

SAFETY DATA SHEET



SureVector E. coli C-terminal Tag kit, 5 rxn, Part Number G7518E

Section 1. Identification

1.1 Product identifier

Product name : SureVector E. coli C-terminal Tag kit, 5 rxn, Part Number G7518E
Part No. (Chemical Kit) : G7518E
Part No. : ~~5~~X SureSolution 5190-8625
 SureVector AmpR Selectable Marker 5190-8807
 SureVector pUC Origin 5190-8810
 SureVector XP1 Linker 5190-8811
 SureVector LacI Repressor 5190-8812
 SureVector T7-HIS6 E. coli Promoter 5190-8813
 SureVector T7 E. coli Promoter 5190-8818
 SureVector CBP Expression Tag (C-Term) 5190-8827
 SureVector SBP Expression Tag (C-Term) 5190-8828
 SureVector Thioredoxin Expression Tag (C-Term) 5190-8829
 SureVector LacZ E. coli Control (C-term) 5190-7819
 SureVector Enzyme Mix 5190-8621
 10X SureVector Buffer 5190-8622
 dNTP Mix 200518-56
 DpnI 5190-8624

Validation date : 5/31/2017

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

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

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	: 5 X SureSolution	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). 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 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 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 XP1 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 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 T7 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 CBP Expression Tag (C-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 SBP Expression Tag (C-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 Thioredoxin Expression Tag (C-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 LacZ E. coli	While this material is not considered hazardous by the

Section 2. Hazards identification

Control (C-term)	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 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.
Dpnl	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

Dpnl

H319 EYE IRRITATION - Category 2A

Ingredients of unknown toxicity

5X SureVector Enzyme Mix	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 30 - 60%
10X SureVector Buffer	Percentage of the mixture consisting of ingredient (s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient (s) of unknown oral toxicity: 1 - 10%
dNTP Mix	Percentage of the mixture consisting of ingredient (s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient (s) of unknown oral toxicity: 1 - 10%
Dpnl	Percentage of the mixture consisting of ingredient (s) of unknown inhalation toxicity: 30 - 60%

2.2 GHS label elements

Section 2. Hazards identification

Hazard pictograms : 10X SureVector Buffer



DpnI



Signal word

<input checked="" type="checkbox"/> SureSolution	Warning
SureVector AmpR Selectable Marker	No signal word.
SureVector pUC Origin	No signal word.
SureVector XP1 Linker	No signal word.
SureVector LacI Repressor	No signal word.
SureVector T7-HIS6 E. coli Promoter	No signal word.
SureVector T7 E. coli Promoter	No signal word.
SureVector CBP Expression Tag (C-Term)	No signal word.
SureVector SBP Expression Tag (C-Term)	No signal word.
SureVector Thioredoxin Expression Tag (C-Term)	No signal word.
SureVector LacZ E. coli Control (C-term)	No signal word.
SureVector Enzyme Mix	Warning
10X SureVector Buffer	Warning
dNTP Mix	No signal word.
DpnI	Warning

Hazard statements

<input checked="" type="checkbox"/> SureSolution	H227 - Combustible liquid. H320 - Causes eye irritation.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector CBP Expression Tag (C-Term)	No known significant effects or critical hazards.
SureVector SBP Expression Tag (C-Term)	No known significant effects or critical hazards.
SureVector Thioredoxin Expression Tag (C-Term)	No known significant effects or critical hazards.
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	H320 - Causes eye irritation.
10X SureVector Buffer	H319 - Causes serious eye irritation.
dNTP Mix	No known significant effects or critical hazards.
DpnI	H319 - Causes serious eye irritation.

[Precautionary statements](#)

Section 2. Hazards identification

Prevention

:  SureSolution

SureVector AmpR Selectable Marker

P280 - Wear protective gloves. Wear eye or face protection.

P210 - Keep away from flames and hot surfaces. - No smoking.

P264 - Wash hands thoroughly after handling. Not applicable.

SureVector pUC Origin

Not applicable.

SureVector XP1 Linker

Not applicable.

SureVector LacI Repressor

Not applicable.

SureVector T7-HIS6 E. coli Promoter

Not applicable.

Promoter

SureVector T7 E. coli Promoter

Not applicable.

SureVector CBP Expression Tag (C-Term)

Not applicable.

SureVector SBP Expression Tag (C-Term)

Not applicable.

SureVector Thioredoxin

Not applicable.

Expression Tag (C-Term)

SureVector LacZ E. coli Control (C-term)

Not applicable.

SureVector Enzyme Mix

P264 - Wash hands thoroughly after handling.

10X SureVector Buffer

P280 - Wear eye or face protection.

dNTP Mix

P264 - Wash hands thoroughly after handling.

DpnI

Not applicable.

P280 - Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

Response

:  SureSolution

SureVector AmpR Selectable Marker

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 attention.

Not applicable.

SureVector pUC Origin

Not applicable.

SureVector XP1 Linker

Not applicable.

SureVector LacI Repressor

Not applicable.

SureVector T7-HIS6 E. coli Promoter

Not applicable.

Promoter

SureVector T7 E. coli Promoter

Not applicable.

SureVector CBP Expression Tag (C-Term)

Not applicable.

SureVector SBP Expression Tag (C-Term)

Not applicable.

SureVector Thioredoxin

Not applicable.

Expression Tag (C-Term)

SureVector LacZ E. coli Control (C-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 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

Section 2. Hazards identification

		rinsing. P337 + P313 - If eye irritation persists: Get medical attention. Not applicable. 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 attention.
	dNTP Mix Dpnl	P403 - Store in a well-ventilated place. P235 - Keep cool. Not applicable.
Storage	: 5X SureSolution	
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7-HIS6 E. coli Promoter	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector CBP Expression Tag (C-Term)	Not applicable.
	SureVector SBP Expression Tag (C-Term)	Not applicable.
	SureVector Thioredoxin Expression Tag (C-Term)	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	Dpnl	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 pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7-HIS6 E. coli Promoter	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector CBP Expression Tag (C-Term)	Not applicable.
	SureVector SBP Expression Tag (C-Term)	Not applicable.
	SureVector Thioredoxin Expression Tag (C-Term)	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	Dpnl	Not applicable.

