

SAFETY DATA SHEET



SureVector Core Kit, Part Number G7514A

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

1.1 Product identifier

Product name	:	SureVector Core Kit, Part Number G7514A
CAS number	:	5X SureSolution 67-68-5
		SureVector AmpR Selectable Marker Not applicable.
		SureVector KanR Selectable Marker Not applicable.
		SureVector ChIR Selectable Marker Not applicable.
		SureVector pUC Origin Not applicable.
		SureVector p15a Origin Not applicable.
		SureVector pBR322 Origin Not applicable.
		SureVector XP1 Linker Not applicable.
		SureVector yARS Not applicable.
		SureVector XP2 Linker Not applicable.
		SureVector NeoR Not applicable.
		Mammalian Selectable Marker
		SureVector LEU2 Yeast Selectable Marker Not applicable.
		SureVector LacI Repressor Not applicable.
		SureVector T7-HIS6 E. coli Promoter Not applicable.
		SureVector CMV-HIS6 Mammalian Promoter Not applicable.
		SureVector GAL1-HIS6 Yeast Promoter Not applicable.
		SureVector LacZ Control (N-term) Not applicable.
		SureVector Enzyme Mix Not applicable.
		10X SureVector Buffer Not applicable.
		dNTP Mix Not applicable.
		DpnI Not applicable.
		XL1-Blue Not applicable.
		Supercompetent Cells
		pUC 18 DNA Control Plasmid Not applicable.
		Beta Mercaptoethanol Not applicable.
Part no. (chemical kit)	:	G7514A
Part no.	:	5X SureSolution 5190-8625
		SureVector AmpR Selectable Marker 5190-8088
		SureVector KanR Selectable Marker 5190-8089
		SureVector ChIR Selectable Marker 5190-8090
		SureVector pUC Origin 5190-8091
		SureVector p15a Origin 5190-8092
		SureVector pBR322 Origin 5190-8093
		SureVector XP1 Linker 5190-8094
		SureVector yARS 5190-8095
		SureVector XP2 Linker 5190-8096
		SureVector NeoR 5190-8097
		Mammalian Selectable Marker

SureVector Core Kit, Part Number G7514A

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

SureVector LEU2 Yeast Selectable Marker	5190-8098
SureVector LacI Repressor	5190-8099
SureVector T7-HIS6 E. coli Promoter	5190-8100
SureVector CMV-HIS6 Mammalian Promoter	5190-8101
SureVector GAL1-HIS6 Yeast Promoter	5190-8102
SureVector LacZ Control (N-term)	5190-8103
SureVector Enzyme Mix	5190-8621
10X SureVector Buffer	5190-8622
dNTP Mix	200518-56
DpnI	5190-8624
XL1-Blue Supercompetent Cells	200236-41
pUC 18 DNA Control Plasmid	200231-42
Beta Mercaptoethanol	210200-43

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

Identified uses

: Analytical reagent.	
<input checked="" type="checkbox"/> SureSolution	0.1 ml (15 reactions)
SureVector AmpR Selectable Marker	0.03 ml (15 reactions)
SureVector KanR Selectable Marker	0.03 ml (15 reactions)
SureVector ChIR Selectable Marker	0.03 ml (15 reactions)
SureVector pUC Origin	0.03 ml (15 reactions)
SureVector p15a Origin	0.03 ml (15 reactions)
SureVector pBR322 Origin	0.03 ml (15 reactions)
SureVector XP1 Linker	0.03 ml (15 reactions)
SureVector yARS	0.03 ml (15 reactions)
SureVector XP2 Linker	0.03 ml (15 reactions)
SureVector NeoR Mammalian Selectable Marker	0.03 ml (15 reactions)
SureVector LEU2 Yeast Selectable Marker	0.03 ml (15 reactions)
SureVector LacI Repressor	0.03 ml (15 reactions)
SureVector T7-HIS6 E. coli Promoter	0.03 ml (15 reactions)
SureVector CMV-HIS6 Mammalian Promoter	0.03 ml (15 reactions)
SureVector GAL1-HIS6 Yeast Promoter	0.03 ml (15 reactions)
SureVector LacZ Control (N-term)	0.03 ml (15 reactions)
SureVector Enzyme Mix	0.03 ml (15 reactions)
10X SureVector Buffer	0.03 ml (15 reactions)
dNTP Mix	0.03 ml
DpnI	0.015 ml (15 reactions)
XL1-Blue Supercompetent Cells	1 ml (5 x 0.2 ml)
pUC 18 DNA Control Plasmid	0.01 ml (0.1 ng / µl)
Beta Mercaptoethanol	0.025 ml (25 µl 1.42M)

Uses advised against

: None known.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
5500 Lakeside Cheadle Royal Business Park,
Cheadle, Cheshire, SK8 3GR
United Kingdom
Tel: +44 (0) 345 712 5292

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

SureVector Core Kit, Part Number G7514A

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

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +(44)-870-8200418

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	:	5X SureSolution	Mono-constituent substance
		SureVector AmpR	Mixture
		Selectable Marker	
		SureVector KanR	Mixture
		Selectable Marker	
		SureVector ChIR	Mixture
		Selectable Marker	
		SureVector pUC Origin	Mixture
		SureVector p15a Origin	Mixture
		SureVector pBR322	Mixture
		Origin	
		SureVector XP1 Linker	Mixture
		SureVector yARS	Mixture
		SureVector XP2 Linker	Mixture
		SureVector NeoR	Mixture
		Mammalian Selectable Marker	
		SureVector LEU2 Yeast	Mixture
		Selectable Marker	
		SureVector LacI	Mixture
		Repressor	
		SureVector T7-HIS6 E. coli Promoter	Mixture
		SureVector CMV-HIS6	Mixture
		Mammalian Promoter	
		SureVector GAL1-HIS6	Mixture
		Yeast Promoter	
		SureVector LacZ Control (N-term)	Mixture
		SureVector Enzyme Mix	Mixture
		10X SureVector Buffer	Mixture
		dNTP Mix	Mixture
		DpnI	Mixture
		XL1-Blue	Mixture
		Supercompetent Cells	
		pUC 18 DNA Control	Mixture
		Plasmid	
		Beta Mercaptoethanol	Mixture

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


10X SureVector Buffer


H319	SERIOUS EYE DAMAGE/EYE IRRITATION	Category 2
H412	LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 3

Beta Mercaptoethanol

H312	ACUTE TOXICITY (dermal)	Category 4
H315	SKIN CORROSION/IRRITATION	Category 2
H318	SERIOUS EYE DAMAGE/EYE IRRITATION	Category 1
H317	SKIN SENSITISATION	Category 1
H361f	REPRODUCTIVE TOXICITY	Category 2
H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Category 2

SECTION 2: Hazards identification

H412	LONG-TERM (CHRONIC) AQUATIC HAZARD	Category 3
 SureSolution		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector AmpR Selectable Marker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector KanR Selectable Marker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector ChIR Selectable Marker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector pUC Origin		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector p15a Origin		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector pBR322 Origin		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector XP1 Linker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector yARS		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector XP2 Linker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector NeoR Mammalian Selectable Marker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector LEU2 Yeast Selectable Marker		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector LacI Repressor		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector T7-HIS6 E. coli Promoter		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector CMV-HIS6 Mammalian Promoter		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector GAL1-HIS6 Yeast Promoter		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector LacZ Control (N-term)		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureVector Enzyme Mix		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
10X SureVector Buffer		The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
dNTP Mix		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
DpnI		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
XL1-Blue Supercompetent Cells		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
pUC 18 DNA Control Plasmid		The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Beta Mercaptoethanol		The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

Ingredients of unknown toxicity	:  SureVector Enzyme Mix	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
	10X SureVector Buffer	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
	DpnI	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	XL1-Blue Supercompetent Cells	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10%
		Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%

SECTION 2: Hazards identification

Ingredients of unknown ecotoxicity : XL1-Blue Supercompetent Cells Contains 5% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms : 10X SureVector Buffer



Beta Mercaptoethanol



Signal word

<input checked="" type="checkbox"/> 5X SureSolution	No signal word.
SureVector AmpR Selectable Marker	No signal word.
SureVector KanR Selectable Marker	No signal word.
SureVector ChIR Selectable Marker	No signal word.
SureVector pUC Origin	No signal word.
SureVector p15a Origin	No signal word.
SureVector pBR322 Origin	No signal word.
SureVector XP1 Linker	No signal word.
SureVector yARS	No signal word.
SureVector XP2 Linker	No signal word.
SureVector NeoR Mammalian Selectable Marker	No signal word.
SureVector LEU2 Yeast Selectable Marker	No signal word.
SureVector LacI Repressor	No signal word.
SureVector T7-HIS6 E. coli Promoter	No signal word.
SureVector CMV-HIS6 Mammalian Promoter	No signal word.
SureVector GAL1-HIS6 Yeast Promoter	No signal word.
SureVector LacZ Control (N-term)	No signal word.
SureVector Enzyme Mix	No signal word.
10X SureVector Buffer	Warning
dNTP Mix	No signal word.
DpnI	No signal word.
XL1-Blue Supercompetent Cells	No signal word.
pUC 18 DNA Control Plasmid	No signal word.
Beta Mercaptoethanol	Danger
<input checked="" type="checkbox"/> 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.

Hazard statements

SECTION 2: Hazards identification

SureVector p15a Origin	No known significant effects or critical hazards.
SureVector pBR322	No known significant effects or critical hazards.
Origin	
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector yARS	No known significant effects or critical hazards.
SureVector XP2 Linker	No known significant effects or critical hazards.
SureVector NeoR	No known significant effects or critical hazards.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
SureVector CMV-HIS6 Mammalian Promoter	No known significant effects or critical hazards.
SureVector GAL1-HIS6 Yeast Promoter	No known significant effects or critical hazards.
SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.
10X SureVector Buffer	H319 - Causes serious eye irritation. H412 - Harmful to aquatic life with long lasting effects.
dNTP Mix	No known significant effects or critical hazards.
DpnI	No known significant effects or critical hazards.
XL1-Blue	No known significant effects or critical hazards.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
Beta Mercaptoethanol	H312 - Harmful in contact with skin. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H318 - Causes serious eye damage. H361f - Suspected of damaging fertility. H373 - May cause damage to organs through prolonged or repeated exposure. H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: 5 X SureSolution	Not applicable.
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChIR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322	Not applicable.
Origin	
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6	Not applicable.

