

SAFETY DATA SHEET



SureVector E. coli N-terminal Tag kit, 5 rxn, Part Number G7518D

Section 1. Identification

1.1 Product identifier

Product name : SureVector E. coli N-terminal Tag kit, 5 rxn, Part Number G7518D

Part No. (Chemical Kit) : G7518D

Part No. :

5X SureSolution	5190-8625
SureVector AmpR Selectable Marker	5190-8807
SureVector pUC Origin	5190-8810
SureVector XP1 Linker	5190-8811
SureVector LacI Repressor	5190-8812
SureVector T7-HIS6 E. coli Promoter	5190-8813
SureVector T7 E. coli Promoter	5190-8818
SureVector GST E. coli Expression Tag (N-term)	5190-8824
SureVector MBP E. coli Expression Tag (N-term)	5190-8825
SureVector SBP E. coli Expression Tag (N-term)	5190-8826
SureVector LacZ Control (N-term)	5190-8814
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.

5X SureSolution	0.1 (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 GST E. coli Expression Tag (N-term)	0.01 ml (5 reactions)
SureVector MBP E. coli Expression Tag (N-term)	0.01 ml (5 reactions)
SureVector SBP E. coli Expression Tag (N-term)	0.01 ml (5 reactions)
SureVector LacZ Control (N-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

Section 1. Identification

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

Section 2. Hazards identification

2.1 Classification of the substance or mixture

<p>OSHA/HCS status : <input checked="" type="checkbox"/> SureSolution</p> <p>SureVector AmpR Selectable Marker</p> <p>SureVector pUC Origin</p> <p>SureVector XP1 Linker</p> <p>SureVector LacI Repressor</p> <p>SureVector T7-HIS6 E. coli Promoter</p> <p>SureVector T7 E. coli Promoter</p> <p>SureVector GST E. coli Expression Tag (N-term)</p> <p>SureVector MBP E. coli Expression Tag (N-term)</p> <p>SureVector SBP E. coli Expression Tag (N-term)</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>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.</p>
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Section 2. Hazards identification

	the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector LacZ Control (N-term)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
SureVector Enzyme Mix	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
10X SureVector Buffer	This material is considered hazardous by the OSHA 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

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

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

Section 2. Hazards identification

Prevention

:  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 GST E. coli Expression Tag (N-term)
 SureVector MBP E. coli Expression Tag (N-term)
 SureVector SBP E. coli Expression Tag (N-term)
 SureVector LacZ Control (N-term)
 SureVector Enzyme Mix
 10X SureVector Buffer

 dNTP Mix
 DpnI

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.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 P264 - Wash hands thoroughly after handling.
 P280 - Wear eye or face protection.
 P264 - Wash hands thoroughly after handling.
 Not applicable.
 P280 - Wear eye or face protection.
 P264 - Wash hands thoroughly after handling.

Response

:  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 GST E. coli Expression Tag (N-term)
 SureVector MBP E. coli Expression Tag (N-term)
 SureVector SBP E. coli Expression Tag (N-term)
 SureVector LacZ Control (N-term)
 SureVector Enzyme Mix

 10X SureVector Buffer

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P337 + P313 - If eye irritation persists: Get medical attention.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 Not applicable.
 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.
 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.

Section 2. Hazards identification

	dNTP Mix	Not applicable.
	DpnI	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
Storage	: <input checked="" type="checkbox"/> SureSolution	P403 - Store in a well-ventilated place. P235 - Keep cool.
	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 GST E. coli Expression Tag (N-term)	Not applicable.
	SureVector MBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector SBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Disposal	: <input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Not applicable.
	SureVector MBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector SBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
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.

Section 2. Hazards identification

SureVector GST E. coli Expression Tag (N-term)	None known.
SureVector MBP E. coli Expression Tag (N-term)	None known.
SureVector SBP E. coli Expression Tag (N-term)	None known.
SureVector LacZ Control (N-term)	None known.
SureVector Enzyme Mix	None known.
10X SureVector Buffer	None known.
dNTP Mix	None known.
DpnI	None known.