Section 2. Hazards identification

Supplemental label elements	: <input checked="" type="checkbox"/> SureSolution	None known.
	SureVector AmpR Selectable Marker	None known.
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7-HIS6 E. coli Promoter	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector CBP Expression Tag (C-Term)	None known.
	SureVector SBP Expression Tag (C-Term)	None known.
	SureVector Thioredoxin Expression Tag (C-Term)	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.

2.3 Other hazards

Hazards not otherwise classified	: <input checked="" type="checkbox"/> SureSolution	None known.
	SureVector AmpR Selectable Marker	None known.
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7-HIS6 E. coli Promoter	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector CBP Expression Tag (C-Term)	None known.
	SureVector SBP Expression Tag (C-Term)	None known.
	SureVector Thioredoxin Expression Tag (C-Term)	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.

Section 3. Composition/information on ingredients

Substance/mixture	: <input checked="" type="checkbox"/> SureSolution	Substance
	SureVector AmpR Selectable Marker	Mixture
	SureVector pUC Origin	Mixture
	SureVector XP1 Linker	Mixture
	SureVector LacI Repressor	Mixture
	SureVector T7-HIS6 E. coli Promoter	Mixture
	SureVector T7 E. coli Promoter	Mixture
	SureVector CBP Expression Tag (C-Term)	Mixture
	SureVector SBP Expression Tag (C-Term)	Mixture
	SureVector Thioredoxin Expression	Mixture

Section 3. Composition/information on ingredients

Tag (C-Term)	
SureVector LacZ E. coli Control (C-term)	Mixture
SureVector Enzyme Mix	Mixture
10X SureVector Buffer	Mixture
dNTP Mix	Mixture
Dpnl	Mixture

Ingredient name	%	CAS number
5X SureSolution Dimethyl sulfoxide	100	67-68-5
SureVector Enzyme Mix Glycerol	≥50 - ≤75	56-81-5
10X SureVector Buffer Potassium chloride	≤5	7447-40-7
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	≤5	1185-53-1
Ammonium sulphate	≤3	7783-20-2
Polyoxyethylene octyl phenyl ether	≤2.3	9002-93-1
dNTP Mix 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate)	≤3	2564-35-4
2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	≤3	1927-31-7
Dpnl Glycerol	≥50 - ≤75	56-81-5
Sodium chloride	≤3	7647-14-5

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

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

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

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact

: **5X SureSolution**

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. 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 pUC Origin

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

SureVector XP1 Linker

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

SureVector LacI Repressor

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Section 4. First aid measures

SureVector T7-HIS6 E. coli Promoter	Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector T7 E. coli Promoter	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector CBP Expression Tag (C-Term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector SBP Expression Tag (C-Term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Thioredoxin Expression Tag (C-Term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector LacZ E. coli Control (C-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector 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.
Dpnl	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.

Inhalation

:  SureSolution

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SureVector AmpR Selectable Marker

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

Section 4. First aid measures

SureVector pUC Origin	attention if symptoms occur. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector XP1 Linker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacI Repressor	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector T7-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 T7 E. coli Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector CBP Expression Tag (C-Term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector SBP Expression Tag (C-Term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Thioredoxin Expression Tag (C-Term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacZ E. coli Control (C-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Enzyme Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 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. In case of inhalation

Section 4. First aid measures

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

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.

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.

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

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

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.

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

Skin contact

: 5X SureSolution

SureVector AmpR Selectable Marker

SureVector pUC Origin

SureVector XP1 Linker

SureVector LacI Repressor

SureVector T7-HIS6 E. coli Promoter

SureVector T7 E. coli Promoter

SureVector CBP Expression Tag (C-Term)

SureVector SBP Expression Tag (C-Term)


SureVector Thioredoxin Expression Tag (C-Term)

SureVector LacZ E. coli Control (C-term)

SureVector Enzyme Mix

10X SureVector Buffer

Section 4. First aid measures

		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.
	Dpnl	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	:  SureSolution	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	SureVector pUC Origin	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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 <i>E. coli</i> Promoter	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting

Section 4. First aid measures

SureVector T7 <i>E. coli</i> Promoter	<p>unless directed to do so by medical personnel. Get medical attention if symptoms occur.</p> <p>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.</p>
SureVector CBP Expression Tag (C-Term)	<p>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.</p>
SureVector SBP Expression Tag (C-Term)	<p>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.</p>
SureVector Thioredoxin Expression Tag (C-Term)	<p>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.</p>
SureVector LacZ <i>E. coli</i> Control (C-term)	<p>Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.</p>
SureVector Enzyme Mix	<p>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.</p>
10X SureVector Buffer	<p>Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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</p>

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dNTP Mix	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. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
Dpnl	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: 5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7-HIS6 E. coli Promoter SureVector T7 E. coli Promoter SureVector CBP Expression Tag (C-Term) SureVector SBP Expression Tag (C-Term) SureVector Thioredoxin Expression Tag (C-Term) SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix Dpnl	Causes eye irritation. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Causes eye irritation. Causes serious eye irritation. No known significant effects or critical hazards. Causes serious eye irritation.
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Inhalation	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector XP1 Linker	No known significant effects or critical hazards.
		SureVector LacI Repressor	No known significant effects or critical hazards.
		SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
		SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
		SureVector CBP Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector SBP Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector Thioredoxin Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
		SureVector Enzyme Mix	No known significant effects or critical hazards.
		10X SureVector Buffer	No known significant effects or critical hazards.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	No known significant effects or critical hazards.
Skin contact	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector XP1 Linker	No known significant effects or critical hazards.
		SureVector LacI Repressor	No known significant effects or critical hazards.
		SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
		SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
		SureVector CBP Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector SBP Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector Thioredoxin Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
		SureVector Enzyme Mix	No known significant effects or critical hazards.
		10X SureVector Buffer	No known significant effects or critical hazards.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	No known significant effects or critical hazards.
Ingestion	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector XP1 Linker	No known significant effects or critical hazards.
		SureVector LacI Repressor	No known significant effects or critical hazards.
		SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
		SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
		SureVector CBP Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector SBP Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector Thioredoxin Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.

