Conforms to US OSHA Hazard Communication 29CFR1910.1200

SAFETY DATA SHEET

Agilent Technologies

SureVector Core Kit, Part Number G7514A

Section 1. Identification

1.1 Product identifier

Product name : SureVector Core Kit, Part Number G7514A

Part no. (chemical kit) : G7514A

Part no. :

5X SureSolution	5190-8625
SureVector AmpR Selectable Marker	5190-8088
SureVector KanR Selectable Marker	5190-8089
SureVector ChlR 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 Mammalian Selectable Marker	5190-8097
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

Validation date : 12/26/2023

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

Identified uses : Analytical reagent.

5X 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 ChlR 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

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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)

1.3 Details of the supplier of the safety data sheet

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

1.4 Emergency telephone number

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

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status :

5X SureSolution	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
SureVector AmpR Selectable Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector KanR Selectable Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector ChlR Selectable Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector pUC Origin	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector p15a Origin	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector pBR322 Origin	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector XP1 Linker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information

Section 2. Hazards identification

	critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector yARS	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector XP2 Linker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector NeoR Mammalian Selectable Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector LEU2 Yeast Selectable Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector LacI Repressor	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector T7-HIS6 E. coli Promoter	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector CMV-HIS6 Mammalian Promoter	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector GAL1-HIS6 Yeast Promoter	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector LacZ Control (N-term)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector Enzyme Mix	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
10X SureVector Buffer	This material is considered hazardous by the OSHA

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	Hazard Communication Standard (29 CFR 1910.1200).
dNTP Mix	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
DpnI	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
XL1-Blue Supercompetent Cells	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
pUC 18 DNA Control Plasmid	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Beta Mercaptoethanol	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

5X SureSolution

H227	FLAMMABLE LIQUIDS - Category 4
H320	EYE IRRITATION - Category 2B

SureVector Enzyme Mix

H320	EYE IRRITATION - Category 2B

10X SureVector Buffer

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

DpnI

H320	EYE IRRITATION - Category 2B

XL1-Blue Supercompetent Cells

H320	EYE IRRITATION - Category 2B

Beta Mercaptoethanol

H312	ACUTE TOXICITY (dermal) - Category 4
H315	SKIN IRRITATION - Category 2
H318	SERIOUS EYE DAMAGE - Category 1
H317	SKIN SENSITIZATION - Category 1
H361	TOXIC TO REPRODUCTION - Category 2
H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
H412	AQUATIC HAZARD (LONG-TERM) - Category 3

XL1-Blue Supercompetent Cells	Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 5%

2.2 GHS label elements

Section 2. Hazards identification

Hazard pictograms :

10X SureVector Buffer

Beta Mercaptoethanol

Signal word :

5X SureSolution	Warning
SureVector AmpR Selectable Marker	No signal word.
SureVector KanR Selectable Marker	No signal word.
SureVector ChlR 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	Warning
10X SureVector Buffer	Warning
dNTP Mix	No signal word.
DpnI	Warning
XL1-Blue Supercompetent Cells	Warning
pUC 18 DNA Control Plasmid	No signal word.
Beta Mercaptoethanol	Danger

Hazard statements :

5X SureSolution	H227 - Combustible liquid. H320 - Causes eye irritation.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChlR 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.

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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	H320 - Causes eye irritation.
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	H320 - Causes eye irritation.
XL1-Blue Supercompetent Cells	H320 - Causes eye irritation.
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. H361 - Suspected of damaging fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention :

5X SureSolution	P210 - Keep away from flames and hot surfaces. No smoking.
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChlR 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	P280 - Wear eye or face protection. P273 - Avoid release to the environment.
dNTP Mix	Not applicable.
DpnI	Not applicable.
XL1-Blue Supercompetent Cells	Not applicable.
pUC 18 DNA Control Plasmid	Not applicable.

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	Beta Mercaptoethanol	P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P273 - Avoid release to the environment. P260 - Do not breathe vapor. P264 - Wash thoroughly after handling.
Response :	5X SureSolution	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.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector KanR Selectable Marker	Not applicable.
	SureVector ChlR 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	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.
	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	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.
	XL1-Blue Supercompetent Cells	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

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			advice or attention.
		pUC 18 DNA Control Plasmid	Not applicable.
		Beta Mercaptoethanol	P308 + P313 - IF exposed or concerned: Get medical advice or attention. P362 + P364 - Take off contaminated clothing and wash it before reuse. P363 - Wash contaminated clothing before reuse. P302 + P312, P352 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwell. Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. 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.
Storage	:	5X SureSolution	P403 + P235 - Store in a well-ventilated place. Keep cool.
		SureVector AmpR Selectable Marker	Not applicable.
		SureVector KanR Selectable Marker	Not applicable.
		SureVector ChlR 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.
Disposal	:	5X SureSolution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
		SureVector AmpR Selectable Marker	Not applicable.
		SureVector KanR Selectable Marker	Not applicable.
		SureVector ChlR Selectable Marker	Not applicable.
		SureVector pUC Origin	Not applicable.

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		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	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 Supercompetent Cells	Not applicable.
		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.
Supplemental label elements	:	5X SureSolution	None known.
		SureVector AmpR Selectable Marker	None known.
		SureVector KanR Selectable Marker	None known.
		SureVector ChlR 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.
		dNTP Mix	None known.
		DpnI	None known.
		XL1-Blue Supercompetent Cells	None known.
		pUC 18 DNA Control Plasmid	None known.
		Beta Mercaptoethanol	None known.