SECTION 2: Hazards identification

Mammalian Promoter	
SureVector GAL1-HIS6	Not applicable.
Yeast Promoter	
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	P280 - Wear eye or face protection. P273 - Avoid release to the environment.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control	Not applicable.
Plasmid	
Beta Mercaptoethanol	P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P260 - Do not breathe vapour.

Response

<input checked="" type="checkbox"/> SureSolution	Not applicable.
SureVector AmpR	Not applicable.
Selectable Marker	
SureVector KanR	Not applicable.
Selectable Marker	
SureVector ChIR	Not applicable.
Selectable Marker	
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322	Not applicable.
Origin	
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast	Not applicable.
Selectable Marker	
SureVector LacI	Not applicable.
Repressor	
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6	Not applicable.
Mammalian Promoter	
SureVector GAL1-HIS6	Not applicable.
Yeast Promoter	
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control	Not applicable.
Plasmid	
Beta Mercaptoethanol	P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

SECTION 2: Hazards identification

Yeast Promoter	
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

: Beta Mercaptoethanol 2-mercaptoethanol

Supplemental label elements

: <input checked="" type="checkbox"/> 5X SureSolution	Not applicable.
SureVector AmpR	Not applicable.
Selectable Marker	
SureVector KanR	Not applicable.
Selectable Marker	
SureVector ChIR	Not applicable.
Selectable Marker	
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322 Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Safety data sheet available on request.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Safety data sheet available on request.
XL1-Blue	Safety data sheet available on request.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	Not applicable.
: <input checked="" type="checkbox"/> 5X SureSolution	Not applicable.
SureVector AmpR	Not applicable.
Selectable Marker	
SureVector KanR	Not applicable.
Selectable Marker	
SureVector ChIR	Not applicable.
Selectable Marker	
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322	Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

SECTION 2: Hazards identification

Origin	
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

<input checked="" type="checkbox"/> SureSolution	Not applicable.
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChIR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322	Not applicable.
Origin	
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	

SECTION 2: Hazards identification

Tactile warning of danger

pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	Not applicable.
<input checked="" type="checkbox"/> SureSolution	Not applicable.
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChIR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322 Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

	PBT	P	B	T	vPvB	vP	vB
<input checked="" type="checkbox"/> SureSolution	No	N/A	No	No	No	N/A	No

<input checked="" type="checkbox"/> SureVector AmpR Selectable Marker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector KanR Selectable Marker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector ChIR Selectable Marker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector pUC Origin	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector p15a Origin	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector pBR322 Origin	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector XP1 Linker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 2: Hazards identification

SureVector yARS	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector XP2 Linker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector NeoR Mammalian Selectable Marker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector LEU2 Yeast Selectable Marker	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector LacI Repressor	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector T7-HIS6 E. coli Promoter	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector CMV-HIS6 Mammalian Promoter	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector GAL1-HIS6 Yeast Promoter	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector LacZ Control (N-term)	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
SureVector Enzyme Mix	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
10X SureVector Buffer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
dNTP Mix	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
DpnI	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
XL1-Blue Supercompetent Cells	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
pUC 18 DNA Control Plasmid	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
Beta Mercaptoethanol	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

<input checked="" type="checkbox"/> SureSolution	None known.
SureVector AmpR Selectable Marker	None known.
SureVector KanR Selectable Marker	None known.
SureVector ChIR Selectable Marker	None known.
SureVector pUC Origin	None known.
SureVector p15a Origin	None known.
SureVector pBR322 Origin	None known.
SureVector XP1 Linker	None known.
SureVector yARS	None known.
SureVector XP2 Linker	None known.
SureVector NeoR Mammalian Selectable Marker	None known.
SureVector LEU2 Yeast Selectable Marker	None known.
SureVector LacI Repressor	None known.
SureVector T7-HIS6 E. coli Promoter	None known.
SureVector CMV-HIS6 Mammalian Promoter	None known.
SureVector GAL1-HIS6 Yeast Promoter	None known.
SureVector LacZ Control (N-term)	None known.
SureVector Enzyme Mix	None known.
10X SureVector Buffer	None known.

SureVector Core Kit, Part Number G7514A

SECTION 2: Hazards identification

Substances identified as having endocrine disruptor properties

dNTP Mix	None known.
DpnI	None known.
XL1-Blue	None known.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	None known.
Beta Mercaptoethanol	None known.

Ingredient name	Impact
SureVector Enzyme Mix Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Environment
10X SureVector Buffer Polyoxyethylene octyl phenyl ether	Environment

SECTION 3: Composition/information on ingredients

3.1 Substances	5X SureSolution	Mono-constituent substance
	SureVector AmpR Selectable Marker	Mixture
	SureVector KanR Selectable Marker	Mixture
	SureVector ChIR Selectable Marker	Mixture
	SureVector pUC Origin	Mixture
	SureVector p15a Origin	Mixture
	SureVector pBR322 Origin	Mixture
	SureVector XP1 Linker	Mixture
	SureVector yARS	Mixture
	SureVector XP2 Linker	Mixture
	SureVector NeoR Mammalian Selectable Marker	Mixture
	SureVector LEU2 Yeast Selectable Marker	Mixture
	SureVector LacI Repressor	Mixture
	SureVector T7-HIS6 E. coli Promoter	Mixture
	SureVector CMV-HIS6 Mammalian Promoter	Mixture
	SureVector GAL1-HIS6 Yeast Promoter	Mixture
	SureVector LacZ Control (N-term)	Mixture
	SureVector Enzyme Mix	Mixture
	10X SureVector Buffer	Mixture
	dNTP Mix	Mixture
	DpnI	Mixture
	XL1-Blue Supercompetent Cells	Mixture
	pUC 18 DNA Control Plasmid	Mixture
	Beta Mercaptoethanol	Mixture

Product/ingredient name	Identifiers	%	Classification	Type
5X SureSolution Dimethyl sulfoxide	EC: 200-664-3 CAS: 67-68-5	100	Not classified.	[1]
SureVector Enzyme Mix Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	CAS: 9036-19-5	<0.25	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	[1] [3]

SECTION 3: Composition/information on ingredients

			Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	
10X SureVector Buffer Ammonium sulphate	EC: 231-984-1 CAS: 7783-20-2	≤3	Eye Irrit. 2, H319	[1]
Polyoxyethylene octyl phenyl ether	CAS: 9002-93-1	<2.5	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	[1] [2]
Dpnl Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[1]
XL1-Blue Supercompetent Cells Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥10 - ≤25	Not classified.	[1]
Sucrose	UK (GB) REACH #: Annex IV REACH #: Annex IV EC: 200-334-9 CAS: 57-50-1	≤10	Not classified.	[1]
Beta Mercaptoethanol 2-Mercaptoethanol	EC: 200-464-6 CAS: 60-24-2	≤12	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 3, H331 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1A, H317 Repr. 2, H361f STOT RE 2, H373 (heart, liver) (oral) Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411 See Section 16 for the full text of the H statements declared above.	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type

<input checked="" type="checkbox"/> SureSolution	[1] Constituent
SureVector Enzyme Mix	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit [3] Substance of equivalent concern
10X SureVector Buffer	[1] Substance classified with a health or environmental hazard [2] Substance of equivalent concern
Dpnl	[1] Substance with a workplace exposure limit
XL1-Blue Supercompetent Cells	[1] Substance with a workplace exposure limit
Beta Mercaptoethanol	[1] Substance classified with a health or environmental hazard

SureVector Core Kit, Part Number G7514A

SECTION 3: Composition/information on ingredients

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: <input checked="" type="checkbox"/> SureSolution	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 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 KanR 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 ChIR 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 p15a 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 pBR322 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 yARS	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 XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 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-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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 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. Continue to rinse for at least 10 minutes. Get medical attention.
	dNTP Mix	Immediately flush eyes with plenty of water, occasionally

SECTION 4: First aid measures

DpnI	lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. 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.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.

Inhalation

: 5X SureSolution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
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 KanR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector ChIR 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 p15a Origin	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector pBR322 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 yARS	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector XP2 Linker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector NeoR Mammalian Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LEU2 Yeast Selectable Marker	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-HIS6 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 CMV-HIS6 Mammalian Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector GAL1-HIS6 Yeast Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

SECTION 4: First aid measures


	occur.
SureVector LacZ Control (N-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. 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. 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	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.
XL1-Blue Supercompetent Cells	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
pUC 18 DNA Control Plasmid	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Beta Mercaptoethanol	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Skin contact	
: 5X SureSolution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector AmpR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector KanR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector ChIR 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 p15a Origin	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector pBR322 Origin	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

SECTION 4: First aid measures

SureVector XP1 Linker	symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector yARS	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector XP2 Linker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector NeoR Mammalian Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector LEU2 Yeast Selectable Marker	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-HIS6 E. coli Promoter	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector CMV-HIS6 Mammalian Promoter	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector GAL1-HIS6 Yeast Promoter	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureVector LacZ Control (N-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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
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.
XL1-Blue Supercompetent Cells	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
pUC 18 DNA Control Plasmid	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Beta Mercaptoethanol	Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

Ingestion

:  SureSolution

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.

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 KanR
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 ChIR
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 p15a 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 pBR322
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 yARS

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 XP2 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 NeoR
Mammalian 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 LEU2 Yeast
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 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.

SECTION 4: First aid measures

SureVector T7-HIS6 E. coli Promoter	occur. 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
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.
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.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	Get medical attention immediately. Call a poison center or physician. 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

SECTION 4: First aid measures

Protection of first-aiders : 5X SureSolution

- SureVector AmpR Selectable Marker
- SureVector KanR Selectable Marker
- SureVector ChIR Selectable Marker
- SureVector pUC Origin
- SureVector p15a Origin
- SureVector pBR322 Origin
- SureVector XP1 Linker
- SureVector yARS
- SureVector XP2 Linker
- SureVector NeoR Mammalian Selectable Marker
- SureVector LEU2 Yeast Selectable Marker
- SureVector LacI Repressor
- SureVector T7-HIS6 E. coli Promoter
- SureVector CMV-HIS6 Mammalian Promoter
- SureVector GAL1-HIS6 Yeast Promoter
- SureVector LacZ Control (N-term)
- SureVector Enzyme Mix
- 10X SureVector Buffer
- dNTP Mix
- DpnI
- XL1-Blue Supercompetent Cells
- pUC 18 DNA Control Plasmid
- Beta Mercaptoethanol

personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training.