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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.

Over-exposure signs/symptoms

Eye contact

:  SureSolution	Adverse symptoms may include the following: irritation watering redness
SureVector AmpR Selectable Marker	No specific data.
SureVector pUC Origin	No specific data.
SureVector XP1 Linker	No specific data.
SureVector LacI Repressor	No specific data.
SureVector T7-HIS6 E. coli Promoter	No specific data.
SureVector T7 E. coli Promoter	No specific data.
SureVector CBP Expression Tag (C-Term)	No specific data.
SureVector SBP Expression Tag (C-Term)	No specific data.
SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
SureVector LacZ E. coli Control (C-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: pain or irritation watering redness

Inhalation

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

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Skin contact	<input checked="" type="checkbox"/> SureSolution	No specific data.	
	SureVector AmpR Selectable Marker	No specific data.	
	SureVector pUC Origin	No specific data.	
	SureVector XP1 Linker	No specific data.	
	SureVector LacI Repressor	No specific data.	
	SureVector T7-HIS6 E. coli Promoter	No specific data.	
	SureVector T7 E. coli Promoter	No specific data.	
	SureVector CBP Expression Tag (C-Term)	No specific data.	
	SureVector SBP Expression Tag (C-Term)	No specific data.	
	SureVector Thioredoxin Expression Tag (C-Term)	No specific data.	
	SureVector LacZ E. coli Control (C-term)	No specific data.	
	SureVector Enzyme Mix	No specific data.	
	10X SureVector Buffer	No specific data.	
	dNTP Mix	No specific data.	
	DpnI	No specific data.	
	Ingestion	<input checked="" type="checkbox"/> SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
SureVector LacI Repressor		No specific data.	
SureVector T7-HIS6 E. coli Promoter		No specific data.	
SureVector T7 E. coli Promoter		No specific data.	
SureVector CBP Expression Tag (C-Term)		No specific data.	
SureVector SBP Expression Tag (C-Term)		No specific data.	
SureVector Thioredoxin Expression Tag (C-Term)		No specific data.	
SureVector LacZ E. coli Control (C-term)		No specific data.	
SureVector Enzyme Mix		No specific data.	
10X SureVector Buffer		No specific data.	
dNTP Mix		No specific data.	
DpnI		No specific data.	

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

Notes to physician	<input checked="" type="checkbox"/> 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 pUC Origin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector XP1 Linker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector LacI Repressor	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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SureVector T7-HIS6 E. coli Promoter	ingested or inhaled. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector T7 E. coli Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector CBP Expression Tag (C-Term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector SBP Expression Tag (C-Term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector Thioredoxin Expression Tag (C-Term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector LacZ E. coli Control (C-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
SureVector Enzyme Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
10X SureVector Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
dNTP Mix	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.
DpnI	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	
: SureSolution	No specific treatment.
SureVector AmpR Selectable Marker	No specific treatment.
SureVector pUC Origin	No specific treatment.
SureVector XP1 Linker	No specific treatment.
SureVector LacI Repressor	No specific treatment.
SureVector T7-HIS6 E. coli Promoter	No specific treatment.
SureVector T7 E. coli Promoter	No specific treatment.
SureVector CBP Expression Tag (C-Term)	No specific treatment.
SureVector SBP Expression Tag (C-Term)	No specific treatment.
SureVector Thioredoxin Expression Tag (C-Term)	No specific treatment.
SureVector LacZ E. coli Control (C-term)	No specific treatment.
SureVector Enzyme Mix	No specific treatment.
10X SureVector Buffer	No specific treatment.
dNTP Mix	No specific treatment.
DpnI	No specific treatment.

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Protection of first-aiders	: 5X SureSolution	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	SureVector AmpR Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
	SureVector pUC Origin	No action shall be taken involving any personal risk or without suitable training.
	SureVector XP1 Linker	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacI Repressor	No action shall be taken involving any personal risk or without suitable training.
	SureVector T7-HIS6 E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
	SureVector T7 E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
	SureVector CBP Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector SBP Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector Thioredoxin Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacZ E. coli Control (C-term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. 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.

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 pUC Origin	Use an extinguishing agent suitable for the surrounding fire.
	SureVector XP1 Linker	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacI Repressor	Use an extinguishing agent suitable for the surrounding fire.
	SureVector T7-HIS6 E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.
	SureVector T7 E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.
	SureVector CBP Expression Tag (C-Term)	Use an extinguishing agent suitable for the surrounding fire.

Section 5. Fire-fighting measures


	SureVector SBP Expression Tag (C-Term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Thioredoxin Expression Tag (C-Term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacZ E. coli Control (C-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Enzyme Mix	Use an extinguishing agent suitable for the surrounding fire.
	10X SureVector Buffer	Use an extinguishing agent suitable for the surrounding fire.
	dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.
	Dpnl	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 pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7-HIS6 E. coli Promoter	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector CBP Expression Tag (C-Term)	None known.
	SureVector SBP Expression Tag (C-Term)	None known.
	SureVector Thioredoxin Expression Tag (C-Term)	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	Dpnl	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical	: 5X SureSolution	Combustible liquid. 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. Runoff to sewer may create fire or explosion hazard.
	SureVector AmpR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector pUC Origin	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector XP1 Linker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector LacI Repressor	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector T7-HIS6 E. coli Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector T7 E. coli Promoter	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector CBP Expression Tag	In a fire or if heated, a pressure increase will occur