Section 2. Hazards identification

2.3 Other hazards

Hazards not otherwise classified	: 5X SureSolution	None known.
	SureVector AmpR Selectable Marker	None known.
	SureVector KanR Selectable Marker	None known.
	SureVector ChlR 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.
	dNTP Mix	None known.
	DpnI	None known.
	XL1-Blue Supercompetent Cells	None known.
	pUC 18 DNA Control Plasmid	None known.
	Beta Mercaptoethanol	None known.

Section 3. Composition/information on ingredients

Substance/mixture	: 5X SureSolution	Substance
	SureVector AmpR Selectable Marker	Mixture
	SureVector KanR Selectable Marker	Mixture
	SureVector ChlR 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

Section 3. Composition/information on ingredients

DpnI	Mixture
XL1-Blue Supercompetent Cells	Mixture
pUC 18 DNA Control Plasmid	Mixture
Beta Mercaptoethanol	Mixture

Ingredient name	%	CAS number
5X SureSolution		
Dimethyl sulfoxide	100	67-68-5
SureVector Enzyme Mix		
Glycerol	≥50 - ≤75	56-81-5
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	<0.25	9036-19-5
10X SureVector Buffer		
Potassium chloride	≤5	7447-40-7
Ammonium sulphate	≤3	7783-20-2
Polyoxyethylene octyl phenyl ether	<2.5	9002-93-1
DpnI		
Glycerol	≥50 - ≤75	56-81-5
XL1-Blue Supercompetent Cells		
Glycerol	≥10 - ≤25	56-81-5
Dimethyl sulfoxide	≤10	67-68-5
Potassium chloride	≤3	7447-40-7
Beta Mercaptoethanol		
2-Mercaptoethanol	≤12	60-24-2

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

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

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

Section 4. First aid measures

4.1 Description of necessary first aid measures

Section 4. First aid measures

Eye contact	: 5X SureSolution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
	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 ChlR 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

Section 4. First aid measures

			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. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
		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 lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
		DpnI	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
		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. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
		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. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
		SureVector AmpR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
		SureVector KanR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

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	attention if symptoms occur.
SureVector ChlR 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.
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. 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.
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

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	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. 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.
XL1-Blue Supercompetent Cells	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.
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.

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Skin contact	:	5X SureSolution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		SureVector AmpR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		SureVector KanR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
		SureVector ChlR 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.
		SureVector XP1 Linker	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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
		10X SureVector Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

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		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. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	XL1-Blue Supercompetent Cells	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.
	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.
Ingestion :	5X SureSolution	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	SureVector AmpR Selectable Marker	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	SureVector 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 ChlR 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.

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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.
SureVector T7-HIS6 E. coli Promoter	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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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. 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.
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. 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.

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	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.
XL1-Blue Supercompetent Cells	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.
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 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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	:	5X SureSolution	Causes eye irritation.
		SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector KanR Selectable Marker	No known significant effects or critical hazards.
		SureVector ChlR 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.

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		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	Causes eye irritation.
		10X SureVector Buffer	Causes serious eye irritation.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	Causes eye irritation.
		XL1-Blue Supercompetent Cells	Causes eye irritation.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	Causes serious eye damage.
Inhalation	:	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 ChlR 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 Supercompetent Cells	No known significant effects or critical hazards.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	No known significant effects or critical hazards.
Skin contact	:	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 ChlR 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.

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	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 Supercompetent Cells	No known significant effects or critical hazards.
	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.
Ingestion :	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 ChlR 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 Supercompetent Cells	No known significant effects or critical hazards.
	pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
	Beta Mercaptoethanol	No known significant effects or critical hazards.

Over-exposure signs/symptoms

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Eye contact	:	5X SureSolution	Adverse symptoms may include the following: irritation watering redness
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChlR 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 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	Adverse symptoms may include the following: irritation watering redness
		10X SureVector Buffer	Adverse symptoms may include the following: pain or irritation watering redness
		dNTP Mix	No specific data.
		DpnI	Adverse symptoms may include the following: irritation watering redness
		XL1-Blue Supercompetent Cells	Adverse symptoms may include the following: irritation watering redness
		pUC 18 DNA Control Plasmid	No specific data.
		Beta Mercaptoethanol	Adverse symptoms may include the following: pain watering redness
Inhalation	:	5X SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChlR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector p15a Origin	No specific data.
		SureVector pBR322 Origin	No specific data.

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	SureVector XP1 Linker	No specific data.
	SureVector yARS	No specific data.
	SureVector XP2 Linker	No specific data.
	SureVector NeoR 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	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	XL1-Blue Supercompetent Cells	No specific data.
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Adverse symptoms may include the following: reduced fetal weight increase in fetal 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 ChlR 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 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	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	XL1-Blue Supercompetent Cells	No specific data.
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Adverse symptoms may include the following: pain or irritation redness blistering may occur

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			reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	5X SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChlR 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 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	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix	No specific data.
		DpnI	No specific data.
		XL1-Blue Supercompetent Cells	No specific data.
		pUC 18 DNA Control Plasmid	No specific data.
		Beta Mercaptoethanol	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