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 GST E. coli Expression Tag (N-term)	None known.
SureVector MBP E. coli Expression Tag (N-term)	None known.
SureVector SBP E. coli Expression Tag (N-term)	None known.
SureVector LacZ Control (N-term)	None known.
SureVector Enzyme Mix	None known.
10X SureVector Buffer	None known.
dNTP Mix	None known.
DpnI	None known.

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 GST E. coli Expression Tag (N-term)	Mixture
	SureVector MBP E. coli Expression Tag (N-term)	Mixture
	SureVector SBP E. coli Expression Tag (N-term)	Mixture
	SureVector LacZ Control (N-term)	Mixture
	SureVector Enzyme Mix	Mixture
	10X SureVector Buffer	Mixture
	dNTP Mix	Mixture
	DpnI	Mixture

Section 3. Composition/information on ingredients

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

SureVector AmpR Selectable Marker

SureVector pUC Origin

SureVector XP1 Linker

SureVector LacI Repressor

SureVector T7-HIS6 E. coli Promoter

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. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.

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.

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.

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.

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.

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.

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

Section 4. First aid measures

SureVector GST E. coli Expression Tag (N-term)	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 MBP E. coli Expression Tag (N-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector SBP E. coli Expression Tag (N-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector LacZ Control (N-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Enzyme Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
10X SureVector Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
dNTP Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
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 : 5X SureSolution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
SureVector AmpR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector pUC Origin	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector XP1 Linker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacI Repressor	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

Section 4. First aid measures

SureVector T7-HIS6 E. coli Promoter	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 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 GST E. coli Expression Tag (N-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector MBP E. coli Expression Tag (N-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector SBP E. coli Expression Tag (N-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacZ Control (N-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Enzyme Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
10X SureVector Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be 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 of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Dpnl	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

Section 4. First aid measures

Skin contact

: 5X SureSolution

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.

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7-HIS6 E. coli Promoter

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

SureVector T7 E. coli Promoter

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

SureVector GST E. coli Expression Tag (N-term)

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

SureVector MBP E. coli Expression Tag (N-term)

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

SureVector SBP E. coli Expression Tag (N-term)

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

SureVector LacZ Control (N-term)

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

SureVector Enzyme Mix

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

10X SureVector Buffer

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

dNTP Mix

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

DpnI

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

Section 4. First aid measures

Ingestion

:  SureSolution

before reuse.

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 *E. coli* 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 unless directed to do so by medical personnel. Get medical attention if symptoms occur.

SureVector T7 *E. coli* 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 unless directed to do so by medical personnel. Get medical attention if symptoms occur.

Section 4. First aid measures

SureVector GST <i>E. coli</i> Expression Tag (N-term)	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 MBP <i>E. coli</i> Expression Tag (N-term)	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 SBP <i>E. coli</i> Expression Tag (N-term)	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 LacZ Control (N-term)	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 Enzyme Mix	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.
10X SureVector Buffer	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,

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dNTP Mix	<p>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.</p>
Dpnl	<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>

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	<p>: 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 GST E. coli Expression Tag (N-term) SureVector MBP E. coli Expression Tag (N-term) SureVector SBP E. coli Expression Tag (N-term) SureVector LacZ Control (N-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix Dpnl</p>	<p>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. Causes eye irritation. Causes serious eye irritation. No known significant effects or critical hazards. Causes serious eye irritation.</p>
Inhalation	<p>: 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 GST E. coli Expression Tag (N-term)</p>	<p>No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.</p>



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	SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.
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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.
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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	: <input checked="" type="checkbox"/> 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.

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	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector GST E. coli Expression Tag (N-term)	No specific data.
	SureVector MBP E. coli Expression Tag (N-term)	No specific data.
	SureVector SBP E. coli Expression Tag (N-term)	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	Adverse symptoms may include the following: irritation watering redness
	10X SureVector Buffer	Adverse symptoms may include the following: pain or irritation watering redness
	dNTP Mix	No specific data.
	DpnI	Adverse symptoms may include the following: 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 GST E. coli Expression Tag (N-term)	No specific data.
	SureVector MBP E. coli Expression Tag (N-term)	No specific data.
	SureVector SBP E. coli Expression Tag (N-term)	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Skin contact	:  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 GST E. coli Expression Tag (N-term)	No specific data.
	SureVector MBP E. coli Expression Tag (N-term)	No specific data.
	SureVector SBP E. coli Expression Tag (N-term)	No specific data.