Section 5. Fire-fighting measures

Hazardous thermal decomposition products

(C-Term) SureVector SBP Expression Tag	and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
(C-Term) SureVector Thioredoxin Expression Tag (C-Term)	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector LacZ E. coli Control (C-term)	In a fire or if heated, a pressure increase will occur and the container may burst.
SureVector Enzyme Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
10X SureVector Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
dNTP Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
Dpnl	In a fire or if heated, a pressure increase will occur and the container may burst.
 SureSolution	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides
SureVector AmpR Selectable Marker	No specific data.
SureVector pUC Origin	No specific data.
SureVector XP1 Linker	No specific data.
SureVector LacI Repressor	No specific data.
SureVector T7-HIS6 E. coli Promoter	No specific data.
SureVector T7 E. coli Promoter	No specific data.
SureVector CBP Expression Tag (C-Term)	No specific data.
SureVector SBP Expression Tag (C-Term)	No specific data.
SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
SureVector LacZ E. coli Control (C-term)	No specific data.
SureVector Enzyme Mix	Decomposition products may include the following materials: 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	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
Dpnl	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds

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metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

: 5X SureSolution

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector pUC Origin

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector XP1 Linker

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector LacI Repressor

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector T7-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 T7 E. coli Promoter

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector CBP Expression Tag (C-Term)

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector SBP Expression Tag (C-Term)

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector Thioredoxin Expression Tag (C-Term)

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector LacZ E. coli Control (C-term)

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

SureVector Enzyme Mix

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or 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

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Special protective equipment for fire-fighters

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

Section 5. Fire-fighting measures

dNTP Mix

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

Dpnl

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

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

:  SureSolution

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through 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 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 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 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 T7 E. coli Promoter

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

SureVector CBP Expression Tag

No action shall be taken involving any personal

Section 6. Accidental release measures

(C-Term)	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 SBP Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Thioredoxin Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector LacZ <i>E. coli</i> Control (C-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through 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.
Dpnl	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

the information in "For non-emergency personnel".

6.2 Environmental precautions

:  SureSolution

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 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 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 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 T7 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 CBP Expression Tag (C-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 SBP Expression Tag (C-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 Thioredoxin Expression Tag (C-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 LacZ E. coli Control (C-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).

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 6. Accidental release measures

10X SureVector Buffer	Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). 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).
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).
Dpnl	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up :  SureSolution

SureVector AmpR Selectable Marker	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector pUC Origin	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector XP1 Linker	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
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 T7 E. coli Promoter	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

	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 CBP Expression Tag (C-Term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector SBP Expression Tag (C-Term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector Thioredoxin Expression Tag (C-Term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector LacZ <i>E. coli</i> Control (C-term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector Enzyme Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
10X SureVector Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
dNTP Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
Dpnl	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures :  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 pUC Origin

Put on appropriate personal protective equipment (see Section 8).

SureVector XP1 Linker

Put on appropriate personal protective equipment (see Section 8).

SureVector LacI Repressor

Put on appropriate personal protective equipment (see Section 8).

SureVector T7-HIS6 *E. coli* Promoter

Put on appropriate personal protective equipment (see Section 8).

SureVector T7 *E. coli* Promoter

Put on appropriate personal protective equipment (see Section 8).

SureVector CBP Expression Tag (C-Term)

Put on appropriate personal protective equipment (see Section 8).

SureVector SBP Expression Tag (C-Term)

Put on appropriate personal protective equipment (see Section 8).

SureVector Thioredoxin Expression Tag (C-Term)

Put on appropriate personal protective equipment (see Section 8).

SureVector LacZ *E. coli* Control (C-term)

Put on appropriate personal protective equipment (see Section 8).

SureVector Enzyme Mix

Put on appropriate personal protective equipment (see Section 8). 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. 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

Section 7. Handling and storage

Advice on general occupational hygiene

:  SureSolution

SureVector AmpR Selectable Marker

SureVector pUC Origin

SureVector XP1 Linker

SureVector LacI Repressor

SureVector T7-HIS6 *E. coli* Promoter

SureVector T7 *E. coli* Promoter

SureVector CBP Expression Tag (C-Term)

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.

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.

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.

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.

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.

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.

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.

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.

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

Section 7. Handling and storage

SureVector SBP Expression Tag (C-Term)	before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. 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 Thioredoxin Expression Tag (C-Term)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector LacZ <i>E. coli</i> Control (C-term)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector Enzyme Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
10X SureVector Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for 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.

Section 7. Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

:  SureSolution

Storage temperature: -20°C (-4°F). 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.

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.

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.

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.

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.

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

Section 7. Handling and storage

	opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
SureVector T7 <i>E. coli</i> 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.
SureVector CBP Expression Tag (C-Term)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
SureVector SBP Expression Tag (C-Term)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
SureVector Thioredoxin Expression Tag (C-Term)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
SureVector LacZ <i>E. coli</i> Control (C-term)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
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

Section 7. Handling and storage

10X SureVector Buffer	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. 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.
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.
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.

7.3 Specific end use(s)

Recommendations

<ul style="list-style-type: none"> 5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7-HIS6 <i>E. coli</i> Promoter SureVector T7 <i>E. coli</i> Promoter SureVector CBP Expression Tag (C-Term) SureVector SBP Expression Tag (C-Term) SureVector Thioredoxin Expression Tag (C-Term) SureVector LacZ <i>E. coli</i> Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI 	<p>Industrial applications, Professional applications. Industrial applications, Professional applications.</p> <p>Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.</p> <p>Industrial applications, Professional applications. Industrial applications, Professional applications.</p> <p>Industrial applications, Professional applications.</p> <p>Industrial applications, Professional applications.</p>
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Section 7. Handling and storage

Industrial sector specific solutions	5X SureSolution	Not applicable.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7-HIS6 E. coli Promoter	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector CBP Expression Tag (C-Term)	Not applicable.
	SureVector SBP Expression Tag (C-Term)	Not applicable.
	SureVector Thioredoxin Expression Tag (C-Term)	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
5X SureSolution Dimethyl sulfoxide	AIHA WEEL (United States, 10/2011). TWA: 250 ppm 8 hours.
SureVector Enzyme Mix Glycerol	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 10 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 6/2016). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust
10X SureVector Buffer Potassium chloride 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride Ammonium sulphate Polyoxyethylene octyl phenyl ether	None. None. None. None.
dNTP Mix 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate) 2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	None. None.
DpnI Glycerol	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 10 mg/m ³ 8 hours. Form: Total dust OSHA PEL (United States, 6/2016).