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No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training.

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.

No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

SECTION 4: First aid measures

SureVector LEU2 Yeast Selectable Marker	No specific data.
SureVector LacI Repressor	No specific data.
SureVector T7-HIS6 E. coli Promoter	No specific data.
SureVector CMV-HIS6 Mammalian Promoter	No specific data.
SureVector GAL1-HIS6 Yeast Promoter	No specific data.
SureVector LacZ Control (N-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.
XL1-Blue	No specific data.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No specific data.
Beta Mercaptoethanol	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations

Skin contact

: 5X SureSolution	No specific data.
SureVector AmpR Selectable Marker	No specific data.
SureVector KanR Selectable Marker	No specific data.
SureVector ChIR Selectable Marker	No specific data.
SureVector pUC Origin	No specific data.
SureVector p15a Origin	No specific data.
SureVector pBR322 Origin	No specific data.
SureVector XP1 Linker	No specific data.
SureVector yARS	No specific data.
SureVector XP2 Linker	No specific data.
SureVector NeoR	No specific data.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	No specific data.
SureVector LacI Repressor	No specific data.
SureVector T7-HIS6 E. coli Promoter	No specific data.
SureVector CMV-HIS6 Mammalian Promoter	No specific data.
SureVector GAL1-HIS6 Yeast Promoter	No specific data.
SureVector LacZ Control (N-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.
XL1-Blue	No specific data.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No specific data.
Beta Mercaptoethanol	Adverse symptoms may include the following: pain or irritation redness

SECTION 4: First aid measures

SureVector yARS	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector XP2 Linker	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector NeoR Mammalian Selectable Marker	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector LEU2 Yeast Selectable Marker	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector LacI Repressor	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector T7-HIS6 E. coli Promoter	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector CMV-HIS6 Mammalian Promoter	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector GAL1-HIS6 Yeast Promoter	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector LacZ Control (N-term)	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
SureVector Enzyme Mix	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
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	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
DpnI	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
XL1-Blue Supercompetent Cells	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
pUC 18 DNA Control Plasmid	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist
Beta Mercaptoethanol	immediately if large quantities have been ingested or inhaled. Treat symptomatically. Contact poison treatment specialist

Specific treatments

☒ SureSolution	No specific treatment.
SureVector AmpR Selectable Marker	No specific treatment.
SureVector KanR Selectable Marker	No specific treatment.
SureVector ChIR Selectable Marker	No specific treatment.
SureVector pUC Origin	No specific treatment.
SureVector p15a Origin	No specific treatment.
SureVector pBR322 Origin	No specific treatment.
SureVector XP1 Linker	No specific treatment.
SureVector yARS	No specific treatment.
SureVector XP2 Linker	No specific treatment.
SureVector NeoR Mammalian Selectable Marker	No specific treatment.
SureVector LEU2 Yeast Selectable Marker	No specific treatment.
SureVector LacI Repressor	No specific treatment.
SureVector T7-HIS6 E. coli Promoter	No specific treatment.
SureVector CMV-HIS6 Mammalian Promoter	No specific treatment.
SureVector GAL1-HIS6 Yeast Promoter	No specific treatment.
SureVector LacZ Control (N-term)	No specific treatment.

SureVector Core Kit, Part Number G7514A

SECTION 4: First aid measures

SureVector Enzyme Mix	No specific treatment.
10X SureVector Buffer	No specific treatment.
dNTP Mix	No specific treatment.
DpnI	No specific treatment.
XL1-Blue	No specific treatment.
Supercompetent Cells	
pUC 18 DNA Control	No specific treatment.
Plasmid	
Beta Mercaptoethanol	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: <input checked="" type="checkbox"/> SureSolution	Use an extinguishing agent suitable for the surrounding fire.
SureVector AmpR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector KanR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector ChIR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector pUC Origin	Use an extinguishing agent suitable for the surrounding fire.
SureVector p15a Origin	Use an extinguishing agent suitable for the surrounding fire.
SureVector pBR322 Origin	Use an extinguishing agent suitable for the surrounding fire.
SureVector XP1 Linker	Use an extinguishing agent suitable for the surrounding fire.
SureVector yARS	Use an extinguishing agent suitable for the surrounding fire.
SureVector XP2 Linker	Use an extinguishing agent suitable for the surrounding fire.
SureVector NeoR Mammalian Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector LEU2 Yeast Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector LacI Repressor	Use an extinguishing agent suitable for the surrounding fire.
SureVector T7-HIS6 E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.
SureVector CMV-HIS6 Mammalian Promoter	Use an extinguishing agent suitable for the surrounding fire.
SureVector GAL1-HIS6 Yeast Promoter	Use an extinguishing agent suitable for the surrounding fire.
SureVector LacZ Control (N-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.
XL1-Blue	Use an extinguishing agent suitable for the surrounding fire.
Supercompetent Cells	
pUC 18 DNA Control	Use an extinguishing agent suitable for the surrounding fire.
Plasmid	
Beta Mercaptoethanol	Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

: <input checked="" type="checkbox"/> SureSolution	None known.
SureVector AmpR Selectable Marker	None known.
SureVector KanR Selectable Marker	None known.
SureVector ChIR Selectable Marker	None known.
SureVector pUC Origin	None known.
SureVector p15a Origin	None known.
SureVector pBR322 Origin	None known.
SureVector XP1 Linker	None known.
SureVector yARS	None known.

SECTION 5: Firefighting measures

SureVector XP2 Linker	None known.
SureVector NeoR	None known.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	None known.
SureVector LacI Repressor	None known.
SureVector T7-HIS6 E. coli Promoter	None known.
SureVector CMV-HIS6 Mammalian Promoter	None known.
SureVector GAL1-HIS6 Yeast Promoter	None known.
SureVector LacZ Control (N-term)	None known.
SureVector Enzyme Mix	None known.
10X SureVector Buffer	None known.
dNTP Mix	None known.
DpnI	None known.
XL1-Blue	None known.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	None known.
Beta Mercaptoethanol	None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: 5X SureSolution	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector AmpR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector KanR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector ChIR 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 p15a Origin	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector pBR322 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 yARS	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector XP2 Linker	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector NeoR Mammalian Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector LEU2 Yeast Selectable Marker	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-HIS6 E. coli Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector CMV-HIS6 Mammalian Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector GAL1-HIS6 Yeast Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector LacZ Control (N-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

SECTION 5: Firefighting measures

	10X SureVector Buffer	container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	dNTP Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	DpnI	In a fire or if heated, a pressure increase will occur and the container may burst.
	XL1-Blue Supercompetent Cells	In a fire or if heated, a pressure increase will occur and the container may burst.
	pUC 18 DNA Control Plasmid	In a fire or if heated, a pressure increase will occur and the container may burst.
	Beta Mercaptoethanol	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	: 5X SureSolution	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChIR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector p15a Origin	No specific data.
	SureVector pBR322 Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector yARS	No specific data.
	SureVector XP2 Linker	No specific data.
	SureVector NeoR	No specific data.
	Mammalian Selectable Marker	No specific data.
	SureVector LEU2 Yeast Selectable Marker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector CMV-HIS6 Mammalian Promoter	No specific data.
	SureVector GAL1-HIS6 Yeast Promoter	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	10X SureVector Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
	dNTP Mix	No specific data.
	DpnI	Decomposition products may include the following materials: carbon dioxide

SECTION 5: Firefighting measures


XL1-Blue Supercompetent Cells	carbon monoxide halogenated compounds metal oxide/oxides Decomposition products may include the following materials:
pUC 18 DNA Control Plasmid Beta Mercaptoethanol	carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

:  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.
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 KanR 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 ChIR 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 p15a 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 pBR322 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 yARS	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 XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 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-HIS6 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 CMV-HIS6 Mammalian 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.

SECTION 5: Firefighting measures


SureVector GAL1-HIS6 Yeast 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 LacZ Control (N-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 without suitable training.
10X SureVector Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
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.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Special protective equipment for fire-fighters	
:  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 KanR 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 ChIR 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 p15a 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 pBR322 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 yARS	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 LacI	Fire-fighters should wear appropriate protective equipment

SECTION 5: Firefighting measures

Repressor	and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector T7-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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 (SCBA) with a full face-piece operated in positive pressure mode.
Dpnl	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
XL1-Blue Supercompetent Cells	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
pUC 18 DNA Control Plasmid	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Beta Mercaptoethanol	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	:  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. 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 KanR 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 ChIR 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.

SECTION 6: Accidental release measures

SureVector p15a 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 pBR322 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 yARS	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 XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 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-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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

SECTION 6: Accidental release measures

10X SureVector Buffer	personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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.
Dpnl	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.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	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. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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 KanR 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 ChIR 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 p15a 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 pBR322 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,

For emergency responders

SECTION 6: Accidental release measures

	take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector yARS	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 XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 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-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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".
XL1-Blue Supercompetent Cells	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".
pUC 18 DNA Control Plasmid	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".
Beta Mercaptoethanol	If specialised clothing is required to deal with the spillage,

SECTION 6: Accidental release measures

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

6.2 Environmental precautions

: <input checked="" type="checkbox"/> 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 KanR 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 ChIR 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 p15a 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 pBR322 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 yARS	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 XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 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-HIS6 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 CMV-HIS6 Mammalian 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

SECTION 6: Accidental release measures

	(sewers, waterways, soil or air).
SureVector GAL1-HIS6 Yeast 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 LacZ Control (N-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). Water polluting material. May be harmful to the environment if released in large quantities.
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).
XL1-Blue Supercompetent Cells	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).
pUC 18 DNA Control Plasmid	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).
Beta Mercaptoethanol	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: 5X SureSolution	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 AmpR Selectable Marker	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 KanR Selectable Marker	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 ChIR Selectable Marker	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 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 p15a 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 pBR322 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.
SureVector yARS	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 XP2 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.
SureVector NeoR Mammalian Selectable Marker	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 LEU2 Yeast Selectable Marker	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 LacI Repressor	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-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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

SECTION 6: Accidental release measures

SureVector Enzyme Mix	of via a licensed waste 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. May be harmful to the environment if released. Dispose of spillages under controlled conditions.
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. May be harmful to the environment if released. Dispose of spillages under controlled conditions.
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.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.