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

Notes to physician	:	5X SureSolution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector AmpR Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector KanR Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector ChlR Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector pUC Origin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector p15a Origin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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SureVector pBR322 Origin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector XP1 Linker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector yARS	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector XP2 Linker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector NeoR Mammalian Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector LEU2 Yeast Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector LacI Repressor	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector T7-HIS6 E. coli Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector CMV-HIS6 Mammalian Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector GAL1-HIS6 Yeast Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector LacZ Control (N-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector Enzyme Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
10X SureVector Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
dNTP Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
DpnI	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
XL1-Blue Supercompetent Cells	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
pUC 18 DNA Control Plasmid	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Beta Mercaptoethanol	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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Specific treatments	:	5X SureSolution	No specific treatment.
		SureVector AmpR Selectable Marker	No specific treatment.
		SureVector KanR Selectable Marker	No specific treatment.
		SureVector ChlR 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 Enzyme Mix	No specific treatment.
		10X SureVector Buffer	No specific treatment.
		dNTP Mix	No specific treatment.
		DpnI	No specific treatment.
		XL1-Blue Supercompetent Cells	No specific treatment.
		pUC 18 DNA Control Plasmid	No specific treatment.
		Beta Mercaptoethanol	No specific treatment.
Protection of first-aiders	:	5X SureSolution	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
		SureVector AmpR Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
		SureVector KanR Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
		SureVector ChlR Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
		SureVector pUC Origin	No action shall be taken involving any personal risk or without suitable training.
		SureVector p15a Origin	No action shall be taken involving any personal risk or without suitable training.
		SureVector pBR322 Origin	No action shall be taken involving any personal risk or without suitable training.
		SureVector XP1 Linker	No action shall be taken involving any personal risk or without suitable training.
		SureVector yARS	No action shall be taken involving any personal risk or without suitable training.
		SureVector XP2 Linker	No action shall be taken involving any personal risk or without suitable training.
		SureVector NeoR Mammalian Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
		SureVector LEU2 Yeast Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
		SureVector LacI Repressor	No action shall be taken involving any personal risk or without suitable training.

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SureVector T7-HIS6 E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
SureVector CMV-HIS6 Mammalian Promoter	No action shall be taken involving any personal risk or without suitable training.
SureVector GAL1-HIS6 Yeast Promoter	No action shall be taken involving any personal risk or without suitable training.
SureVector LacZ Control (N-term)	No action shall be taken involving any personal risk or without suitable training.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
dNTP Mix	No action shall be taken involving any personal risk or without suitable training.
DpnI	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
XL1-Blue Supercompetent Cells	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.
pUC 18 DNA Control Plasmid	No action shall be taken involving any personal risk or without suitable training.
Beta Mercaptoethanol	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.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media :

5X SureSolution	Use dry chemical, CO_2, water spray (fog) or foam.
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 ChlR 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

Section 5. Fire-fighting measures

		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 Supercompetent Cells	Use an extinguishing agent suitable for the surrounding fire.
	pUC 18 DNA Control Plasmid	Use an extinguishing agent suitable for the surrounding fire.
	Beta Mercaptoethanol	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media :	5X SureSolution	Do not use water jet.
	SureVector AmpR Selectable Marker	None known.
	SureVector KanR Selectable Marker	None known.
	SureVector ChlR 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.
	dNTP Mix	None known.
	DpnI	None known.
	XL1-Blue Supercompetent Cells	None known.
	pUC 18 DNA Control Plasmid	None known.

Section 5. Fire-fighting measures

	Beta Mercaptoethanol	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical :	5X SureSolution	Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
	SureVector AmpR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector KanR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector ChlR 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 container may burst.
	10X SureVector Buffer	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	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

Section 5. Fire-fighting measures

		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 thermal decomposition products	: 5X SureSolution	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChlR 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 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 carbon monoxide halogenated compounds metal oxide/oxides
	XL1-Blue Supercompetent Cells	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides

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	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters	:	5X SureSolution	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
		SureVector AmpR Selectable Marker	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
		SureVector 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 ChlR 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

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		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.
	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 :	5X SureSolution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	SureVector AmpR Selectable Marker	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	SureVector 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 ChlR Selectable	Fire-fighters should wear appropriate protective

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Marker	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 Repressor	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector T7-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

Section 5. Fire-fighting measures

	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.
DpnI	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	: 5X 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	SureVector AmpR Selectable Marker	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled 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 spilled material. Put on appropriate personal protective equipment.
	SureVector ChlR 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 spilled 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 spilled material. Put on

Section 6. Accidental release measures

	appropriate personal protective equipment.
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 spilled 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 spilled 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 spilled 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 spilled 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 spilled 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 spilled 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 spilled 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 spilled 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 spilled 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 spilled material. Put on

Section 6. Accidental release measures

	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 spilled 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 spilled 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor 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 spilled material. Put on appropriate personal protective equipment.
DpnI	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Put on

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	Beta Mercaptoethanol	appropriate 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 spilled material. Do not breathe vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders :	5X SureSolution	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector AmpR Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector KanR Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector ChlR Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector pUC Origin	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector p15a Origin	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector pBR322 Origin	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector XP1 Linker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector yARS	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector XP2 Linker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector NeoR Mammalian Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector LEU2 Yeast Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector LacI Repressor	If specialized clothing is required to deal with the spillage, take note of any information in Section 8

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		on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector T7-HIS6 E. coli Promoter	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector CMV-HIS6 Mammalian Promoter	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector GAL1-HIS6 Yeast Promoter	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector LacZ Control (N-term)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureVector Enzyme Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	10X SureVector Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	dNTP Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	DpnI	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	XL1-Blue Supercompetent Cells	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	pUC 18 DNA Control Plasmid	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Beta Mercaptoethanol	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
6.2 Environmental precautions :	5X SureSolution	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SureVector AmpR Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SureVector KanR Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

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	caused environmental pollution (sewers, waterways, soil or air).
SureVector ChlR Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector pUC Origin	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector p15a Origin	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector pBR322 Origin	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector XP1 Linker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector yARS	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector XP2 Linker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector NeoR Mammalian Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LEU2 Yeast Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LacI Repressor	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector T7-HIS6 E. coli Promoter	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector CMV-HIS6 Mammalian Promoter	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