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Ingestion	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
	<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 GST E. coli Expression Tag (N-term)	No specific data.
	SureVector MBP E. coli Expression Tag (N-term)	No specific data.
	SureVector SBP E. coli Expression Tag (N-term)	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.

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.
	SureVector T7-HIS6 E. coli Promoter	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 GST E. coli Expression Tag (N-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector MBP E. coli Expression Tag (N-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector SBP E. coli Expression Tag (N-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector LacZ Control (N-term)	Treat symptomatically. Contact poison treatment

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	SureVector Enzyme Mix	specialist immediately if large quantities have been ingested or inhaled. 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.
	Dpnl	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: 5X SureSolution	No specific treatment.
	SureVector AmpR Selectable Marker	No specific treatment.
	SureVector pUC Origin	No specific treatment.
	SureVector XP1 Linker	No specific treatment.
	SureVector LacI Repressor	No specific treatment.
	SureVector T7-HIS6 E. coli Promoter	No specific treatment.
	SureVector T7 E. coli Promoter	No specific treatment.
	SureVector GST E. coli Expression Tag (N-term)	No specific treatment.
	SureVector MBP E. coli Expression Tag (N-term)	No specific treatment.
	SureVector SBP E. coli Expression Tag (N-term)	No specific treatment.
	SureVector LacZ Control (N-term)	No specific treatment.
	SureVector Enzyme Mix	No specific treatment.
	10X SureVector Buffer	No specific treatment.
	dNTP Mix	No specific treatment.
	Dpnl	No specific treatment.
Protection of first-aiders	: 5X SureSolution	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	SureVector AmpR Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
	SureVector pUC Origin	No action shall be taken involving any personal risk or without suitable training.
	SureVector XP1 Linker	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacI Repressor	No action shall be taken involving any personal risk or without suitable training.
	SureVector T7-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 GST E. coli Expression Tag (N-term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector MBP E. coli Expression Tag (N-term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector SBP E. coli Expression Tag (N-term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacZ Control (N-term)	No action shall be taken involving any personal risk



Section 4. First aid measures

SureVector Enzyme Mix	or without suitable training. No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
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	:  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 GST E. coli Expression Tag (N-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector MBP E. coli Expression Tag (N-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector SBP E. coli Expression Tag (N-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacZ Control (N-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Enzyme Mix	Use an extinguishing agent suitable for the surrounding fire.
	10X SureVector Buffer	Use an extinguishing agent suitable for the surrounding fire.
	dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.
DpnI	Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	:  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.

Section 5. Fire-fighting measures

SureVector T7 E. coli Promoter	None known.
SureVector GST E. coli Expression Tag (N-term)	None known.
SureVector MBP E. coli Expression Tag (N-term)	None known.
SureVector SBP E. coli Expression Tag (N-term)	None known.
SureVector LacZ Control (N-term)	None known.
SureVector Enzyme Mix	None known.
10X SureVector Buffer	None known.
dNTP Mix	None known.
DpnI	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

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 GST E. coli Expression Tag (N-term)

In a fire or if heated, a pressure increase will occur and the container may burst.

SureVector MBP E. coli Expression Tag (N-term)

In a fire or if heated, a pressure increase will occur and the container may burst.

SureVector SBP E. coli Expression Tag (N-term)

In a fire or if heated, a pressure increase will occur and the container may burst.

SureVector LacZ Control (N-term)

In a fire or if heated, a pressure increase will occur and the container may burst.

SureVector Enzyme Mix

In a fire or if heated, a pressure increase will occur and the container may burst.

10X SureVector Buffer

In a fire or if heated, a pressure increase will occur and the container may burst.

dNTP Mix

In a fire or if heated, a pressure increase will occur and the container may burst.

DpnI

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products

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.