6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: 5X SureSolution	Put on appropriate personal protective equipment (see Section 8).
	SureVector AmpR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
	SureVector KanR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
	SureVector ChIR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
	SureVector pUC Origin	Put on appropriate personal protective equipment (see Section 8).
	SureVector p15a Origin	Put on appropriate personal protective equipment (see Section 8).
	SureVector pBR322 Origin	Put on appropriate personal protective equipment (see Section 8).
	SureVector XP1 Linker	Put on appropriate personal protective equipment (see Section 8).
	SureVector yARS	Put on appropriate personal protective equipment (see Section 8).

SECTION 7: Handling and storage

SureVector XP2 Linker	Put on appropriate personal protective equipment (see Section 8).
SureVector NeoR Mammalian Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
SureVector LEU2 Yeast Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
SureVector LacI Repressor	Put on appropriate personal protective equipment (see Section 8).
SureVector T7-HIS6 E. coli Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector CMV-HIS6 Mammalian Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector GAL1-HIS6 Yeast Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector LacZ Control (N-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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
DpnI	Put on appropriate personal protective equipment (see Section 8).
XL1-Blue Supercompetent Cells	Put on appropriate personal protective equipment (see Section 8).
pUC 18 DNA Control Plasmid	Put on appropriate personal protective equipment (see Section 8).
Beta Mercaptoethanol	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:  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 KanR Selectable Marker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

SECTION 7: Handling and storage

SureVector ChIR Selectable Marker	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector pUC Origin	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector p15a Origin	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector pBR322 Origin	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector XP1 Linker	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector yARS	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector XP2 Linker	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector NeoR Mammalian Selectable Marker	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector LEU2 Yeast Selectable Marker	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
SureVector LacI Repressor	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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

SECTION 7: Handling and storage

SureVector T7-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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 additional information on hygiene measures.
dNTP 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.
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.
XL1-Blue Supercompetent Cells	Potentially biohazardous material. 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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	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

SECTION 7: Handling and storage

and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage

:  SureSolution

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 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 KanR
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 ChIR
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 p15a 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

SECTION 7: Handling and storage

SureVector pBR322 Origin	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 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 yARS	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 XP2 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 NeoR Mammalian 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 LEU2 Yeast 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 LacI Repressor	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-

SECTION 7: Handling and storage

	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 T7-HIS6 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 CMV-HIS6 Mammalian 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 GAL1-HIS6 Yeast 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 LacZ Control (N-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 Enzyme 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.
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

SECTION 7: Handling and storage

	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.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	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.
Beta Mercaptoethanol	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. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

SureVector Core Kit, Part Number G7514A

SECTION 7: Handling and storage

Yeast Promoter	
SureVector LacZ Control (N-term)	Not available.
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	Not available.
DpnI	Not available.
XL1-Blue	Not available.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not available.
Beta Mercaptoethanol	Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
SureVector Enzyme Mix Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
DpnI Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
XL1-Blue Supercompetent Cells Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
Sucrose	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 20 mg/m ³ 15 minutes. TWA: 10 mg/m ³ 8 hours.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
5X SureSolution Dimethyl sulfoxide	DNEL	Long term Inhalation	47 mg/m ³	General population	Local
	DNEL	Long term Oral	60 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	100 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	120 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	200 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	265 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	484 mg/m ³	Workers	Systemic
SureVector Enzyme Mix Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local

SECTION 8: Exposure controls/personal protection

10X SureVector Buffer Ammonium sulphate	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1.667 mg/m ³	General population	Systemic
	DNEL	Long term Oral	6.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	11.167 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	12.8 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	42.667 mg/kg bw/day	Workers	Systemic
Dpnl Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic
XL1-Blue Supercompetent Cells Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic
Beta Mercaptoethanol 2-Mercaptoethanol	DNEL	Short term Oral	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.05 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.05 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	0.17 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.17 mg/m ³	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

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

Individual protection measures

Hygiene measures : Handle as biohazard material (Biosafety level 1). 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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 8: Exposure controls/personal protection

- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state	5X SureSolution	Liquid. [Clear.]
	SureVector AmpR Selectable Marker	Liquid.
	SureVector KanR Selectable Marker	Liquid.
	SureVector ChIR Selectable Marker	Liquid.
	SureVector pUC Origin	Liquid.
	SureVector p15a Origin	Liquid.
	SureVector pBR322 Origin	Liquid.
	SureVector XP1 Linker	Liquid.
	SureVector yARS	Liquid.
	SureVector XP2 Linker	Liquid.
	SureVector NeoR Mammalian Selectable Marker	Liquid.
	SureVector LEU2 Yeast Selectable Marker	Liquid.
	SureVector LacI Repressor	Liquid.
	SureVector T7-HIS6 E. coli Promoter	Liquid.
	SureVector CMV-HIS6 Mammalian Promoter	Liquid.
	SureVector GAL1-HIS6 Yeast Promoter	Liquid.
	SureVector LacZ Control	Liquid.

SECTION 9: Physical and chemical properties

		(N-term)	
		SureVector Enzyme Mix	Liquid.
		10X SureVector Buffer	Liquid.
		dNTP Mix	Liquid.
		DpnI	Liquid.
		XL1-Blue	Liquid.
		Supercompetent Cells	
		pUC 18 DNA Control	Liquid.
		Plasmid	
		Beta Mercaptoethanol	Liquid.
Colour	:	5X SureSolution	Blue.
		SureVector AmpR	Not available.
		Selectable Marker	
		SureVector KanR	Not available.
		Selectable Marker	
		SureVector ChIR	Not available.
		Selectable Marker	
		SureVector pUC Origin	Not available.
		SureVector p15a Origin	Not available.
		SureVector pBR322	Not available.
		Origin	
		SureVector XP1 Linker	Not available.
		SureVector yARS	Not available.
		SureVector XP2 Linker	Not available.
		SureVector NeoR	Not available.
		Mammalian Selectable	
		Marker	
		SureVector LEU2 Yeast	Not available.
		Selectable Marker	
		SureVector LacI	Not available.
		Repressor	
		SureVector T7-HIS6 E.	Not available.
		coli Promoter	
		SureVector CMV-HIS6	Not available.
		Mammalian Promoter	
		SureVector GAL1-HIS6	Not available.
		Yeast Promoter	
		SureVector LacZ Control	Not available.
		(N-term)	
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
		XL1-Blue	Not available.
		Supercompetent Cells	
		pUC 18 DNA Control	Not available.
		Plasmid	
		Beta Mercaptoethanol	Not available.
Odour	:	5X SureSolution	Odourless. [Slight]
		SureVector AmpR	Not available.
		Selectable Marker	
		SureVector KanR	Not available.
		Selectable Marker	
		SureVector ChIR	Not available.
		Selectable Marker	
		SureVector pUC Origin	Not available.
		SureVector p15a Origin	Not available.
		SureVector pBR322	Not available.
		Origin	
		SureVector XP1 Linker	Not available.
		SureVector yARS	Not available.
		SureVector XP2 Linker	Not available.
		SureVector NeoR	Not available.
		Mammalian Selectable	

SECTION 9: Physical and chemical properties

	Marker	
	SureVector LEU2 Yeast	Not available.
	Selectable Marker	
	SureVector LacI	Not available.
	Repressor	
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector CMV-HIS6 Mammalian Promoter	Not available.
	SureVector GAL1-HIS6 Yeast Promoter	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
	XL1-Blue	Not available.
	Supercompetent Cells	
	pUC 18 DNA Control Plasmid	Not available.
	Beta Mercaptoethanol	Not available.
Odour threshold	: 5X SureSolution	Not available.
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322 Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.
	SureVector NeoR	Not available.
	Mammalian Selectable Marker	
	SureVector LEU2 Yeast	Not available.
	Selectable Marker	
	SureVector LacI	Not available.
	Repressor	
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector CMV-HIS6 Mammalian Promoter	Not available.
	SureVector GAL1-HIS6 Yeast Promoter	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
	XL1-Blue	Not available.
	Supercompetent Cells	
	pUC 18 DNA Control Plasmid	Not available.
	Beta Mercaptoethanol	Not available.

SureVector Core Kit, Part Number G7514A

SECTION 9: Physical and chemical properties

Melting point/freezing point	:	5X SureSolution	18.5°C
		SureVector AmpR	0°C
		Selectable Marker	
		SureVector KanR	0°C
		Selectable Marker	
		SureVector ChIR	0°C
		Selectable Marker	
		SureVector pUC Origin	0°C
		SureVector p15a Origin	0°C
		SureVector pBR322	0°C
		Origin	
		SureVector XP1 Linker	0°C
		SureVector yARS	0°C
		SureVector XP2 Linker	0°C
		SureVector NeoR	0°C
		Mammalian Selectable Marker	
		SureVector LEU2 Yeast	0°C
		Selectable Marker	
		SureVector LacI	0°C
		Repressor	
		SureVector T7-HIS6 E. coli Promoter	0°C
		SureVector CMV-HIS6 Mammalian Promoter	0°C
		SureVector GAL1-HIS6 Yeast Promoter	0°C
		SureVector LacZ Control (N-term)	0°C
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	0°C
		DpnI	Not available.
		XL1-Blue	Not available.
		Supercompetent Cells	
		pUC 18 DNA Control Plasmid	0°C
		Beta Mercaptoethanol	Not available.
	Initial boiling point and boiling range	:	5X SureSolution
		SureVector AmpR	100°C
		Selectable Marker	
		SureVector KanR	100°C
		Selectable Marker	
		SureVector ChIR	100°C
		Selectable Marker	
		SureVector pUC Origin	100°C
		SureVector p15a Origin	100°C
		SureVector pBR322	100°C
		Origin	
		SureVector XP1 Linker	100°C
		SureVector yARS	100°C
		SureVector XP2 Linker	100°C
		SureVector NeoR	100°C
		Mammalian Selectable Marker	
		SureVector LEU2 Yeast	100°C
		Selectable Marker	
		SureVector LacI	100°C
		Repressor	
		SureVector T7-HIS6 E. coli Promoter	100°C
		SureVector CMV-HIS6 Mammalian Promoter	100°C
		SureVector GAL1-HIS6 Yeast Promoter	100°C

SECTION 9: Physical and chemical properties

Flammability

Yeast Promoter	
SureVector LacZ Control (N-term)	100°C
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	100°C
DpnI	Not available.
XL1-Blue	Not available.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	100°C
Beta Mercaptoethanol	Not available.
5X SureSolution	Not applicable.
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChIR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322 Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR	Not applicable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	Not applicable.
5X SureSolution	Lower: 2.6% Upper: 28.5%
SureVector AmpR Selectable Marker	Not available.
SureVector KanR Selectable Marker	Not available.
SureVector ChIR Selectable Marker	Not available.
SureVector pUC Origin	Not available.
SureVector p15a Origin	Not available.
SureVector pBR322 Origin	Not available.
SureVector XP1 Linker	Not available.
SureVector yARS	Not available.