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	caused environmental pollution (sewers, waterways, soil or air).
SureVector GAL1-HIS6 Yeast Promoter	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LacZ Control (N-term)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector Enzyme Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X SureVector Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
dNTP Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
DpnI	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
XL1-Blue Supercompetent Cells	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
pUC 18 DNA Control Plasmid	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Beta Mercaptoethanol	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and materials for containment and cleaning up

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Methods for cleaning up :	5X SureSolution	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	SureVector 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 ChlR 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 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

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	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 of via a licensed waste disposal contractor.
SureVector Enzyme Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
10X SureVector Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
dNTP Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste

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	disposal contractor.
DpnI	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.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures	:	5X SureSolution	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
		SureVector AmpR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
		SureVector KanR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
		SureVector ChlR 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).
		SureVector XP2 Linker	Put on appropriate personal protective equipment

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	(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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
10X SureVector Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
DpnI	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
XL1-Blue Supercompetent Cells	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
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

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		clothing. Do not breathe vapor 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	: 5X SureSolution	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SureVector AmpR Selectable Marker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SureVector KanR 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 ChlR Selectable Marker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SureVector pUC Origin	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SureVector p15a Origin	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SureVector pBR322 Origin	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	SureVector XP1 Linker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and

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	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 yARS	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 XP2 Linker	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 NeoR Mammalian 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 LEU2 Yeast 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 LacI Repressor	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector T7-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

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

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7.2 Conditions for safe storage, including any incompatibilities :	5X SureSolution	Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled 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 unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SureVector ChlR 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 unlabeled 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 unlabeled 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

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	dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
SureVector pBR322 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 unlabeled 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 unlabeled 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 unlabeled 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 unlabeled 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

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	to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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 unlabeled 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-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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 unlabeled 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 unlabeled 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 unlabeled 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

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

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	opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
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 unlabeled 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations	:	5X SureSolution	Industrial applications, Professional applications.
		SureVector AmpR Selectable Marker	Industrial applications, Professional applications.
		SureVector KanR Selectable Marker	Industrial applications, Professional applications.
		SureVector ChlR Selectable Marker	Industrial applications, Professional applications.
		SureVector pUC Origin	Industrial applications, Professional applications.
		SureVector p15a Origin	Industrial applications, Professional applications.
		SureVector pBR322 Origin	Industrial applications, Professional applications.
		SureVector XP1 Linker	Industrial applications, Professional applications.
		SureVector yARS	Industrial applications, Professional applications.
		SureVector XP2 Linker	Industrial applications, Professional applications.
		SureVector NeoR Mammalian Selectable Marker	Industrial applications, Professional applications.
		SureVector LEU2 Yeast Selectable Marker	Industrial applications, Professional applications.
		SureVector LacI Repressor	Industrial applications, Professional applications.
		SureVector T7-HIS6 E. coli Promoter	Industrial applications, Professional applications.
		SureVector CMV-HIS6 Mammalian Promoter	Industrial applications, Professional applications.
		SureVector GAL1-HIS6 Yeast Promoter	Industrial applications, Professional applications.
		SureVector LacZ Control (N-term)	Industrial applications, Professional applications.
		SureVector Enzyme Mix	Industrial applications, Professional applications.
		10X SureVector Buffer	Industrial applications, Professional applications.
		dNTP Mix	Industrial applications, Professional applications.

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		DpnI	Industrial applications, Professional applications.
		XL1-Blue Supercompetent Cells	Industrial applications, Professional applications.
		pUC 18 DNA Control Plasmid	Industrial applications, Professional applications.
		Beta Mercaptoethanol	Industrial applications, Professional applications.
Industrial sector specific solutions	:	5X SureSolution	Not available.
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 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 Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
5X SureSolution	
Dimethyl sulfoxide	**OARS WEEL (United States, 4/2022).** TWA: 250 ppm 8 hours.
SureVector Enzyme Mix	
Glycerol	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust **CAL OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: respirable fraction TWA: 10 mg/m³ 8 hours. Form: total dust

Section 8. Exposure controls/personal protection

Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-. omega.-hydroxy-	None.
10X SureVector Buffer	
Potassium chloride	None.
Ammonium sulphate	None.
Polyoxyethylene octyl phenyl ether	None.
Dpnl	
Glycerol	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust **CAL OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: respirable fraction TWA: 10 mg/m³ 8 hours. Form: total dust
XL1-Blue Supercompetent Cells	
Glycerol	**OSHA PEL 1989 (United States, 3/1989).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: Respirable fraction TWA: 15 mg/m³ 8 hours. Form: Total dust **CAL OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: respirable fraction TWA: 10 mg/m³ 8 hours. Form: total dust
Dimethyl sulfoxide	**OARS WEEL (United States, 4/2022).** TWA: 250 ppm 8 hours.
Potassium chloride	None.
Beta Mercaptoethanol	
2-Mercaptoethanol	**OARS WEEL (United States, 4/2022).** **Absorbed through skin.** TWA: 0.2 ppm 8 hours.

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

Appropriate engineering controls : If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

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

Individual protection measures

Section 8. Exposure controls/personal protection

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.

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.

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

Physical state :

5X SureSolution	Liquid. [Clear.]
SureVector AmpR Selectable Marker	Liquid.
SureVector KanR Selectable Marker	Liquid.
SureVector ChlR 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	Liquid.