Section 8. Exposure controls/personal protection

Sodium chloride

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction
 TWA: 15 mg/m³ 8 hours. Form: Total dust
 None.

8.2 Exposure controls

Appropriate engineering controls

- Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

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

Individual protection measures

Hygiene measures

- Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

- Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection

- Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

- Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

- Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

- Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Section 9. Physical and chemical properties

Physical state	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	Liquid. [Clear.] Liquid.		
		SureVector pUC Origin	Liquid.		
		SureVector XP1 Linker	Liquid.		
		SureVector LacI Repressor	Liquid.		
		SureVector T7-HIS6 E. coli Promoter	Liquid.		
		SureVector T7 E. coli Promoter	Liquid.		
		SureVector CBP Expression Tag (C-Term)	Liquid.		
		SureVector SBP Expression Tag (C-Term)	Liquid.		
		SureVector Thioredoxin Expression Tag (C-Term)	Liquid.		
		SureVector LacZ E. coli Control (C-term)	Liquid.		
		SureVector Enzyme Mix	Liquid.		
		10X SureVector Buffer	Liquid.		
		dNTP Mix	Liquid.		
		DpnI	Liquid.		
		Color	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	Blue. Not available.
				SureVector pUC Origin	Not available.
				SureVector XP1 Linker	Not available.
				SureVector LacI Repressor	Not available.
				SureVector T7-HIS6 E. coli Promoter	Not available.
				SureVector T7 E. coli Promoter	Not available.
SureVector CBP Expression Tag (C-Term)	Not available.				
SureVector SBP Expression Tag (C-Term)	Not available.				
SureVector Thioredoxin Expression Tag (C-Term)	Not available.				
SureVector LacZ E. coli Control (C-term)	Not available.				
SureVector Enzyme Mix	Not available.				
10X SureVector Buffer	Not available.				
dNTP Mix	Not available.				
DpnI	Not available.				
Odor	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	Odorless. [Slight] Not available.		
		SureVector pUC Origin	Not available.		
		SureVector XP1 Linker	Not available.		
		SureVector LacI Repressor	Not available.		
		SureVector T7-HIS6 E. coli Promoter	Not available.		
		SureVector T7 E. coli Promoter	Not available.		
		SureVector CBP Expression Tag (C-Term)	Not available.		
		SureVector SBP Expression Tag (C-Term)	Not available.		
		SureVector Thioredoxin Expression Tag (C-Term)	Not available.		
		SureVector LacZ E. coli Control (C-	Not available.		

Section 9. Physical and chemical properties

		term)	
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
Odor threshold	:	<input checked="" type="checkbox"/> SureSolution	Not available.
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7-HIS6 E. coli Promoter	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector CBP Expression Tag (C-Term)	Not available.
		SureVector SBP Expression Tag (C-Term)	Not available.
		SureVector Thioredoxin Expression Tag (C-Term)	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
pH	:	<input checked="" type="checkbox"/> SureSolution	Not available.
		SureVector AmpR Selectable Marker	8
		SureVector pUC Origin	8
		SureVector XP1 Linker	8
		SureVector LacI Repressor	8
		SureVector T7-HIS6 E. coli Promoter	8
		SureVector T7 E. coli Promoter	8
		SureVector CBP Expression Tag (C-Term)	8
		SureVector SBP Expression Tag (C-Term)	8
		SureVector Thioredoxin Expression Tag (C-Term)	8
		SureVector LacZ E. coli Control (C-term)	8
		SureVector Enzyme Mix	8.2
		10X SureVector Buffer	8.8
		dNTP Mix	7.5
		DpnI	7.5
Melting point	:	<input checked="" type="checkbox"/> SureSolution	18.5°C (65.3°F)
		SureVector AmpR Selectable Marker	0°C (32°F)
		SureVector pUC Origin	0°C (32°F)
		SureVector XP1 Linker	0°C (32°F)
		SureVector LacI Repressor	0°C (32°F)
		SureVector T7-HIS6 E. coli Promoter	0°C (32°F)
		SureVector T7 E. coli Promoter	0°C (32°F)
		SureVector CBP Expression Tag (C-Term)	0°C (32°F)

Section 9. Physical and chemical properties

	SureVector SBP Expression Tag (C-Term)	0°C (32°F)
	SureVector Thioredoxin Expression Tag (C-Term)	0°C (32°F)
	SureVector LacZ E. coli Control (C-term)	0°C (32°F)
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Boiling point	: <input checked="" type="checkbox"/> SureSolution	189°C (372.2°F)
	SureVector AmpR Selectable Marker	100°C (212°F)
	SureVector pUC Origin	100°C (212°F)
	SureVector XP1 Linker	100°C (212°F)
	SureVector LacI Repressor	100°C (212°F)
	SureVector T7-HIS6 E. coli Promoter	100°C (212°F)
	SureVector T7 E. coli Promoter	100°C (212°F)
	SureVector CBP Expression Tag (C-Term)	100°C (212°F)
	SureVector SBP Expression Tag (C-Term)	100°C (212°F)
	SureVector Thioredoxin Expression Tag (C-Term)	100°C (212°F)
	SureVector LacZ E. coli Control (C-term)	100°C (212°F)
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Flash point	: <input checked="" type="checkbox"/> SureSolution	Closed cup: 87°C (188.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag (C-Term)	Not available.
	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.