Upper/lower flammability or explosive limits

SECTION 9: Physical and chemical properties

SureVector XP2 Linker	Not available.
SureVector NeoR	Not available.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not available.
SureVector LacI Repressor	Not available.
SureVector T7-HIS6 E. coli Promoter	Not available.
SureVector CMV-HIS6 Mammalian Promoter	Not available.
SureVector GAL1-HIS6 Yeast Promoter	Not available.
SureVector LacZ Control (N-term)	Not available.
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	Not available.
DpnI	Not available.
XL1-Blue	Not available.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not available.
Beta Mercaptoethanol	Not available.
5X SureSolution	Closed cup: 87°C [ASTM D 93] Open cup: 87°C
SureVector AmpR Selectable Marker	Not available.
SureVector KanR Selectable Marker	Not available.
SureVector ChIR Selectable Marker	Not available.
SureVector pUC Origin	Not available.
SureVector p15a Origin	Not available.
SureVector pBR322 Origin	Not available.
SureVector XP1 Linker	Not available.
SureVector yARS	Not available.
SureVector XP2 Linker	Not available.
SureVector NeoR	Not available.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not available.
SureVector LacI Repressor	Not available.
SureVector T7-HIS6 E. coli Promoter	Not available.
SureVector CMV-HIS6 Mammalian Promoter	Not available.
SureVector GAL1-HIS6 Yeast Promoter	Not available.
SureVector LacZ Control (N-term)	Not available.
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	Not available.
DpnI	Not available.
XL1-Blue	Not available.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not available.
Beta Mercaptoethanol	Not available.

Flash point

SureVector Core Kit, Part Number G7514A

SECTION 9: Physical and chemical properties

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
SureVector Enzyme Mix				
glycerol	-	-	177	-
10X SureVector Buffer				
Polyoxyethylene octyl phenyl ether	>109.85	-	-	-
Dpnl				
glycerol	-	-	177	-
XL1-Blue Supercompetent Cells				
dimethyl sulfoxide	87	ASTM D 93	87	-
glycerol	-	-	177	-
Beta Mercaptoethanol				
2-mercaptoethanol	74	-	74	-

Auto-ignition temperature

: SureSolution 300 to 302°C

Ingredient name	°C	Method
SureVector Enzyme Mix		
glycerol	370	-
Dpnl		
glycerol	370	-
XL1-Blue Supercompetent Cells		
dimethyl sulfoxide	300 to 302	-
glycerol	370	-
Beta Mercaptoethanol		
2-mercaptoethanol	295	-

Decomposition temperature

: 5X SureSolution 140 to 189°C
 SureVector AmpR Not available.
 Selectable Marker
 SureVector KanR Not available.
 Selectable Marker
 SureVector ChIR Not available.
 Selectable Marker
 SureVector pUC Origin Not available.
 SureVector p15a Origin Not available.
 SureVector pBR322 Not available.
 Origin
 SureVector XP1 Linker Not available.
 SureVector yARS Not available.

SECTION 9: Physical and chemical properties

pH

SureVector XP2 Linker	Not available.
SureVector NeoR	Not available.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	Not available.
SureVector LacI Repressor	Not available.
SureVector T7-HIS6 E. coli Promoter	Not available.
SureVector CMV-HIS6 Mammalian Promoter	Not available.
SureVector GAL1-HIS6 Yeast Promoter	Not available.
SureVector LacZ Control (N-term)	Not available.
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	Not available.
DpnI	Not available.
XL1-Blue	Not available.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not available.
Beta Mercaptoethanol	Not available.
5X SureSolution	Not available.
SureVector AmpR Selectable Marker	8
SureVector KanR Selectable Marker	8
SureVector ChIR Selectable Marker	8
SureVector pUC Origin	8
SureVector p15a Origin	8
SureVector pBR322 Origin	8
SureVector XP1 Linker	8
SureVector yARS	8
SureVector XP2 Linker	8
SureVector NeoR	8
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	8
SureVector LacI Repressor	8
SureVector T7-HIS6 E. coli Promoter	8
SureVector CMV-HIS6 Mammalian Promoter	8
SureVector GAL1-HIS6 Yeast Promoter	8
SureVector LacZ Control (N-term)	8
SureVector Enzyme Mix	8.2
10X SureVector Buffer	8.8
dNTP Mix	7.5
DpnI	7.5
XL1-Blue	6.4
Supercompetent Cells	
pUC 18 DNA Control Plasmid	7.5
Beta Mercaptoethanol	Not available.

SureVector Core Kit, Part Number G7514A

SECTION 9: Physical and chemical properties

Viscosity	: 5X SureSolution	Dynamic: 2.14 mPa·s
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector KanR	Not available.
	Selectable Marker	
	SureVector ChIR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322	Not available.
	Origin	
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.
	SureVector NeoR	Not available.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	Not available.
	Selectable Marker	
	SureVector LacI	Not available.
	Repressor	
	SureVector T7-HIS6 E.	Not available.
	coli Promoter	
	SureVector CMV-HIS6	Not available.
	Mammalian Promoter	
	SureVector GAL1-HIS6	Not available.
	Yeast Promoter	
	SureVector LacZ Control	Not available.
	(N-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
	XL1-Blue	Not available.
	Supercompetent Cells	
	pUC 18 DNA Control	Not available.
	Plasmid	
	Beta Mercaptoethanol	Not available.

Solubility(ies)	: Media	Result
	5X SureSolution	
	water	Soluble
	SureVector AmpR Selectable Marker	
	water	Soluble
	SureVector KanR Selectable Marker	
	water	Soluble
	SureVector ChIR Selectable Marker	
	water	Soluble
	SureVector pUC Origin	
	water	Soluble
	SureVector p15a Origin	
	water	Soluble
	SureVector pBR322 Origin	
	water	Soluble
	SureVector XP1 Linker	
	water	Soluble
	SureVector yARS	
	water	Soluble
	SureVector XP2 Linker	
	water	Soluble
	SureVector NeoR Mammalian	
	Selectable Marker	
	water	Soluble
	SureVector LEU2 Yeast Selectable	

SureVector Core Kit, Part Number G7514A

SECTION 9: Physical and chemical properties

Marker	
water	Soluble
SureVector LacI Repressor	
water	Soluble
SureVector T7-HIS6 E. coli Promoter	
water	Soluble
SureVector CMV-HIS6 Mammalian Promoter	
water	Soluble
SureVector GAL1-HIS6 Yeast Promoter	
water	Soluble
SureVector LacZ Control (N-term)	
water	Soluble
SureVector Enzyme Mix	
water	Soluble
10X SureVector Buffer	
water	Soluble
dNTP Mix	
water	Soluble
Dpnl	
water	Soluble
XL1-Blue Supercompetent Cells	
water	Soluble
pUC 18 DNA Control Plasmid	
water	Soluble
Beta Mercaptoethanol	
water	Soluble

Partition coefficient: n-octanol/water

5X SureSolution	-1.35
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChIR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322 Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR Mammalian Selectable Marker	Not applicable.
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
Dpnl	Not applicable.
XL1-Blue Supercompetent Cells	Not applicable.
pUC 18 DNA Control	Not applicable.

SureVector Core Kit, Part Number G7514A

SECTION 9: Physical and chemical properties

Plasmid

Beta Mercaptoethanol

Not applicable.

Vapour pressure

: SureSolution

0.056 kPa (0.42 mm Hg) [EU A.4]

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<input checked="" type="checkbox"/> SureVector AmpR Selectable Marker						
water	17.5	2.3	-	92.258	12.3	-
SureVector KanR Selectable Marker						
water	17.5	2.3	-	92.258	12.3	-
SureVector ChIR Selectable Marker						
water	17.5	2.3	-	92.258	12.3	-
SureVector pUC Origin						
water	17.5	2.3	-	92.258	12.3	-
SureVector p15a Origin						
water	17.5	2.3	-	92.258	12.3	-
SureVector pBR322 Origin						
water	17.5	2.3	-	92.258	12.3	-
SureVector XP1 Linker						
water	17.5	2.3	-	92.258	12.3	-
SureVector yARS						
water	17.5	2.3	-	92.258	12.3	-
SureVector XP2 Linker						
water	17.5	2.3	-	92.258	12.3	-
SureVector NeoR Mammalian Selectable Marker						
water	17.5	2.3	-	92.258	12.3	-

SECTION 9: Physical and chemical properties

SureVector LEU2 Yeast Selectable Marker							
water	17.5	2.3	-	92.258	12.3	-	
SureVector LacI Repressor							
water	17.5	2.3	-	92.258	12.3	-	
SureVector T7-HIS6 E. coli Promoter							
water	17.5	2.3	-	92.258	12.3	-	
SureVector CMV-HIS6 Mammalian Promoter							
water	17.5	2.3	-	92.258	12.3	-	
SureVector GAL1-HIS6 Yeast Promoter							
water	17.5	2.3	-	92.258	12.3	-	
SureVector LacZ Control (N-term)							
water	17.5	2.3	-	92.258	12.3	-	
SureVector Enzyme Mix							
water	17.5	2.3	-	92.258	12.3	-	
glycerol	0.000075	0.00001	-	0.0025	0.00033	-	
10X SureVector Buffer							
water	17.5	2.3	-	92.258	12.3	-	
Polyoxyethylene octyl phenyl ether	0.997581	0.13	-	-	-	-	
dNTP Mix							
water	17.5	2.3	-	92.258	12.3	-	
Dpnl							

SECTION 9: Physical and chemical properties

water	17.5	2.3	-	92.258	12.3	-
glycerol	0.000075	0.00001	-	0.0025	0.00033	-
XL1-Blue Supercompetent Cells						
water	17.5	2.3	-	92.258	12.3	-
dimethyl sulfoxide	0.42	0.056	EU A.4	-	-	-
pUC 18 DNA Control Plasmid						
water	17.5	2.3	-	92.258	12.3	-
Beta Mercaptoethanol						
water	17.5	2.3	-	92.258	12.3	-
2-mercaptoethanol	0.98	0.13	-	-	-	-

Evaporation rate	:	5X SureSolution	0.026 (butyl acetate = 1)
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChIR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector p15a Origin	Not available.
		SureVector pBR322 Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector yARS	Not available.
		SureVector XP2 Linker	Not available.
		SureVector NeoR	Not available.
		Mammalian Selectable Marker	
		SureVector LEU2 Yeast Selectable Marker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7-HIS6 E. coli Promoter	Not available.
		SureVector CMV-HIS6 Mammalian Promoter	Not available.
		SureVector GAL1-HIS6 Yeast Promoter	Not available.
		SureVector LacZ Control (N-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
		XL1-Blue Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.