Section 9. Physical and chemical properties and safety characteristics

		Promoter	
		SureVector LacZ Control (N-term)	Liquid.
		SureVector Enzyme Mix	Liquid.
		10X SureVector Buffer	Liquid.
		dNTP Mix	Liquid.
		DpnI	Liquid.
		XL1-Blue Supercompetent Cells	Liquid.
		pUC 18 DNA Control Plasmid	Liquid.
		Beta Mercaptoethanol	Liquid.
Color	:	5X SureSolution	Blue.
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 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 Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.
Odor	:	5X SureSolution	Odorless. [Slight]
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 Mammalian Selectable Marker	Not available.
		SureVector LEU2 Yeast Selectable Marker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7-HIS6 E. coli	Not available.

Section 9. Physical and chemical properties and safety characteristics

		Promoter	
		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.
Odor threshold	:	5X SureSolution	Not available.
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 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 Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.
pH	:	5X SureSolution	Not available.
		SureVector AmpR Selectable Marker	8
		SureVector KanR Selectable Marker	8
		SureVector ChlR 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 Mammalian Selectable Marker	8

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		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 Supercompetent Cells	6.4
		pUC 18 DNA Control Plasmid	7.5
		Beta Mercaptoethanol	Not available.
Melting point/freezing point	:	5X SureSolution	18.5°C (65.3°F)
		SureVector AmpR Selectable Marker	0°C (32°F)
		SureVector KanR Selectable Marker	0°C (32°F)
		SureVector ChlR Selectable Marker	0°C (32°F)
		SureVector pUC Origin	0°C (32°F)
		SureVector p15a Origin	0°C (32°F)
		SureVector pBR322 Origin	0°C (32°F)
		SureVector XP1 Linker	0°C (32°F)
		SureVector yARS	0°C (32°F)
		SureVector XP2 Linker	0°C (32°F)
		SureVector NeoR Mammalian Selectable Marker	0°C (32°F)
		SureVector LEU2 Yeast Selectable Marker	0°C (32°F)
		SureVector LacI Repressor	0°C (32°F)
		SureVector T7-HIS6 E. coli Promoter	0°C (32°F)
		SureVector CMV-HIS6 Mammalian Promoter	0°C (32°F)
		SureVector GAL1-HIS6 Yeast Promoter	0°C (32°F)
		SureVector LacZ Control (N-term)	0°C (32°F)
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	0°C (32°F)
		DpnI	Not available.
		XL1-Blue Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	0°C (32°F)
		Beta Mercaptoethanol	Not available.
Boiling point, initial boiling point, and boiling range	:	5X SureSolution	189°C (372.2°F)
		SureVector AmpR Selectable Marker	100°C (212°F)
		SureVector KanR Selectable Marker	100°C (212°F)
		SureVector ChlR Selectable Marker	100°C (212°F)
		SureVector pUC Origin	100°C (212°F)
		SureVector p15a Origin	100°C (212°F)
		SureVector pBR322 Origin	100°C (212°F)
		SureVector XP1 Linker	100°C (212°F)

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		SureVector yARS	100°C (212°F)
		SureVector XP2 Linker	100°C (212°F)
		SureVector NeoR Mammalian Selectable Marker	100°C (212°F)
		SureVector LEU2 Yeast Selectable Marker	100°C (212°F)
		SureVector LacI Repressor	100°C (212°F)
		SureVector T7-HIS6 E. coli Promoter	100°C (212°F)
		SureVector CMV-HIS6 Mammalian Promoter	100°C (212°F)
		SureVector GAL1-HIS6 Yeast Promoter	100°C (212°F)
		SureVector LacZ Control (N-term)	100°C (212°F)
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	100°C (212°F)
		DpnI	Not available.
		XL1-Blue Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	100°C (212°F)
		Beta Mercaptoethanol	Not available.
Flash point	:	5X SureSolution	Closed cup: 87°C (188.6°F) [ASTM D 93] Open cup: 87°C (188.6°F)
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 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 Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.

Section 9. Physical and chemical properties and safety characteristics

	Closed cup			Open cup		
Ingredient name	**°C**	**°F**	**Method**	**°C**	**°F**	**Method**
SureVector Enzyme Mix						
Glycerol	-	-	-	177	350.6	-
10X SureVector Buffer						
Polyoxyethylene octyl phenyl ether	>109.85	>229.7	-	-	-	-
DpnI						
Glycerol	-	-	-	177	350.6	-
XL1-Blue Supercompetent Cells						
Dimethyl sulfoxide	87	188.6	ASTM D 93	87	188.6	-
Glycerol	-	-	-	177	350.6	-
Beta Mercaptoethanol						
2-Mercaptoethanol	74	165.2	-	74	165.2	-

Evaporation rate : 5X SureSolution 0.026 (butyl acetate = 1)
SureVector AmpR Selectable Marker Not available.
SureVector KanR Selectable Marker Not available.
SureVector ChlR 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 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.

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		dNTP Mix	Not available.
		DpnI	Not available.
		XL1-Blue Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.
Flammability	:	5X SureSolution	Not applicable.
		SureVector AmpR Selectable Marker	Not applicable.
		SureVector KanR Selectable Marker	Not applicable.
		SureVector ChlR 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.
Lower and upper explosion limit/flammability limit	:	5X SureSolution	Lower: 2.6% Upper: 28.5%
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 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.

Section 9. Physical and chemical properties and safety characteristics

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.
5X SureSolution	0.056 kPa (0.42 mm Hg) [EU A.4]

Vapor pressure :

Ingredient name	Vapor Pressure at 20˚C			Vapor pressure at 50˚C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
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 ChlR 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	-

Section 9. Physical and chemical properties and safety characteristics

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	-
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	-

Section 9. Physical and chemical properties and safety characteristics

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	-
DpnI						
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	-	-	-	-

Relative vapor density : 5X SureSolution — 2.7 [Air = 1]
SureVector AmpR Selectable Marker — Not available.
SureVector KanR Selectable Marker — Not available.
SureVector ChlR 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 Mammalian Selectable Marker — Not available.
SureVector LEU2 Yeast Selectable Marker — Not available.
SureVector LacI Repressor — Not available.
SureVector T7-HIS6 E. coli — Not available.