Section 9. Physical and chemical properties

Evaporation rate	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	0.026 (butyl acetate = 1) Not available.		
		SureVector pUC Origin	Not available.		
		SureVector XP1 Linker	Not available.		
		SureVector LacI Repressor	Not available.		
		SureVector T7-HIS6 E. coli Promoter	Not available.		
		SureVector T7 E. coli Promoter	Not available.		
		SureVector CBP Expression Tag (C-Term)	Not available.		
		SureVector SBP Expression Tag (C-Term)	Not available.		
		SureVector Thioredoxin Expression Tag (C-Term)	Not available.		
		SureVector LacZ E. coli Control (C-term)	Not available.		
		SureVector Enzyme Mix	Not available.		
		10X SureVector Buffer	Not available.		
		dNTP Mix	Not available.		
		DpnI	Not available.		
		Flammability (solid, gas)	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	Not applicable. Not applicable.
				SureVector pUC Origin	Not applicable.
				SureVector XP1 Linker	Not applicable.
SureVector LacI Repressor	Not applicable.				
SureVector T7-HIS6 E. coli Promoter	Not applicable.				
SureVector T7 E. coli Promoter	Not applicable.				
SureVector CBP Expression Tag (C-Term)	Not applicable.				
SureVector SBP Expression Tag (C-Term)	Not applicable.				
SureVector Thioredoxin Expression Tag (C-Term)	Not applicable.				
SureVector LacZ E. coli Control (C-term)	Not applicable.				
SureVector Enzyme Mix	Not applicable.				
10X SureVector Buffer	Not applicable.				
dNTP Mix	Not applicable.				
DpnI	Not applicable.				
Lower and upper explosive (flammable) limits	: <input checked="" type="checkbox"/> SureSolution			SureVector AmpR Selectable Marker	Lower: 2.6% Upper: 28.5% Not available.
				SureVector pUC Origin	Not available.
				SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.		
		SureVector T7-HIS6 E. coli Promoter	Not available.		
		SureVector T7 E. coli Promoter	Not available.		
		SureVector CBP Expression Tag (C-Term)	Not available.		
		SureVector SBP Expression Tag (C-Term)	Not available.		
		SureVector Thioredoxin Expression Tag (C-Term)	Not available.		

Section 9. Physical and chemical properties

	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Vapor pressure	: <input checked="" type="checkbox"/> SureSolution	0.056 kPa (0.42 mm Hg) [room temperature]
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag (C-Term)	Not available.
	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Vapor density	: <input checked="" type="checkbox"/> SureSolution	2.7 [Air = 1]
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag (C-Term)	Not available.
	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Relative density	: <input checked="" type="checkbox"/> SureSolution	1.1
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag	Not available.

Section 9. Physical and chemical properties

	(C-Term)	SureVector SBP Expression Tag	Not available.
	(C-Term)	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
Solubility	:	 SureSolution	Easily soluble in the following materials: cold water and hot water.
		SureVector AmpR Selectable Marker	Easily soluble in the following materials: cold water and hot water.
		SureVector pUC Origin	Easily soluble in the following materials: cold water and hot water.
		SureVector XP1 Linker	Easily soluble in the following materials: cold water and hot water.
		SureVector LacI Repressor	Easily soluble in the following materials: cold water and hot water.
		SureVector T7-HIS6 E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
		SureVector T7 E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
		SureVector CBP Expression Tag (C-Term)	Easily soluble in the following materials: cold water and hot water.
		SureVector SBP Expression Tag (C-Term)	Easily soluble in the following materials: cold water and hot water.
		SureVector Thioredoxin Expression Tag (C-Term)	Easily soluble in the following materials: cold water and hot water.
		SureVector LacZ E. coli Control (C-term)	Easily soluble in the following materials: cold water and hot water.
		SureVector Enzyme Mix	Soluble in the following materials: cold water and hot water.
		10X SureVector Buffer	Easily soluble in the following materials: cold water and hot water.
		dNTP Mix	Easily soluble in the following materials: cold water and hot water.
		DpnI	Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	:	 SureSolution	-1.35
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7-HIS6 E. coli Promoter	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector CBP Expression Tag (C-Term)	Not available.
		SureVector SBP Expression Tag (C-Term)	Not available.
		SureVector Thioredoxin Expression Tag (C-Term)	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.

Section 9. Physical and chemical properties

	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Auto-ignition temperature	: 5X SureSolution	300 to 302°C (572 to 575.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag (C-Term)	Not available.
	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Decomposition temperature	: 5X SureSolution	140 to 189°C (284 to 372.2°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag (C-Term)	Not available.
	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Viscosity	: 5X SureSolution	Dynamic (room temperature): 2.14 mPa·s (2.14 cP)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag	Not available.

Section 9. Physical and chemical properties

(C-Term) SureVector Thioredoxin Expression Tag (C-Term)	Not available.
SureVector LacZ E. coli Control (C-term)	Not available.
SureVector Enzyme Mix	Not available.
10X SureVector Buffer	Not available.
dNTP Mix	Not available.
DpnI	Not available.

Section 10. Stability and reactivity

10.1 Reactivity	: <input checked="" type="checkbox"/> SureSolution	No specific test data related to reactivity available for this product or its ingredients.
	SureVector AmpR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector pUC Origin	No specific test data related to reactivity available for this product or its ingredients.
	SureVector XP1 Linker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacI Repressor	No specific test data related to reactivity available for this product or its ingredients.
	SureVector T7-HIS6 E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector T7 E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector CBP Expression Tag (C-Term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector SBP Expression Tag (C-Term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Thioredoxin Expression Tag (C-Term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacZ E. coli Control (C-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Enzyme Mix	No specific test data related to reactivity available for this product or its ingredients.
	10X SureVector Buffer	No specific test data related to reactivity available for this product or its ingredients.
	dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
	DpnI	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: <input checked="" type="checkbox"/> SureSolution	The product is stable.
	SureVector AmpR Selectable Marker	The product is stable.
	SureVector pUC Origin	The product is stable.
	SureVector XP1 Linker	The product is stable.
	SureVector LacI Repressor	The product is stable.
	SureVector T7-HIS6 E. coli Promoter	The product is stable.
	SureVector T7 E. coli Promoter	The product is stable.
	SureVector CBP Expression Tag (C-Term)	The product is stable.
	SureVector SBP Expression Tag (C-Term)	The product is stable.
	SureVector Thioredoxin Expression Tag (C-Term)	The product is stable.
	SureVector LacZ E. coli Control (C-	The product is stable.

