector Rhamnose E. coli Promoter	The product is stable.
SureVector HIS6 Expression Tag C-Term	The product is stable.
SureVector LacZ E. coli Control (C-term)	The product is stable.
SureVector Enzyme Mix	The product is stable.
10X SureVector Buffer	The product is stable.
dNTP Mix	The product is stable.
DpnI	The product is stable.

Possibility of hazardous reactions

: 5X SureSolution	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector pUC Origin	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector XP1 Linker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector LacI Repressor	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector Tac E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector Rhamnose E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector HIS6 Expression Tag C-Term	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
10X SureVector Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
DpnI	Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

: 5X SureSolution	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas.
SureVector AmpR Selectable Marker	No specific data.
SureVector pUC Origin	No specific data.
SureVector XP1 Linker	No specific data.
SureVector LacI Repressor	No specific data.
SureVector T7 E. coli Promoter	No specific data.
SureVector Tac E. coli Promoter	No specific data.
SureVector Rhamnose E. coli Promoter	No specific data.
SureVector HIS6 Expression Tag C-Term	No specific data.
SureVector LacZ E. coli Control (C-term)	No specific data.
SureVector Enzyme Mix	No specific data.
10X SureVector Buffer	No specific data.
dNTP Mix	No specific data.

Section 10. Stability and reactivity

DpnI No specific data.

Incompatible materials	: 5X SureSolution	Reactive or incompatible with the following materials: oxidising materials
	SureVector AmpR Selectable Marker	May react or be incompatible with oxidising materials.
	SureVector pUC Origin	May react or be incompatible with oxidising materials.
	SureVector XP1 Linker	May react or be incompatible with oxidising materials.
	SureVector LacI Repressor	May react or be incompatible with oxidising materials.
	SureVector T7 E. coli Promoter	May react or be incompatible with oxidising materials.
	SureVector Tac E. coli Promoter	May react or be incompatible with oxidising materials.
	SureVector Rhamnose E. coli Promoter	May react or be incompatible with oxidising materials.
	SureVector HIS6 Expression Tag C-Term	May react or be incompatible with oxidising materials.
	SureVector LacZ E. coli Control (C-term)	May react or be incompatible with oxidising materials.
	SureVector Enzyme Mix	May react or be incompatible with oxidising materials.
	10X SureVector Buffer	May react or be incompatible with oxidising materials.
	dNTP Mix	May react or be incompatible with oxidising materials.
	DpnI	May react or be incompatible with oxidising materials.

Hazardous decomposition products	: 5X SureSolution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector pUC Origin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector XP1 Linker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector LacI Repressor	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector Tac E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector Rhamnose E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector HIS6 Expression Tag C-Term	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10X SureVector Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 10. Stability and reactivity

Dpnl

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information**Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
5X SureSolution Dimethyl sulfoxide	LD50 Dermal	Rat	40000 mg/kg	-
	LD50 Oral	Rat	14500 mg/kg	-
SureVector Enzyme Mix Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Dpnl Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
5X SureSolution Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	100 mg	-
SureVector Enzyme Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Dpnl Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitisation

Not available.

Mutagenicity**Conclusion/Summary** : Not available.**Carcinogenicity****Conclusion/Summary** : Not available.**Reproductive toxicity****Conclusion/Summary** : Not available.**Teratogenicity****Conclusion/Summary** : Not available.**Specific target organ toxicity (single exposure)**

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Section 11. Toxicological information

Not available.

Information on likely routes of exposure	: 5X SureSolution	Routes of entry anticipated: Oral, Dermal, Inhalation.
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Routes of entry anticipated: Oral, Dermal, Inhalation.
	10X SureVector Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	dNTP Mix	Not available.
	DpnI	Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact

: <input checked="" type="checkbox"/> 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.
10X SureVector Buffer	No known significant effects or critical hazards.
dNTP Mix	No known significant effects or critical hazards.
DpnI	No known significant effects or critical hazards.

Inhalation

: 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.
10X SureVector Buffer	No known significant effects or critical hazards.
dNTP Mix	No known significant effects or critical hazards.