Section 9. Physical and chemical properties and safety characteristics

	Promoter	
	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.
Relative density :	5X SureSolution	1.1
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChlR 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 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 Supercompetent Cells	Not available.
	pUC 18 DNA Control Plasmid	Not available.
	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 ChlR Selectable Marker	
water	Soluble
SureVector pUC Origin	
water	Soluble
SureVector p15a Origin	
water	Soluble
SureVector pBR322 Origin	

Section 9. Physical and chemical properties and safety characteristics

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 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
DpnI	
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 ChlR 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	Not applicable.

Section 9. Physical and chemical properties and safety characteristics

Mammalian Promoter	
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.

Auto-ignition temperature :

5X SureSolution	300 to 302°C (572 to 575.6°F)

Ingredient name	°C	°F	Method
SureVector Enzyme Mix			
Glycerol	370	698	-
DpnI			
Glycerol	370	698	-
XL1-Blue Supercompetent Cells			
Dimethyl sulfoxide	300 to 302	572 to 575.6	-
Glycerol	370	698	-
Beta Mercaptoethanol			
2-Mercaptoethanol	295	563	-

Decomposition temperature :

5X SureSolution	140 to 189°C (284 to 372.2°F)
SureVector AmpR Selectable Marker	Not available.
SureVector KanR Selectable Marker	Not available.
SureVector ChlR 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 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.

Section 9. Physical and chemical properties and safety characteristics

		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.
Viscosity	:	5X SureSolution	Dynamic: 2.14 mPa·s (2.14 cP)
		SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.
		SureVector ChlR 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 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 Supercompetent Cells	Not available.
		pUC 18 DNA Control Plasmid	Not available.
		Beta Mercaptoethanol	Not available.
Particle characteristics			
Median particle size	:	5X SureSolution	Not applicable.
		SureVector AmpR Selectable Marker	Not applicable.
		SureVector KanR Selectable Marker	Not applicable.
		SureVector ChlR 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	Not applicable.

Section 9. Physical and chemical properties and safety characteristics

Mammalian Promoter	
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.

Section 10. Stability and reactivity

10.1 Reactivity :

5X 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 ChlR 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

Section 10. Stability and reactivity

for this product or its ingredients.

10.2 Chemical stability :

5X SureSolution	The product is stable.
SureVector AmpR Selectable Marker	The product is stable.
SureVector KanR Selectable Marker	The product is stable.
SureVector ChlR Selectable Marker	The product is stable.
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 Mammalian Selectable Marker	The product is stable.
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 Supercompetent Cells	The product is stable.
pUC 18 DNA Control Plasmid	The product is stable.
Beta Mercaptoethanol	The product is stable.

10.3 Possibility of hazardous reactions :

5X SureSolution	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector KanR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector ChlR 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,

Section 10. Stability and reactivity

		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.
	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	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChlR 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 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	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	XL1-Blue Supercompetent Cells	No specific data.
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	No specific data.

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10.5 Incompatible materials	:	5X SureSolution	Reactive or incompatible with the following materials: oxidizing materials
		SureVector AmpR Selectable Marker	May react or be incompatible with oxidizing materials.
		SureVector KanR Selectable Marker	May react or be incompatible with oxidizing materials.
		SureVector ChlR Selectable Marker	May react or be incompatible with oxidizing materials.
		SureVector pUC Origin	May react or be incompatible with oxidizing materials.
		SureVector p15a Origin	May react or be incompatible with oxidizing materials.
		SureVector pBR322 Origin	May react or be incompatible with oxidizing materials.
		SureVector XP1 Linker	May react or be incompatible with oxidizing materials.
		SureVector yARS	May react or be incompatible with oxidizing materials.
		SureVector XP2 Linker	May react or be incompatible with oxidizing materials.
		SureVector NeoR Mammalian Selectable Marker	May react or be incompatible with oxidizing materials.
		SureVector LEU2 Yeast Selectable Marker	May react or be incompatible with oxidizing materials.
		SureVector LacI Repressor	May react or be incompatible with oxidizing materials.
		SureVector T7-HIS6 E. coli Promoter	May react or be incompatible with oxidizing materials.
		SureVector CMV-HIS6 Mammalian Promoter	May react or be incompatible with oxidizing materials.
		SureVector GAL1-HIS6 Yeast Promoter	May react or be incompatible with oxidizing materials.
		SureVector LacZ Control (N-term)	May react or be incompatible with oxidizing materials.
		SureVector Enzyme Mix	May react or be incompatible with oxidizing materials.
		10X SureVector Buffer	May react or be incompatible with oxidizing materials.
		dNTP Mix	May react or be incompatible with oxidizing materials.
		DpnI	May react or be incompatible with oxidizing materials.
		XL1-Blue Supercompetent Cells	May react or be incompatible with oxidizing materials.
		pUC 18 DNA Control Plasmid	May react or be incompatible with oxidizing materials.
		Beta Mercaptoethanol	May react or be incompatible with oxidizing 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.

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SureVector ChlR 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 Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LacI Repressor	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector T7-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.