SECTION 9: Physical and chemical properties

Relative density	: 5X SureSolution	1.1
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector KanR	Not available.
	Selectable Marker	
	SureVector ChIR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322	Not available.
	Origin	
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.
	SureVector NeoR	Not available.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	Not available.
	Selectable Marker	
	SureVector LacI	Not available.
	Repressor	
	SureVector T7-HIS6 E.	Not available.
	coli Promoter	
	SureVector CMV-HIS6	Not available.
	Mammalian Promoter	
	SureVector GAL1-HIS6	Not available.
	Yeast Promoter	
	SureVector LacZ Control	Not available.
	(N-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
	XL1-Blue	Not available.
	Supercompetent Cells	
	pUC 18 DNA Control	Not available.
	Plasmid	
	Beta Mercaptoethanol	Not available.
Vapour density	: 5X SureSolution	2.7 [Air = 1]
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector KanR	Not available.
	Selectable Marker	
	SureVector ChIR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322	Not available.
	Origin	
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.
	SureVector NeoR	Not available.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	Not available.
	Selectable Marker	
	SureVector LacI	Not available.
	Repressor	
	SureVector T7-HIS6 E.	Not available.
	coli Promoter	
	SureVector CMV-HIS6	Not available.
	Mammalian Promoter	
	SureVector GAL1-HIS6	Not available.

SECTION 9: Physical and chemical properties

	Yeast Promoter	
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
	XL1-Blue	Not available.
	Supercompetent Cells	
	pUC 18 DNA Control Plasmid	Not available.
	Beta Mercaptoethanol	Not available.
Explosive properties	: 5X SureSolution	Not available.
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector KanR	Not available.
	Selectable Marker	
	SureVector ChIR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322	Not available.
	Origin	
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.
	SureVector NeoR	Not available.
	Mammalian Selectable Marker	
	SureVector LEU2 Yeast	Not available.
	Selectable Marker	
	SureVector LacI	Not available.
	Repressor	
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector CMV-HIS6	Not available.
	Mammalian Promoter	
	SureVector GAL1-HIS6	Not available.
	Yeast Promoter	
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
	XL1-Blue	Not available.
	Supercompetent Cells	
	pUC 18 DNA Control Plasmid	Not available.
	Beta Mercaptoethanol	Not available.
Oxidising properties	: 5X SureSolution	Not available.
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector KanR	Not available.
	Selectable Marker	
	SureVector ChIR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322	Not available.
	Origin	
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.

SECTION 9: Physical and chemical properties

SureVector NeoR Mammalian Selectable Marker	Not available.
SureVector LEU2 Yeast Selectable Marker	Not available.
SureVector LacI Repressor	Not available.
SureVector T7-HIS6 E. coli Promoter	Not available.
SureVector CMV-HIS6 Mammalian Promoter	Not available.
SureVector GAL1-HIS6 Yeast Promoter	Not available.
SureVector LacZ Control (N-term)	Not available.
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	Not available.
DpnI	Not available.
XL1-Blue	Not available.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not available.
Beta Mercaptoethanol	Not available.

Particle characteristics

Median particle size

<input checked="" type="checkbox"/> SureSolution	Not applicable.
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChIR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector p15a Origin	Not applicable.
SureVector pBR322 Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector yARS	Not applicable.
SureVector XP2 Linker	Not applicable.
SureVector NeoR Mammalian Selectable Marker	Not applicable.
SureVector LEU2 Yeast Selectable Marker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue	Not applicable.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	Not applicable.

SECTION 9: Physical and chemical properties

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: <input checked="" type="checkbox"/> SureSolution	No specific test data related to reactivity available for this product or its ingredients.
	SureVector AmpR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector KanR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector ChIR 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 p15a Origin	No specific test data related to reactivity available for this product or its ingredients.
	SureVector pBR322 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 yARS	No specific test data related to reactivity available for this product or its ingredients.
	SureVector XP2 Linker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector NeoR Mammalian Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LEU2 Yeast Selectable Marker	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-HIS6 E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector CMV-HIS6 Mammalian Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector GAL1-HIS6 Yeast Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacZ Control (N-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.
	XL1-Blue Supercompetent Cells	No specific test data related to reactivity available for this product or its ingredients.
	pUC 18 DNA Control Plasmid	No specific test data related to reactivity available for this product or its ingredients.
	Beta Mercaptoethanol	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: <input checked="" type="checkbox"/> SureSolution	The product is stable.
	SureVector AmpR Selectable Marker	The product is stable.
	SureVector KanR Selectable Marker	The product is stable.
	SureVector ChIR Selectable Marker	The product is stable.

SECTION 10: Stability and reactivity

SureVector pUC Origin	The product is stable.
SureVector p15a Origin	The product is stable.
SureVector pBR322 Origin	The product is stable.
SureVector XP1 Linker	The product is stable.
SureVector yARS	The product is stable.
SureVector XP2 Linker	The product is stable.
SureVector NeoR	The product is stable.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	The product is stable.
SureVector LacI Repressor	The product is stable.
SureVector T7-HIS6 E. coli Promoter	The product is stable.
SureVector CMV-HIS6 Mammalian Promoter	The product is stable.
SureVector GAL1-HIS6 Yeast Promoter	The product is stable.
SureVector LacZ Control (N-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.
XL1-Blue	The product is stable.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	The product is stable.
Beta Mercaptoethanol	The product is stable.

10.3 Possibility of hazardous reactions

<input checked="" type="checkbox"/> 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 KanR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector ChIR 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 p15a Origin	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector pBR322 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 yARS	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector XP2 Linker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector NeoR Mammalian Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector LEU2 Yeast Selectable Marker	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-HIS6 E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector CMV-HIS6 Mammalian Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.

SECTION 10: Stability and reactivity

SureVector GAL1-HIS6 Yeast Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector LacZ Control (N-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.
XL1-Blue Supercompetent Cells	Under normal conditions of storage and use, hazardous reactions will not occur.
pUC 18 DNA Control Plasmid	Under normal conditions of storage and use, hazardous reactions will not occur.
Beta Mercaptoethanol	Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid	:	5X SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChIR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector p15a Origin	No specific data.
		SureVector pBR322 Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector yARS	No specific data.
		SureVector XP2 Linker	No specific data.
		SureVector NeoR	No specific data.
		Mammalian Selectable Marker	
		SureVector LEU2 Yeast Selectable Marker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7-HIS6 E. coli Promoter	No specific data.
		SureVector CMV-HIS6 Mammalian Promoter	No specific data.
		SureVector GAL1-HIS6 Yeast Promoter	No specific data.
		SureVector LacZ Control (N-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.
		XL1-Blue	No specific data.
		Supercompetent Cells	
		pUC 18 DNA Control Plasmid	No specific data.
		Beta Mercaptoethanol	No specific data.

SECTION 10: Stability and reactivity

10.5 Incompatible materials

: 5X SureSolution	May react or be incompatible with oxidising materials.
SureVector AmpR Selectable Marker	May react or be incompatible with oxidising materials.
SureVector KanR Selectable Marker	May react or be incompatible with oxidising materials.
SureVector ChIR Selectable Marker	May react or be incompatible with oxidising materials.
SureVector pUC Origin	May react or be incompatible with oxidising materials.
SureVector p15a Origin	May react or be incompatible with oxidising materials.
SureVector pBR322 Origin	May react or be incompatible with oxidising materials.
SureVector XP1 Linker	May react or be incompatible with oxidising materials.
SureVector yARS	May react or be incompatible with oxidising materials.
SureVector XP2 Linker	May react or be incompatible with oxidising materials.
SureVector NeoR Mammalian Selectable Marker	May react or be incompatible with oxidising materials.
SureVector LEU2 Yeast Selectable Marker	May react or be incompatible with oxidising materials.
SureVector LacI Repressor	May react or be incompatible with oxidising materials.
SureVector T7-HIS6 E. coli Promoter	May react or be incompatible with oxidising materials.
SureVector CMV-HIS6 Mammalian Promoter	May react or be incompatible with oxidising materials.
SureVector GAL1-HIS6 Yeast Promoter	May react or be incompatible with oxidising materials.
SureVector LacZ Control (N-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.
XL1-Blue	May react or be incompatible with oxidising materials.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	May react or be incompatible with oxidising materials.
Beta Mercaptoethanol	May react or be incompatible with oxidising materials.