Section 11. Toxicological information

Skin contact	:	DpnI	No known significant effects or critical hazards.
	:	5X SureSolution	No known significant effects or critical hazards.
	:	SureVector AmpR	No known significant effects or critical hazards.
	:	Selectable Marker	
	:	SureVector pUC Origin	No known significant effects or critical hazards.
	:	SureVector XP1 Linker	No known significant effects or critical hazards.
	:	SureVector LacI Repressor	No known significant effects or critical hazards.
	:	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	:	SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
	:	SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
	:	SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
	:	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	:	SureVector Enzyme Mix	No known significant effects or critical hazards.
	:	10X SureVector Buffer	No known significant effects or critical hazards.
	:	dNTP Mix	No known significant effects or critical hazards.
	:	DpnI	No known significant effects or critical hazards.
	Ingestion	:	5X SureSolution
:		SureVector AmpR	No known significant effects or critical hazards.
:		Selectable Marker	
:		SureVector pUC Origin	No known significant effects or critical hazards.
:		SureVector XP1 Linker	No known significant effects or critical hazards.
:		SureVector LacI Repressor	No known significant effects or critical hazards.
:		SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
:		SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
:		SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
:		SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
:		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
:		SureVector Enzyme Mix	No known significant effects or critical hazards.
:		10X SureVector Buffer	No known significant effects or critical hazards.
:		dNTP Mix	No known significant effects or critical hazards.
:		DpnI	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	5X SureSolution	No specific data.
	:	SureVector AmpR	No specific data.
	:	Selectable Marker	
	:	SureVector pUC Origin	No specific data.
	:	SureVector XP1 Linker	No specific data.
	:	SureVector LacI Repressor	No specific data.
	:	SureVector T7 E. coli Promoter	No specific data.
	:	SureVector Tac E. coli Promoter	No specific data.
	:	SureVector Rhamnose E. coli Promoter	No specific data.
	:	SureVector HIS6 Expression Tag C-Term	No specific data.
	:	SureVector LacZ E. coli Control (C-term)	No specific data.
	:	SureVector Enzyme Mix	No specific data.
	:	10X SureVector Buffer	No specific data.
	:	dNTP Mix	No specific data.

Section 11. Toxicological information

	DpnI	No specific data.
Inhalation	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli	No specific data.
	Promoter	
	SureVector Tac E. coli	No specific data.
	Promoter	
	SureVector Rhamnose E. coli	No specific data.
	Promoter	
	SureVector HIS6 Expression	No specific data.
	Tag C-Term	
	SureVector LacZ E. coli	No specific data.
	Control (C-term)	
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Skin contact	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli	No specific data.
	Promoter	
	SureVector Tac E. coli	No specific data.
	Promoter	
	SureVector Rhamnose E. coli	No specific data.
	Promoter	
	SureVector HIS6 Expression	No specific data.
	Tag C-Term	
	SureVector LacZ E. coli	No specific data.
	Control (C-term)	
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Ingestion	: 5X SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli	No specific data.
	Promoter	
	SureVector Tac E. coli	No specific data.
	Promoter	
	SureVector Rhamnose E. coli	No specific data.
	Promoter	
	SureVector HIS6 Expression	No specific data.
	Tag C-Term	
	SureVector LacZ E. coli	No specific data.
	Control (C-term)	
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.

Section 11. Toxicological information

Reproductive toxicity	:	<input type="checkbox"/> SureSolution	No known significant effects or critical hazards.
		SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector XP1 Linker	No known significant effects or critical hazards.
		SureVector LacI Repressor	No known significant effects or critical hazards.
		SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
		SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
		SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
		SureVector HIS6 Expression Tag C-Term	No known significant effects or critical hazards.
		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
		SureVector Enzyme Mix	No known significant effects or critical hazards.
		10X SureVector Buffer	No known significant effects or critical hazards.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	No known significant effects or critical hazards.
		SureVector Enzyme Mix	No known significant effects or critical hazards.
		10X SureVector Buffer	No known significant effects or critical hazards.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	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)
<input checked="" type="checkbox"/> SureSolution Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A
SureVector Enzyme Mix Glycerol	12600	N/A	N/A	N/A	N/A
10X SureVector Buffer 10X SureVector Buffer	180000	N/A	N/A	N/A	N/A
DpnI Glycerol	12600	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
5X SureSolution Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water Acute LC50 34000000 µg/l Fresh water Chronic NOEC 100 µl/L Marine water Chronic NOEC 100 µl/L Fresh water	Daphnia - Daphnia magna - Neonate Fish - Pimephales promelas Algae - Ulva lactuca Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	48 hours 96 hours 72 hours 21 days
SureVector Enzyme Mix Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Dpnl Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
5X SureSolution Dimethyl sulfoxide	OECD 301D Ready Biodegradability - Closed Bottle Test	31 % - Not readily - 28 days	-	-
SureVector Enzyme Mix Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Dpnl Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
5X SureSolution Dimethyl sulfoxide	-	-	Not readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
5X SureSolution Dimethyl sulfoxide	-1.35	3.16	low
SureVector Enzyme Mix Glycerol	-1.76	-	low
Dpnl Glycerol	-1.76	-	low

Mobility in soil

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

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

Section 13. Disposal considerations

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

Section 14. Transport information

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

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

Transport in bulk according to 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.
Canada	: Not determined.
China	: All components are listed or exempted.
Europe	: 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	: All components are listed or exempted.
Thailand	: Not determined.

Section 15. Regulatory information

Turkey	: Not determined.
United States	: <input checked="" type="checkbox"/> All components are active or exempted.
Viet Nam	: Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision	: 28/03/2022
Date of previous issue	: 02/08/2019
Version	: 4

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
<input checked="" type="checkbox"/> SureSolution FLAMMABLE LIQUIDS - Category 4	On basis of test data

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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