Section 5. Fire-fighting measures


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 GST E. coli Expression Tag (N-term)	No specific data.
SureVector MBP E. coli Expression Tag (N-term)	No specific data.
SureVector SBP E. coli Expression Tag (N-term)	No specific data.
SureVector LacZ Control (N-term)	No specific data.
SureVector Enzyme Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
10X SureVector Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
dNTP Mix	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 metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

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

Section 5. Fire-fighting measures

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

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SureVector T7-HIS6 E. coli Promoter	equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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 GST E. coli Expression Tag (N-term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector MBP E. coli Expression Tag (N-term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector SBP E. coli Expression Tag (N-term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector LacZ Control (N-term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Enzyme Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
10X SureVector Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
dNTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
DpnI	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.
No action shall be taken involving any personal risk or without suitable training. Evacuate

SureVector AmpR Selectable Marker

Section 6. Accidental release measures

SureVector pUC Origin	surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. 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 <i>E. coli</i> 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 <i>E. coli</i> 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 GST <i>E. coli</i> Expression Tag (N-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector MBP <i>E. coli</i> Expression Tag (N-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector SBP <i>E. coli</i> Expression Tag (N-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector LacZ Control (N-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Enzyme Mix	No action shall be taken involving any personal

Section 6. Accidental release measures

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.

For emergency responders :  SureSolution

SureVector AmpR Selectable Marker

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SureVector pUC Origin

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SureVector XP1 Linker

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SureVector LacI Repressor

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

SureVector T7-HIS6 *E. coli* Promoter

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".


SureVector T7 *E. coli* Promoter

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also

Section 6. Accidental release measures

SureVector GST E. coli Expression Tag (N-term)	the information in "For non-emergency personnel". If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector MBP E. coli Expression Tag (N-term)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector SBP E. coli Expression Tag (N-term)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector LacZ Control (N-term)	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector Enzyme Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X SureVector Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
dNTP Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
DpnI	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

:  SureSolution	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector AmpR Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector 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).

Section 6. Accidental release measures

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 GST E. coli Expression Tag (N-term)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector MBP E. coli Expression Tag (N-term)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector SBP E. coli Expression Tag (N-term)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LacZ Control (N-term)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector Enzyme Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X SureVector Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
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

Section 6. Accidental release measures

Methods for cleaning up :  SureSolution

	Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector AmpR Selectable Marker	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector 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 <i>E. coli</i> 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 <i>E. coli</i> 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 GST <i>E. coli</i> Expression Tag (N-term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector MBP <i>E. coli</i> Expression Tag (N-term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector SBP <i>E. coli</i> Expression Tag (N-term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container.

Section 6. Accidental release measures

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


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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 GST E. coli Expression Tag (N-term)	Put on appropriate personal protective equipment (see Section 8).
SureVector MBP E. coli Expression Tag (N-term)	Put on appropriate personal protective equipment (see Section 8).
SureVector SBP E. coli Expression Tag (N-term)	Put on appropriate personal protective equipment (see Section 8).
SureVector LacZ Control (N-term)	Put on appropriate personal protective equipment (see Section 8).
SureVector Enzyme Mix	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
10X SureVector Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
DpnI	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:  SureSolution
SureVector AmpR Selectable Marker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector pUC Origin	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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SureVector XP1 Linker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector LacI Repressor	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector T7-HIS6 <i>E. coli</i> Promoter	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector T7 <i>E. coli</i> Promoter	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector GST <i>E. coli</i> Expression Tag (N-term)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector MBP <i>E. coli</i> Expression Tag (N-term)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector SBP <i>E. coli</i> Expression Tag (N-term)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector LacZ Control (N-term)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureVector Enzyme Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face

Section 7. Handling and storage

	<p>10X SureVector Buffer</p> <p>dNTP Mix</p> <p>Dpnl</p>	<p>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.</p>
<p>7.2 Conditions for safe storage, including any incompatibilities</p>	<p>:  SureSolution</p> <p>SureVector AmpR Selectable Marker</p> <p>SureVector pUC Origin</p>	<p>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.</p> <p>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.</p> <p>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.</p>

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

Section 7. Handling and storage

SureVector SBP <i>E. coli</i> Expression Tag (N-term)	<p>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.</p>
SureVector LacZ Control (N-term)	<p>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.</p>
SureVector Enzyme Mix	<p>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.</p>
10X SureVector Buffer	<p>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.</p>
dNTP Mix	<p>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.</p>
Dpnl	<p>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</p>

Section 7. Handling and storage

containers. Use appropriate containment to avoid environmental contamination.