10.6 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 KanR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector ChIR 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 p15a Origin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector pBR322 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 yARS	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector XP2 Linker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector NeoR Mammalian Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LEU2 Yeast	Under normal conditions of storage and use, hazardous

SECTION 10: Stability and reactivity

Selectable Marker	decomposition products should not be produced.
SureVector LacI	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Repressor	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector T7-HIS6 E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector CMV-HIS6 Mammalian Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector GAL1-HIS6 Yeast Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LacZ Control (N-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.
DpnI	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
XL1-Blue Supercompetent Cells	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
pUC 18 DNA Control Plasmid	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Beta Mercaptoethanol	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
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	-
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-
10X SureVector Buffer				
Ammonium sulphate	LD50 Oral	Rat	2840 mg/kg	-
Polyoxyethylene octyl phenyl ether	LD50 Oral	Rat	1800 mg/kg	-
DpnI				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
XL1-Blue Supercompetent Cells				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sucrose	LD50 Oral	Rat	29700 mg/kg	-
Beta Mercaptoethanol				
2-Mercaptoethanol	LD50 Oral	Rat	244 mg/kg	-

Acute toxicity estimates

SureVector Core Kit, Part Number G7514A

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
5X SureSolution Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A
SureVector Enzyme Mix Glycerol	12600	N/A	N/A	N/A	N/A
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	500	N/A	N/A	N/A	N/A
10X SureVector Buffer 10X SureVector Buffer	180000.0	N/A	N/A	N/A	N/A
Ammonium sulphate	2840	N/A	N/A	N/A	N/A
Polyoxyethylene octyl phenyl ether	1800	N/A	N/A	N/A	N/A
Dpnl Glycerol	12600	N/A	N/A	N/A	N/A
XL1-Blue Supercompetent Cells Glycerol	12600	N/A	N/A	N/A	N/A
Sucrose	29700	N/A	N/A	N/A	N/A
Beta Mercaptoethanol Beta Mercaptoethanol	2440.0	2000	N/A	30	N/A
2-Mercaptoethanol	244	200	N/A	3	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
5X SureSolution Dimethyl sulfoxide	Eyes - Mild irritant Eyes - Mild irritant	Rabbit Rabbit	- -	100 mg 24 hours 500 mg	- -
	Skin - Mild irritant Skin - Mild irritant	Rabbit Rabbit	- -	100 mg 24 hours 500 mg	- -
SureVector Enzyme Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
10X SureVector Buffer Polyoxyethylene octyl phenyl ether	Skin - Mild irritant	Rabbit	-	24 hours 500 uL	-
Dpnl Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
XL1-Blue Supercompetent Cells Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-

SureVector Core Kit, Part Number G7514A

SECTION 11: Toxicological information

Beta Mercaptoethanol 2-Mercaptoethanol	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Severe irritant	Rabbit	-	2 mg	-

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Beta Mercaptoethanol 2-Mercaptoethanol	Category 2	oral	heart, liver

Aspiration hazard

Not available.

Information on likely routes of exposure	<input checked="" type="checkbox"/> SureSolution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector p15a Origin	Not available.
	SureVector pBR322 Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector yARS	Not available.
	SureVector XP2 Linker	Not available.
	SureVector NeoR	Not available.
	Mammalian Selectable Marker	
	SureVector LEU2 Yeast Selectable Marker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector CMV-HIS6 Mammalian Promoter	Not available.
	SureVector GAL1-HIS6 Yeast Promoter	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
	10X SureVector Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
	dNTP Mix	Not available.
	DpnI	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

SECTION 11: Toxicological information

XL1-Blue	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Supercompetent Cells	
pUC 18 DNA Control	Not available.
Plasmid	
Beta Mercaptoethanol	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Inhalation

: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector KanR	No known significant effects or critical hazards.
Selectable Marker	
SureVector ChIR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector p15a Origin	No known significant effects or critical hazards.
SureVector pBR322	No known significant effects or critical hazards.
Origin	
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector yARS	No known significant effects or critical hazards.
SureVector XP2 Linker	No known significant effects or critical hazards.
SureVector NeoR	No known significant effects or critical hazards.
Mammalian Selectable	
Marker	
SureVector LEU2 Yeast	No known significant effects or critical hazards.
Selectable Marker	
SureVector LacI	No known significant effects or critical hazards.
Repressor	
SureVector T7-HIS6 E.	No known significant effects or critical hazards.
coli Promoter	
SureVector CMV-HIS6	No known significant effects or critical hazards.
Mammalian Promoter	
SureVector GAL1-HIS6	No known significant effects or critical hazards.
Yeast Promoter	
SureVector LacZ Control	No known significant effects or critical hazards.
(N-term)	
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.
XL1-Blue	No known significant effects or critical hazards.
Supercompetent Cells	
pUC 18 DNA Control	No known significant effects or critical hazards.
Plasmid	
Beta Mercaptoethanol	No known significant effects or critical hazards.

Ingestion

: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
SureVector KanR	No known significant effects or critical hazards.
Selectable Marker	
SureVector ChIR	No known significant effects or critical hazards.
Selectable Marker	
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector p15a Origin	No known significant effects or critical hazards.
SureVector pBR322	No known significant effects or critical hazards.
Origin	
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector yARS	No known significant effects or critical hazards.
SureVector XP2 Linker	No known significant effects or critical hazards.
SureVector NeoR	No known significant effects or critical hazards.
Mammalian Selectable	
Marker	
SureVector LEU2 Yeast	No known significant effects or critical hazards.
Selectable Marker	

SECTION 11: Toxicological information

Skin contact

SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
SureVector CMV-HIS6 Mammalian Promoter	No known significant effects or critical hazards.
SureVector GAL1-HIS6 Yeast Promoter	No known significant effects or critical hazards.
SureVector LacZ Control (N-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.
XL1-Blue	No known significant effects or critical hazards.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
Beta Mercaptoethanol	No known significant effects or critical hazards.
<input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector p15a Origin	No known significant effects or critical hazards.
SureVector pBR322 Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector yARS	No known significant effects or critical hazards.
SureVector XP2 Linker	No known significant effects or critical hazards.
SureVector NeoR Mammalian Selectable Marker	No known significant effects or critical hazards.
SureVector LEU2 Yeast Selectable Marker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
SureVector CMV-HIS6 Mammalian Promoter	No known significant effects or critical hazards.
SureVector GAL1-HIS6 Yeast Promoter	No known significant effects or critical hazards.
SureVector LacZ Control (N-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.
XL1-Blue	No known significant effects or critical hazards.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
Beta Mercaptoethanol	Harmful in contact with skin. Causes skin irritation. May cause an allergic skin reaction.

SECTION 11: Toxicological information

Eye contact	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	SureVector KanR	No known significant effects or critical hazards.
	Selectable Marker	
	SureVector ChIR	No known significant effects or critical hazards.
	Selectable Marker	
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector p15a Origin	No known significant effects or critical hazards.
	SureVector pBR322	No known significant effects or critical hazards.
	Origin	
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector yARS	No known significant effects or critical hazards.
	SureVector XP2 Linker	No known significant effects or critical hazards.
	SureVector NeoR	No known significant effects or critical hazards.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	No known significant effects or critical hazards.
	Selectable Marker	
	SureVector LacI	No known significant effects or critical hazards.
	Repressor	
	SureVector T7-HIS6 E.	No known significant effects or critical hazards.
	coli Promoter	
	SureVector CMV-HIS6	No known significant effects or critical hazards.
	Mammalian Promoter	
	SureVector GAL1-HIS6	No known significant effects or critical hazards.
	Yeast Promoter	
	SureVector LacZ Control	No known significant effects or critical hazards.
	(N-term)	
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	Causes serious eye irritation.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.
	XL1-Blue	No known significant effects or critical hazards.
	Supercompetent Cells	
	pUC 18 DNA Control	No known significant effects or critical hazards.
	Plasmid	
	Beta Mercaptoethanol	Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: <input checked="" type="checkbox"/> SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector KanR	No specific data.
	Selectable Marker	
	SureVector ChIR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector p15a Origin	No specific data.
	SureVector pBR322	No specific data.
	Origin	
	SureVector XP1 Linker	No specific data.
	SureVector yARS	No specific data.
	SureVector XP2 Linker	No specific data.
	SureVector NeoR	No specific data.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	No specific data.
	Selectable Marker	
	SureVector LacI	No specific data.
	Repressor	
	SureVector T7-HIS6 E.	No specific data.
	coli Promoter	
	SureVector CMV-HIS6	No specific data.
	Mammalian Promoter	

SECTION 11: Toxicological information

	SureVector GAL1-HIS6 Yeast Promoter	No specific data.
	SureVector LacZ Control (N-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.
	XL1-Blue	No specific data.
	Supercompetent Cells	
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: <input checked="" type="checkbox"/> SureSolution	No specific data.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChIR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector p15a Origin	No specific data.
	SureVector pBR322 Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector yARS	No specific data.
	SureVector XP2 Linker	No specific data.
	SureVector NeoR	No specific data.
	Mammalian Selectable Marker	
	SureVector LEU2 Yeast Selectable Marker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector CMV-HIS6 Mammalian Promoter	No specific data.
	SureVector GAL1-HIS6 Yeast Promoter	No specific data.
	SureVector LacZ Control (N-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.
	XL1-Blue	No specific data.
	Supercompetent Cells	
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

SECTION 11: Toxicological information

Skin contact	: <input checked="" type="checkbox"/> SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector KanR	No specific data.
	Selectable Marker	
	SureVector ChIR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector p15a Origin	No specific data.
	SureVector pBR322	No specific data.
	Origin	
	SureVector XP1 Linker	No specific data.
	SureVector yARS	No specific data.
	SureVector XP2 Linker	No specific data.
	SureVector NeoR	No specific data.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	No specific data.
	Selectable Marker	
	SureVector LacI	No specific data.
	Repressor	
	SureVector T7-HIS6 E.	No specific data.
	coli Promoter	
	SureVector CMV-HIS6	No specific data.
	Mammalian Promoter	
	SureVector GAL1-HIS6	No specific data.
	Yeast Promoter	
	SureVector LacZ Control	No specific data.
	(N-term)	
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	XL1-Blue	No specific data.
	Supercompetent Cells	
	pUC 18 DNA Control	No specific data.
	Plasmid	
	Beta Mercaptoethanol	Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Eye contact	: <input checked="" type="checkbox"/> SureSolution	No specific data.
	SureVector AmpR	No specific data.
	Selectable Marker	
	SureVector KanR	No specific data.
	Selectable Marker	
	SureVector ChIR	No specific data.
	Selectable Marker	
	SureVector pUC Origin	No specific data.
	SureVector p15a Origin	No specific data.
	SureVector pBR322	No specific data.
	Origin	
	SureVector XP1 Linker	No specific data.
	SureVector yARS	No specific data.
	SureVector XP2 Linker	No specific data.
	SureVector NeoR	No specific data.
	Mammalian Selectable	
	Marker	
	SureVector LEU2 Yeast	No specific data.
	Selectable Marker	
	SureVector LacI	No specific data.