Section 10. Stability and reactivity

	term)	
	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.
10.3 Possibility of hazardous reactions	☒ SureSolution	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector pUC Origin	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector XP1 Linker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector LacI Repressor	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector T7-HIS6 E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector CBP Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector SBP Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector Thioredoxin Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	10X SureVector Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	DpnI	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	☒ 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 pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector CBP Expression Tag (C-Term)	No specific data.
	SureVector SBP Expression Tag (C-Term)	No specific data.
	SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.

Section 10. Stability and reactivity

SureVector Enzyme Mix	No specific data.
10X SureVector Buffer	No specific data.
dNTP Mix	No specific data.
DpnI	No specific data.

10.5 Incompatible materials : SureSolution

	Reactive or incompatible with the following materials: oxidizing materials
SureVector AmpR Selectable Marker	May react or be incompatible with oxidizing materials.
SureVector pUC Origin	May react or be incompatible with oxidizing materials.
SureVector XP1 Linker	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 T7 E. coli Promoter	May react or be incompatible with oxidizing materials.
SureVector CBP Expression Tag (C-Term)	May react or be incompatible with oxidizing materials.
SureVector SBP Expression Tag (C-Term)	May react or be incompatible with oxidizing materials.
SureVector Thioredoxin Expression Tag (C-Term)	May react or be incompatible with oxidizing materials.
SureVector LacZ E. coli Control (C-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.

10.6 Hazardous decomposition products : SureSolution

	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector pUC Origin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector XP1 Linker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LacI Repressor	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector T7-HIS6 E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 10. Stability and reactivity

SureVector CBP Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector SBP Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector Thioredoxin Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10X SureVector Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Dpnl	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	-
10X SureVector Buffer Potassium chloride Ammonium sulphate Polyoxyethylene octyl phenyl ether	LD50 Oral LD50 Oral LD50 Oral	Rat Rat Rat	2600 mg/kg 2840 mg/kg 1800 mg/kg	- - -
Dpnl Glycerol Sodium chloride	LD50 Oral LD50 Oral	Rat Rat	12600 mg/kg 3000 mg/kg	- -

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
5X SureSolution Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 milligrams	-

Section 11. Toxicological information

				milligrams	
SureVector Enzyme Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
10X SureVector Buffer Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Polyoxyethylene octyl phenyl ether	Rabbit	-	24 hours 10 microliters	-
Dpnl Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
10X SureVector Buffer 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Section 11. Toxicological information

Information on the likely routes of exposure	: <input checked="" type="checkbox"/> SureSolution	Routes of entry anticipated: Oral, Dermal, Inhalation.
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag (C-Term)	Not available.
	SureVector SBP Expression Tag (C-Term)	Not available.
	SureVector Thioredoxin Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Routes of entry anticipated: Oral, Dermal, Inhalation.
	10X SureVector Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
	dNTP Mix	Not available.
DpnI	Routes of entry anticipated: Oral, Dermal, Inhalation.	
Potential acute health effects		
Eye contact	: <input checked="" type="checkbox"/> SureSolution	Causes eye irritation.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	SureVector CBP Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector SBP Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector Thioredoxin Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	Causes eye irritation.
	10X SureVector Buffer	Causes serious eye irritation.
	dNTP Mix	No known significant effects or critical hazards.
DpnI	Causes serious eye irritation.	
Inhalation	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7-HIS6 E. coli Promoter	No known significant effects or critical hazards.
	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	SureVector CBP Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector SBP Expression Tag	No known significant effects or critical hazards.

Section 11. Toxicological information

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

Symptoms related to the physical, chemical and toxicological characteristics

Section 11. Toxicological information

Eye contact	:	5X SureSolution	Adverse symptoms may include the following: irritation watering redness
		SureVector AmpR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7-HIS6 E. coli Promoter	No specific data.
		SureVector T7 E. coli Promoter	No specific data.
		SureVector CBP Expression Tag (C-Term)	No specific data.
		SureVector SBP Expression Tag (C-Term)	No specific data.
		SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
		SureVector LacZ E. coli Control (C-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 DpnI	No specific data. Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	:	5X SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7-HIS6 E. coli Promoter	No specific data.
		SureVector T7 E. coli Promoter	No specific data.
		SureVector CBP Expression Tag (C-Term)	No specific data.
		SureVector SBP Expression Tag (C-Term)	No specific data.
		SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
		SureVector LacZ E. coli Control (C-term)	No specific data.
		SureVector Enzyme Mix	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix DpnI	No specific data. No specific data.

Section 11. Toxicological information

Skin contact	:	<input checked="" type="checkbox"/> SureSolution	No specific data.
		SureVector AmpR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7-HIS6 E. coli Promoter	No specific data.
		SureVector T7 E. coli Promoter	No specific data.
		SureVector CBP Expression Tag (C-Term)	No specific data.
		SureVector SBP Expression Tag (C-Term)	No specific data.
		SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
		SureVector LacZ E. coli Control (C-term)	No specific data.
		SureVector Enzyme Mix	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix	No specific data.
		DpnI	No specific data.
	Ingestion	:	<input checked="" type="checkbox"/> SureSolution
		SureVector AmpR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7-HIS6 E. coli Promoter	No specific data.
		SureVector T7 E. coli Promoter	No specific data.
		SureVector CBP Expression Tag (C-Term)	No specific data.
		SureVector SBP Expression Tag (C-Term)	No specific data.
		SureVector Thioredoxin Expression Tag (C-Term)	No specific data.
		SureVector LacZ E. coli Control (C-term)	No specific data.
		SureVector Enzyme Mix	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix	No specific data.
		DpnI	No specific data.