7.3 Specific end use(s)

Recommendations

: <input checked="" type="checkbox"/> SureSolution	Industrial applications, Professional applications.
SureVector AmpR Selectable Marker	Industrial applications, Professional applications.
SureVector pUC Origin	Industrial applications, Professional applications.
SureVector XP1 Linker	Industrial applications, Professional applications.
SureVector LacI Repressor	Industrial applications, Professional applications.
SureVector T7-HIS6 E. coli Promoter	Industrial applications, Professional applications.
SureVector T7 E. coli Promoter	Industrial applications, Professional applications.
SureVector GST E. coli Expression Tag (N-term)	Industrial applications, Professional applications.
SureVector MBP E. coli Expression Tag (N-term)	Industrial applications, Professional applications.
SureVector SBP E. coli Expression Tag (N-term)	Industrial applications, Professional applications.
SureVector LacZ Control (N-term)	Industrial applications, Professional applications.
SureVector Enzyme Mix	Industrial applications, Professional applications.
10X SureVector Buffer	Industrial applications, Professional applications.
dNTP Mix	Industrial applications, Professional applications.
DpnI	Industrial applications, Professional applications.

Industrial sector specific solutions

: <input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Not applicable.
SureVector MBP E. coli Expression Tag (N-term)	Not applicable.
SureVector SBP E. coli Expression Tag (N-term)	Not applicable.
SureVector LacZ Control (N-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Section 8. Exposure controls/personal protection

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
10X SureVector Buffer Potassium chloride	TWA: 10 mg/m ³ 8 hours. Form: Total dust
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	OSHA PEL (United States, 6/2016). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
Ammonium sulphate	TWA: 15 mg/m ³ 8 hours. Form: Total dust
Polyoxyethylene octyl phenyl ether	None.
dNTP Mix 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate)	None.
2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	None.
Dpnl Glycerol	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction
Sodium chloride	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

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.

Section 8. Exposure controls/personal protection

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

Physical state	:	<input checked="" type="checkbox"/> SureSolution	Liquid. [Clear.]
		SureVector AmpR Selectable Marker	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 GST E. coli Expression Tag (N-term)	Liquid.
		SureVector MBP E. coli Expression Tag (N-term)	Liquid.
		SureVector SBP E. coli Expression Tag (N-term)	Liquid.
		SureVector LacZ Control (N-term)	Liquid.
		SureVector Enzyme Mix	Liquid.
		10X SureVector Buffer	Liquid.
		dNTP Mix	Liquid.
		DpnI	Liquid.
		Color	:
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 GST E. coli	Not available.		

Section 9. Physical and chemical properties

	Expression Tag (N-term)	
	SureVector MBP E. coli	Not available.
	Expression Tag (N-term)	
	SureVector SBP E. coli	Not available.
	Expression Tag (N-term)	
	SureVector LacZ Control (N-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	Odorless. [Slight]
	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 GST E. coli	Not available.
	Expression Tag (N-term)	
	SureVector MBP E. coli	Not available.
	Expression Tag (N-term)	
	SureVector SBP E. coli	Not available.
	Expression Tag (N-term)	
	SureVector LacZ Control (N-term)	Not available.
	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 GST E. coli	Not available.
	Expression Tag (N-term)	
	SureVector MBP E. coli	Not available.
	Expression Tag (N-term)	
	SureVector SBP E. coli	Not available.
	Expression Tag (N-term)	
	SureVector LacZ Control (N-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

Section 9. Physical and chemical properties

	SureVector GST E. coli Expression Tag (N-term)	8
	SureVector MBP E. coli Expression Tag (N-term)	8
	SureVector SBP E. coli Expression Tag (N-term)	8
	SureVector LacZ Control (N-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 GST E. coli Expression Tag (N-term)	0°C (32°F)
	SureVector MBP E. coli Expression Tag (N-term)	0°C (32°F)
	SureVector SBP E. coli Expression Tag (N-term)	0°C (32°F)
	SureVector LacZ Control (N-term)	0°C (32°F)
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	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 GST E. coli Expression Tag (N-term)	100°C (212°F)
	SureVector MBP E. coli Expression Tag (N-term)	100°C (212°F)
	SureVector SBP E. coli Expression Tag (N-term)	100°C (212°F)
	SureVector LacZ Control (N-term)	100°C (212°F)
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	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.