Section 10. Stability and reactivity

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 LD50 Oral	Rat Rat	40000 mg/kg 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				
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
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	-
Dimethyl sulfoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	- -
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
Beta Mercaptoethanol				
2-Mercaptoethanol	LD50 Oral	Rat	244 mg/kg	-

Irritation/Corrosion

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

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10X SureVector Buffer					
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Polyoxyethylene octyl phenyl ether	Skin - Mild irritant	Rabbit	-	24 hours 500 uL	-
DpnI					
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	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Beta Mercaptoethanol					
2-Mercaptoethanol	Eyes - Severe irritant	Rabbit	-	2 mg	-

Sensitization

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)

Name	Category	Route of exposure	Target organs
Beta Mercaptoethanol 2-Mercaptoethanol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Beta Mercaptoethanol 2-Mercaptoethanol	Category 2	oral	heart, liver

Aspiration hazard

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Not available.

Information on the likely routes of exposure

5X SureSolution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
SureVector AmpR Selectable Marker	Not available.
SureVector KanR Selectable Marker	Not available.
SureVector ChlR 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 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	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.
XL1-Blue Supercompetent Cells	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
pUC 18 DNA Control Plasmid	Not available.
Beta Mercaptoethanol	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact

5X SureSolution	Causes eye irritation.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChlR 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.

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		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	Causes eye irritation.
		10X SureVector Buffer	Causes serious eye irritation.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	Causes eye irritation.
		XL1-Blue Supercompetent Cells	Causes eye irritation.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	Causes serious eye damage.
Inhalation	:	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 ChlR 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 Supercompetent Cells	No known significant effects or critical hazards.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	No known significant effects or critical hazards.
Skin contact	:	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 ChlR 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.

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		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 Supercompetent Cells	No known significant effects or critical hazards.
		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.
Ingestion	:	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 ChlR 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 Supercompetent Cells	No known significant effects or critical hazards.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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Eye contact	:	5X SureSolution	Adverse symptoms may include the following: irritation watering redness
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChlR 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 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	Adverse symptoms may include the following: irritation watering redness
		10X SureVector Buffer	Adverse symptoms may include the following: pain or irritation watering redness
		dNTP Mix	No specific data.
		DpnI	Adverse symptoms may include the following: irritation watering redness
		XL1-Blue Supercompetent Cells	Adverse symptoms may include the following: irritation watering redness
		pUC 18 DNA Control Plasmid	No specific data.
		Beta Mercaptoethanol	Adverse symptoms may include the following: pain watering redness
Inhalation	:	5X SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChlR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector p15a Origin	No specific data.

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	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 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	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	XL1-Blue Supercompetent Cells	No specific data.
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Adverse symptoms may include the following: reduced fetal weight increase in fetal 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 ChlR 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 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	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	XL1-Blue Supercompetent Cells	No specific data.
	pUC 18 DNA Control Plasmid	No specific data.
	Beta Mercaptoethanol	Adverse symptoms may include the following: pain or irritation

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			redness blistering may occur reduced fetal weight increase in fetal deaths skeletal malformations
Ingestion	:	5X SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChlR 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 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	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix	No specific data.
		DpnI	No specific data.
		XL1-Blue Supercompetent Cells	No specific data.
		pUC 18 DNA Control Plasmid	No specific data.
		Beta Mercaptoethanol	Adverse symptoms may include the following: stomach pains reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

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General	:	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 ChlR 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 Supercompetent Cells	No known significant effects or critical hazards.
		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	:	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 ChlR 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.

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		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 Supercompetent Cells	No known significant effects or critical hazards.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	No known significant effects or critical hazards.
Mutagenicity	:	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 ChlR 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 Supercompetent Cells	No known significant effects or critical hazards.
		pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
		Beta Mercaptoethanol	No known significant effects or critical hazards.
Reproductive toxicity	:	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 ChlR 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.

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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 Supercompetent Cells	No known significant effects or critical hazards.
pUC 18 DNA Control Plasmid	No known significant effects or critical hazards.
Beta Mercaptoethanol	Suspected of damaging fertility or the unborn child.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
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	41044.5	N/A	N/A	N/A	N/A
Potassium chloride	2600	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
DpnI					
DpnI	128314.8	N/A	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
XL1-Blue Supercompetent Cells					
XL1-Blue Supercompetent Cells	136842.1	N/A	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A
Potassium chloride	2600	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

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
5X SureSolution			
Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 100 ul/L Marine water	Algae - *Ulva lactuca*	72 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - *Daphnia magna* - Juvenile (Fledgling, Hatchling, Weanling)	21 days
SureVector Enzyme Mix			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Acute EC50 210 µg/l Fresh water	Algae - *Selenastrum sp.*	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - *Pandalus montagui* - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
10X SureVector Buffer			
Potassium chloride	Acute EC50 9.24 g/L Fresh water	Algae - *Desmodesmus subspicatus*	72 hours
	Acute EC50 1337000 µg/l Fresh water	Algae - *Navicula seminulum*	96 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - *Pseudosida ramosa* - Neonate	48 hours
	Acute LC50 93000 µg/l Fresh water	Daphnia - *Daphnia magna*	48 hours
	Acute LC50 509.65 mg/l Fresh water	Fish - *Danio rerio*	96 hours
Ammonium sulphate	Chronic NOEC 7.5 mg/l Marine water	Algae - *Phaeodactylum tricornutum* - Exponential growth phase	96 hours
Polyoxyethylene octyl phenyl ether	Acute LC50 5.85 mg/l Fresh water	Crustaceans - *Ceriodaphnia rigaudi* - Neonate	48 hours
	Acute LC50 11.2 mg/l Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 4500 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 0.004 mg/l Fresh water	Fish - *Gambusia holbrooki*	28 days
DpnI			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
XL1-Blue Supercompetent Cells			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - *Oncorhynchus mykiss*	96 hours
Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - *Daphnia magna* - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - *Pimephales promelas*	96 hours
	Chronic NOEC 100 ul/L Marine water	Algae - *Ulva lactuca*	72 hours
	Chronic NOEC 100 ul/L Fresh water	Daphnia - *Daphnia magna* - Juvenile (Fledgling, Hatchling, Weanling)	21 days
Potassium chloride	Acute EC50 9.24 g/L Fresh water	Algae - *Desmodesmus subspicatus*	72 hours
	Acute EC50 1337000 µg/l Fresh water	Algae - *Navicula seminulum*	96 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - *Pseudosida ramosa* - Neonate	48 hours