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

Section 11. Toxicological information

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

Section 11. Toxicological information

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

Section 11. Toxicological information

SureVector Thioredoxin Expression Tag (C-Term)	No known significant effects or critical hazards.
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.
10X SureVector Buffer	No known significant effects or critical hazards.
dNTP Mix	No known significant effects or critical hazards.
Dpnl	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
10X SureVector Buffer Oral	41044.5 mg/kg
Dpnl Oral	128314.8 mg/kg

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 µl/L Marine water	Algae - Ulva lactuca	72 hours
SureVector Enzyme Mix Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
10X SureVector Buffer Potassium chloride	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 141460 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 12.92 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
Ammonium sulphate	Acute LC50 880000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 2.6 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Young	48 hours
	Acute LC50 14000 to 15000 µg/l Fresh water	Daphnia - Daphnia magna - Young	48 hours
	Acute LC50 68 µg/l Fresh water	Fish - Oncorhynchus gorbuscha - Alevin	96 hours
Polyoxyethylene octyl phenyl ether	Chronic NOEC 7.5 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
	Chronic NOEC 143 µg/l Marine water	Fish - Salmo salar - Post-smolt	5 weeks
	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

Section 12. Ecological information

Dpnl Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water Acute EC50 2430000 µg/l Fresh water Acute EC50 28.85 mg/dm ³ Fresh water Acute EC50 519.6 mg/l Fresh water Acute IC50 6.87 g/L Fresh water Acute LC50 1.56 g/L Fresh water Acute LC50 1000000 µg/l Fresh water Chronic LC10 781 mg/l Fresh water Chronic NOEC 6 g/L Fresh water Chronic NOEC 0.314 g/L Fresh water Chronic NOEC 100 mg/l Fresh water	Fish - Oncorhynchus mykiss Algae - Navicula seminulum Algae - Pseudokirchneriella subcapitata Crustaceans - Cypris subglobosa Aquatic plants - Lemna minor Daphnia - Daphnia magna Fish - Morone saxatilis - Larvae Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling) Aquatic plants - Lemna minor Daphnia - Daphnia pulex Fish - Gambusia holbrooki - Adult	96 hours 96 hours 72 hours 48 hours 96 hours 48 hours 96 hours 3 weeks 96 hours 21 days 8 weeks
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12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
10X SureVector Buffer Potassium chloride Ammonium sulphate Polyoxyethylene octyl phenyl ether	- - -	- - -	Readily Readily 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
10X SureVector Buffer Potassium chloride Ammonium sulphate Polyoxyethylene octyl phenyl ether	-0.46 -5.1 4.86	- - -	low low high
Dpnl Glycerol	-1.76	-	low

12.4 Mobility in soil

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

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

Section 13. Disposal considerations

13.1 Waste treatment methods

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

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

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

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

Section 14. Transport information

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

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

Transport in bulk according to Annex II of MARPOL and the IBC Code : 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) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

Section 15. Regulatory information

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification

5X SureSolution	Fire hazard
	Immediate (acute) health hazard
SureVector AmpR Selectable Marker	Not applicable.
SureVector pUC Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7-HIS6 E. coli Promoter	Not applicable.
SureVector T7 E. coli Promoter	Not applicable.
SureVector CBP Expression Tag (C-Term)	Not applicable.
SureVector SBP Expression Tag (C-Term)	Not applicable.
SureVector Thioredoxin Expression Tag (C-Term)	Not applicable.
SureVector LacZ E. coli Control (C-term)	Not applicable.
SureVector Enzyme Mix	Immediate (acute) health hazard
10X SureVector Buffer	Immediate (acute) health hazard
dNTP Mix	Not applicable.
DpnI	Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
5X SureSolution Dimethyl sulfoxide	100	Yes.	No.	No.	Yes.	No.
SureVector Enzyme Mix Glycerol	≥50 - ≤75	No.	No.	No.	Yes.	No.
10X SureVector Buffer Potassium chloride	≤5	No.	No.	No.	Yes.	No.
2-Amino-2-(hydroxymethyl)propane-1, 3-diol hydrochloride	≤5	No.	No.	No.	Yes.	No.
Ammonium sulphate	≤3	No.	No.	No.	Yes.	No.
Polyoxyethylene octyl phenyl ether	≤2.3	No.	No.	No.	Yes.	No.
dNTP Mix 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate)	≤3	No.	No.	No.	Yes.	No.
2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	≤3	No.	No.	No.	Yes.	No.

Section 15. Regulatory information

Dpnl							
Glycerol	≥50 - ≤75	No.	No.	No.	Yes.	No.	
Sodium chloride	≤3	No.	No.	No.	Yes.	No.	

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: DIMETHYL SULFOXIDE; METHANE, SULFINYLBIIS-; GLYCERIN; 1,2,3-PROPANETRIOL
- Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL

California Prop. 65

Not available.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

- Australia** : Not determined.
- Canada** : Not determined.
- China** : All components are listed or exempted.
- Europe** : All components are listed or exempted.
- Japan** : **Japan inventory (ENCS)**: Not determined.
Japan inventory (ISHL): Not determined.
- Malaysia** : Not determined.
- New Zealand** : Not determined.
- Philippines** : Not determined.
- Republic of Korea** : Not determined.
- Taiwan** : All components are listed or exempted.
- Thailand** : Not determined.

Section 15. Regulatory information

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

Section 16. Other information

History

Date of issue	: 05/31/2017
Date of previous issue	: 08/21/2015.
Version	: 2

Indicates information that has changed from previously issued version.

Notice to reader

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