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	SureVector T7 E. coli Promoter	Not available.
	SureVector GST E. coli Expression Tag (N-term)	Not available.
	SureVector MBP E. coli Expression Tag (N-term)	Not available.
	SureVector SBP E. coli Expression Tag (N-term)	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Evaporation rate	: <input checked="" type="checkbox"/> SureSolution	0.026 (butyl acetate = 1)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 E. coli Promoter	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector GST E. coli Expression Tag (N-term)	Not available.
	SureVector MBP E. coli Expression Tag (N-term)	Not available.
	SureVector SBP E. coli Expression Tag (N-term)	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Flammability (solid, gas)	: <input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Not applicable.
	SureVector MBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector SBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	:	<input checked="" type="checkbox"/> SureSolution	Lower: 2.6%	
			Upper: 28.5%	
		SureVector AmpR Selectable Marker	Not available.	
		SureVector pUC Origin	Not available.	
		SureVector XP1 Linker	Not available.	
		SureVector LacI Repressor	Not available.	
		SureVector T7-HIS6 E. coli Promoter	Not available.	
		SureVector T7 E. coli Promoter	Not available.	
		SureVector GST E. coli Expression Tag (N-term)	Not available.	
		SureVector MBP E. coli Expression Tag (N-term)	Not available.	
		SureVector SBP E. coli Expression Tag (N-term)	Not available.	
		SureVector LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	
		dNTP Mix	Not available.	
		DpnI	Not available.	
	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 GST E. coli Expression Tag (N-term)	Not available.	
		SureVector MBP E. coli Expression Tag (N-term)	Not available.	
		SureVector SBP E. coli Expression Tag (N-term)	Not available.	
		SureVector LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	
		dNTP Mix	Not available.	
		DpnI	Not available.	
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 GST E. coli Expression Tag (N-term)	Not available.	
		SureVector MBP E. coli Expression Tag (N-term)	Not available.	
		SureVector SBP E. coli Expression Tag (N-term)	Not available.	
		SureVector LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	

Section 9. Physical and chemical properties

	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 GST E. coli Expression Tag (N-term)	Not available.
	SureVector MBP E. coli Expression Tag (N-term)	Not available.
	SureVector SBP E. coli Expression Tag (N-term)	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Solubility	: <input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Easily soluble in the following materials: cold water and hot water.
	SureVector MBP E. coli Expression Tag (N-term)	Easily soluble in the following materials: cold water and hot water.
	SureVector SBP E. coli Expression Tag (N-term)	Easily soluble in the following materials: cold water and hot water.
	SureVector LacZ Control (N-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.

Section 9. Physical and chemical properties

Partition coefficient: n-octanol/water	:	<input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Not available.	
		SureVector MBP E. coli Expression Tag (N-term)	Not available.	
		SureVector SBP E. coli Expression Tag (N-term)	Not available.	
		SureVector LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	
		dNTP Mix	Not available.	
		DpnI	Not available.	
	Auto-ignition temperature	:	<input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Not available.	
		SureVector MBP E. coli Expression Tag (N-term)	Not available.	
		SureVector SBP E. coli Expression Tag (N-term)	Not available.	
		SureVector LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	
		dNTP Mix	Not available.	
		DpnI	Not available.	
Decomposition temperature		:	<input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	Not available.	
		SureVector MBP E. coli Expression Tag (N-term)	Not available.	
		SureVector SBP E. coli Expression Tag (N-term)	Not available.	
		SureVector LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	
		dNTP Mix	Not available.	



Section 9. Physical and chemical properties

Viscosity	DpnI	Not available.
	: 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 GST E. coli Expression Tag (N-term)	Not available.
	SureVector MBP E. coli Expression Tag (N-term)	Not available.
	SureVector SBP E. coli Expression Tag (N-term)	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.



Section 10. Stability and reactivity

10.1 Reactivity	: 5X SureSolution	No specific test data related to reactivity available for this product or its ingredients.
	SureVector AmpR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector 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 GST E. coli Expression Tag (N-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector MBP E. coli Expression Tag (N-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector SBP E. coli Expression Tag (N-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacZ Control (N-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Enzyme Mix	No specific test data related to reactivity available for this product or its ingredients.
	10X SureVector Buffer	No specific test data related to reactivity available for this product or its ingredients.
	dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
	DpnI	No specific test data related to reactivity available for this product or its ingredients.