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	Acute LC50 93000 µg/l Fresh water Acute LC50 509.65 mg/l Fresh water	Daphnia - *Daphnia magna* Fish - *Danio rerio*	48 hours 96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
5X SureSolution				
Dimethyl sulfoxide	OECD 301D Ready Biodegradability - Closed Bottle Test	31 % - Not readily - 28 days	-	-
SureVector Enzyme Mix				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
DpnI				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
XL1-Blue Supercompetent Cells				
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Dimethyl sulfoxide	OECD 301D Ready Biodegradability - Closed Bottle Test	31 % - Not readily - 28 days	-	-
Beta Mercaptoethanol				
2-Mercaptoethanol	OECD 310 Ready Biodegradability - CO_2 in Sealed Vessels (Headspace Test)	69 % - Not readily - 60 days	20 mg/l	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
5X SureSolution			
Dimethyl sulfoxide	-	-	Not readily
10X SureVector Buffer			
Potassium chloride	-	-	Readily
Ammonium sulphate	-	-	Readily
Polyoxyethylene octyl phenyl ether	-	-	Readily
XL1-Blue Supercompetent Cells			
Dimethyl sulfoxide	-	-	Not readily

Section 12. Ecological information

Potassium chloride	-	-	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
10X SureVector Buffer			
Potassium chloride	-0.46	-	Low
Ammonium sulphate	-5.1	-	Low
Polyoxyethylene octyl phenyl ether	4.86	-	High
DpnI			
Glycerol	-1.76	-	Low
XL1-Blue Supercompetent Cells			
Glycerol	-1.76	-	Low
Dimethyl sulfoxide	-1.35	3.16	Low
Potassium chloride	-0.46	-	Low
Beta Mercaptoethanol			
2-Mercaptoethanol	-0.056	-	Low

12.4 Mobility in soil

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

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

Section 13. Disposal considerations

13.1 Waste treatment methods

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

Section 13. Disposal considerations

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

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

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

Section 14. Transport information

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

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

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

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

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

Clean Water Act (CWA) 311: Edetic acid

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs) : Listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Section 15. Regulatory information

Classification :

5X SureSolution	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2B
SureVector AmpR Selectable Marker	Not applicable.
SureVector KanR Selectable Marker	Not applicable.
SureVector ChlR 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	EYE IRRITATION - Category 2B
10X SureVector Buffer	EYE IRRITATION - Category 2A
dNTP Mix	Not applicable.
DpnI	EYE IRRITATION - Category 2B
XL1-Blue Supercompetent Cells	EYE IRRITATION - Category 2B
pUC 18 DNA Control Plasmid	Not applicable.
Beta Mercaptoethanol	ACUTE TOXICITY (dermal) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Composition/information on ingredients

Name	%	Classification
5X SureSolution		
Dimethyl sulfoxide	100	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2B
SureVector Enzyme Mix		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
10X SureVector Buffer		
Potassium chloride	≤5	EYE IRRITATION - Category 2B
Ammonium sulphate	≤3	EYE IRRITATION - Category 2A
Polyoxyethylene octyl phenyl ether	<2.5	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1
DpnI		
Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
XL1-Blue Supercompetent Cells		
Glycerol	≥10 - ≤25	EYE IRRITATION - Category 2B
Dimethyl sulfoxide	≤10	FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2B
Sucrose	≤10	COMBUSTIBLE DUSTS
Potassium chloride	≤3	EYE IRRITATION - Category 2B
Beta Mercaptoethanol		
2-Mercaptoethanol	≤12	FLAMMABLE LIQUIDS - Category 4 ACUTE TOXICITY (oral) - Category 3 ACUTE TOXICITY (dermal) - Category 2 ACUTE TOXICITY (inhalation) - Category 3 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SKIN SENSITIZATION - Category 1A

Section 15. Regulatory information

		TOXIC TO REPRODUCTION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	**10X SureVector Buffer** Ammonium sulphate	7783-20-2	≤3
Supplier notification	**10X SureVector Buffer** Ammonium sulphate	7783-20-2	≤3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; DIMETHYL SULFOXIDE; METHANE, SULFINYLBIS-

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

California Prop. 65

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

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

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

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : All components are listed or exempted.

Thailand : Not determined.

Turkey : Not determined.

United States : All components are active or exempted.

Viet Nam : Not determined.

Section 16. Other information

Procedure used to derive the classification

Classification	Justification
5X SureSolution	
FLAMMABLE LIQUIDS - Category 4	On basis of test data
EYE IRRITATION - Category 2B	On basis of test data
SureVector Enzyme Mix	
EYE IRRITATION - Category 2B	Calculation method
10X SureVector Buffer	
EYE IRRITATION - Category 2A	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method
DpnI	
EYE IRRITATION - Category 2B	Calculation method
XL1-Blue Supercompetent Cells	
EYE IRRITATION - Category 2B	Calculation method
Beta Mercaptoethanol	
ACUTE TOXICITY (dermal) - Category 4	Calculation method
SKIN IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE - Category 1	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method

History

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Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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