SECTION 11: Toxicological information

Repressor SureVector T7-HIS6 E. coli Promoter	No specific data.
SureVector CMV-HIS6 Mammalian Promoter	No specific data.
SureVector GAL1-HIS6 Yeast Promoter	No specific data.
SureVector LacZ Control (N-term)	No specific data.
SureVector Enzyme Mix 10X SureVector Buffer	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
dNTP Mix	No specific data.
DpnI	No specific data.
XL1-Blue	No specific data.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No specific data.
Beta Mercaptoethanol	Adverse symptoms may include the following: pain watering redness

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

General	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector KanR Selectable Marker	No known significant effects or critical hazards.
	SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector p15a Origin	No known significant effects or critical hazards.
	SureVector pBR322 Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector yARS	No known significant effects or critical hazards.
	SureVector XP2 Linker	No known significant effects or critical hazards.
	SureVector NeoR	No known significant effects or critical hazards.
	Mammalian Selectable Marker	
	SureVector LEU2 Yeast Selectable Marker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
	SureVector CMV-HIS6	No known significant effects or critical hazards.

SECTION 11: Toxicological information

Mammalian Promoter
 SureVector GAL1-HIS6 No known significant effects or critical hazards.
 Yeast Promoter
 SureVector LacZ Control (N-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.
 XL1-Blue No known significant effects or critical hazards.
 Supercompetent Cells
 pUC 18 DNA Control Plasmid No known significant effects or critical hazards.
 Beta Mercaptoethanol May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity

: SureSolution No known significant effects or critical hazards.
 SureVector AmpR Selectable Marker No known significant effects or critical hazards.
 SureVector KanR Selectable Marker No known significant effects or critical hazards.
 SureVector ChIR Selectable Marker No known significant effects or critical hazards.
 SureVector pUC Origin No known significant effects or critical hazards.
 SureVector p15a Origin No known significant effects or critical hazards.
 SureVector pBR322 Origin No known significant effects or critical hazards.
 SureVector XP1 Linker No known significant effects or critical hazards.
 SureVector yARS No known significant effects or critical hazards.
 SureVector XP2 Linker No known significant effects or critical hazards.
 SureVector NeoR Mammalian Selectable Marker No known significant effects or critical hazards.
 SureVector LEU2 Yeast Selectable Marker No known significant effects or critical hazards.
 SureVector LacI Repressor No known significant effects or critical hazards.
 SureVector T7-HIS6 E. coli Promoter No known significant effects or critical hazards.
 SureVector CMV-HIS6 Mammalian Promoter No known significant effects or critical hazards.
 SureVector GAL1-HIS6 Yeast Promoter No known significant effects or critical hazards.
 SureVector LacZ Control (N-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.
 XL1-Blue No known significant effects or critical hazards.
 Supercompetent Cells
 pUC 18 DNA Control Plasmid No known significant effects or critical hazards.
 Beta Mercaptoethanol No known significant effects or critical hazards.

Mutagenicity

: SureSolution No known significant effects or critical hazards.
 SureVector AmpR Selectable Marker No known significant effects or critical hazards.
 SureVector KanR Selectable Marker No known significant effects or critical hazards.
 SureVector ChIR Selectable Marker No known significant effects or critical hazards.
 SureVector pUC Origin No known significant effects or critical hazards.
 SureVector p15a Origin No known significant effects or critical hazards.
 SureVector pBR322 No known significant effects or critical hazards.

SECTION 11: Toxicological information

Reproductive toxicity

Origin	
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector yARS	No known significant effects or critical hazards.
SureVector XP2 Linker	No known significant effects or critical hazards.
SureVector NeoR	No known significant effects or critical hazards.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
SureVector CMV-HIS6 Mammalian Promoter	No known significant effects or critical hazards.
SureVector GAL1-HIS6 Yeast Promoter	No known significant effects or critical hazards.
SureVector LacZ Control (N-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.
XL1-Blue	No known significant effects or critical hazards.
Supercompetent Cells	
pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
Beta Mercaptoethanol	No known significant effects or critical hazards.
<input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector p15a Origin	No known significant effects or critical hazards.
SureVector pBR322	No known significant effects or critical hazards.
Origin	
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector yARS	No known significant effects or critical hazards.
SureVector XP2 Linker	No known significant effects or critical hazards.
SureVector NeoR	No known significant effects or critical hazards.
Mammalian Selectable Marker	
SureVector LEU2 Yeast Selectable Marker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
SureVector CMV-HIS6 Mammalian Promoter	No known significant effects or critical hazards.
SureVector GAL1-HIS6 Yeast Promoter	No known significant effects or critical hazards.
SureVector LacZ Control (N-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.
XL1-Blue	No known significant effects or critical hazards.
Supercompetent Cells	
pUC 18 DNA Control	No known significant effects or critical hazards.

SureVector Core Kit, Part Number G7514A

SECTION 11: Toxicological information

Plasmid
Beta Mercaptoethanol Suspected of damaging fertility.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
5X SureSolution Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours
	Chronic NOEC 100 ul/L Marine water	Algae - Green algae - <i>Ulva lactuca</i>	72 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Juvenile (Fledgling, Hatchling, Weanling)	21 days
SureVector Enzyme Mix Glycerol Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours
	Acute EC50 210 µg/l Fresh water	Algae - Green algae - <i>Selenastrum sp.</i>	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - Aesop shrimp - <i>Pandalus montagui</i> - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i>	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i>	96 hours
	10X SureVector Buffer Ammonium sulphate	Chronic NOEC 7.5 mg/l Marine water	Algae - Diatom - <i>Phaeodactylum tricornutum</i> - Exponential growth phase
Acute LC50 5.85 mg/l Fresh water		Crustaceans - Water flea - <i>Ceriodaphnia rigaudi</i> - Neonate	48 hours
Polyoxyethylene octyl phenyl ether	Acute LC50 11.2 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 4500 µg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours
	Chronic NOEC 0.004 mg/l Fresh water	Fish - Eastern mosquitofish - <i>Gambusia holbrooki</i>	28 days
	Dpnl Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>
XL1-Blue Supercompetent Cells Glycerol		Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>

Conclusion/Summary : Not available.

12.2 Persistence and degradability

SECTION 12: Ecological information

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	-	-
XL1-Blue Supercompetent Cells Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Beta Mercaptoethanol 2-Mercaptoethanol	OECD 310 Ready Biodegradability - CO2 in Sealed Vessels (Headspace Test)	69 % - Not readily - 60 days	20 mg/l	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
5X SureSolution Dimethyl sulfoxide	-	-	Not readily
10X SureVector Buffer Ammonium sulphate	-	-	Readily
Polyoxyethylene octyl phenyl ether	-	-	Readily
Beta Mercaptoethanol 2-Mercaptoethanol	-	-	Not readily

12.3 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
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	2.7	78.67	Low

SureVector Core Kit, Part Number G7514A

SECTION 12: Ecological information

10X SureVector Buffer			
Ammonium sulphate	-5.1	-	Low
Polyoxyethylene octyl phenyl ether	4.86	-	High
Dpnl			
Glycerol	-1.76	-	Low
XL1-Blue Supercompetent Cells			
Glycerol	-1.76	-	Low
Sucrose	-3.7	-	Low
Beta Mercaptoethanol			
2-Mercaptoethanol	-0.056	-	Low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
5X SureSolution Dimethyl sulfoxide	No	N/A	No	No	No	N/A	No

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

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

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : Dispose of material(s) and residues under controlled conditions. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

SureVector Core Kit, Part Number G7514A

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

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

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
10X SureVector Buffer Substance of equivalent concern for environment	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated covering well-defined substances and UVCB substances, polymers and homologues	Listed	42	1/1/2021

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
SureVector Enzyme Mix Substance of equivalent concern for environment	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated covering well-defined substances and UVCB substances, polymers and homologues	Candidate	-	12/19/2012
10X SureVector Buffer Substance of equivalent concern for environment	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated covering well-defined substances and UVCB substances, polymers and homologues	Candidate	-	12/19/2012

SureVector Core Kit, Part Number G7514A

SECTION 15: Regulatory information

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product / Ingredient name	Identifiers	Status
10X SureVector Buffer 10X SureVector Buffer	-	3
Beta Mercaptoethanol Beta Mercaptoethanol	-	3

Label	:	5X SureSolution	Not applicable.
		SureVector AmpR Selectable Marker	Not applicable.
		SureVector KanR Selectable Marker	Not applicable.
		SureVector ChIR Selectable Marker	Not applicable.
		SureVector pUC Origin	Not applicable.
		SureVector p15a Origin	Not applicable.
		SureVector pBR322 Origin	Not applicable.
		SureVector XP1 Linker	Not applicable.
		SureVector yARS	Not applicable.
		SureVector XP2 Linker	Not applicable.
		SureVector NeoR Mammalian Selectable Marker	Not applicable.
		SureVector LEU2 Yeast Selectable Marker	Not applicable.
		SureVector LacI Repressor	Not applicable.
		SureVector T7-HIS6 E. coli Promoter	Not applicable.
		SureVector CMV-HIS6 Mammalian Promoter	Not applicable.
		SureVector GAL1-HIS6 Yeast Promoter	Not applicable.
		SureVector LacZ Control (N-term)	Not applicable.
		SureVector Enzyme Mix	Not applicable.
		10X SureVector Buffer	Not applicable.
		dNTP Mix	Not applicable.
		DpnI	Not applicable.
		XL1-Blue Supercompetent Cells	Not applicable.
		pUC 18 DNA Control Plasmid	Not applicable.
		Beta Mercaptoethanol	Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

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

SureVector Core Kit, Part Number G7514A

SECTION 15: Regulatory information

Industrial emissions (integrated pollution prevention and control) - Water : Not listed

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

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

United States : All components are active or exempted.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- N/A = Not available
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
<p>✔ 10X SureVector Buffer Eye Irrit. 2, H319 Aquatic Chronic 3, H412</p> <p>Beta Mercaptoethanol Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361f STOT RE 2, H373 Aquatic Chronic 3, H412</p>	<p>Calculation method Calculation method</p> <p>Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method</p>

Full text of abbreviated H statements

SECTION 16: Other information

SureVector

Enzyme Mix

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

10X

SureVector

Buffer

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Beta

Mercaptoethanol

H301	Toxic if swallowed.
H310	Fatal in contact with skin.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

[Full text of classifications](#)

SureVector Enzyme

Mix

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

10X SureVector

Buffer

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

Beta

Mercaptoethanol

Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Repr. 2	REPRODUCTIVE TOXICITY - Category 2

SureVector Core Kit, Part Number G7514A

SECTION 16: Other information

Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1A	SKIN SENSITISATION - Category 1A
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

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Notice to reader

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