Section 10. Stability and reactivity

10.2 Chemical stability	:  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 GST E. coli Expression Tag (N-term)	The product is stable.
	SureVector MBP E. coli Expression Tag (N-term)	The product is stable.
	SureVector SBP E. coli Expression Tag (N-term)	The product is stable.
	SureVector LacZ Control (N-term)	The product is stable.
	SureVector Enzyme Mix	The product is stable.
	10X SureVector Buffer	The product is stable.
	dNTP Mix	The product is stable.
	DpnI	The product is stable.
 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 GST E. coli Expression Tag (N-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector MBP E. coli Expression Tag (N-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector SBP E. coli Expression Tag (N-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector LacZ Control (N-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	10X SureVector Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	DpnI	Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

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 GST E. coli Expression Tag (N-term)	No specific data.
	SureVector MBP E. coli Expression Tag (N-term)	No specific data.
	SureVector SBP E. coli Expression Tag (N-term)	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
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 GST E. coli Expression Tag (N-term)	May react or be incompatible with oxidizing materials.
	SureVector MBP E. coli Expression Tag (N-term)	May react or be incompatible with oxidizing materials.
	SureVector SBP E. coli Expression Tag (N-term)	May react or be incompatible with oxidizing materials.
	SureVector LacZ Control (N-term)	May react or be incompatible with oxidizing materials.
	SureVector Enzyme Mix	May react or be incompatible with oxidizing materials.
	10X SureVector Buffer	May react or be incompatible with oxidizing materials.
	dNTP Mix	May react or be incompatible with oxidizing materials.
	DpnI	May react or be incompatible with oxidizing materials.

Section 10. Stability and reactivity

10.6 Hazardous decomposition products

: 5X SureSolution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector 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.
SureVector GST E. coli Expression Tag (N-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector MBP E. coli Expression Tag (N-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector SBP E. coli Expression Tag (N-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LacZ Control (N-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10X SureVector Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
DpnI	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

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	LD50 Oral	Rat	2600 mg/kg	-
Ammonium sulphate	LD50 Oral	Rat	2840 mg/kg	-
Polyoxyethylene octyl phenyl ether	LD50 Oral	Rat	1800 mg/kg	-
Dpnl Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sodium chloride	LD50 Oral	Rat	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	-
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	Eyes - Moderate irritant	Rabbit	-	24 hours 10 microliters	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 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.

Section 11. Toxicological information

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.

Information on the likely routes of exposure

: 5X 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 GST E. coli Expression Tag (N-term)	Not available.
SureVector MBP E. coli Expression Tag (N-term)	Not available.
SureVector SBP E. coli Expression Tag (N-term)	Not available.
SureVector LacZ Control (N-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

Section 11. Toxicological information

Eye contact	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	Causes eye irritation. 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector LacZ Control (N-term)	No known significant effects or critical hazards.		
		SureVector Enzyme Mix	Causes eye irritation.		
		10X SureVector Buffer	Causes serious eye irritation.		
		dNTP Mix	No known significant effects or critical hazards.		
		DpnI	Causes serious eye irritation.		
		Inhalation	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards. 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.				
SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.				
SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.				
SureVector LacZ Control (N-term)	No known significant effects or critical hazards.				
SureVector Enzyme Mix	No known significant effects or critical hazards.				
10X SureVector Buffer	No known significant effects or critical hazards.				
dNTP Mix	No known significant effects or critical hazards.				
DpnI	No known significant effects or critical hazards.				
Skin contact	: <input checked="" type="checkbox"/> SureSolution			SureVector AmpR Selectable Marker	No known significant effects or critical hazards. 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector LacZ Control (N-term)	No known significant effects or critical hazards.		
		SureVector Enzyme Mix	No known significant effects or critical hazards.		
		10X SureVector Buffer	No known significant effects or critical hazards.		
		dNTP Mix	No known significant effects or critical hazards.		

Section 11. Toxicological information

Ingestion	DpnI	No known significant effects or critical hazards.
	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: <input checked="" type="checkbox"/> 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 GST E. coli Expression Tag (N-term)	No specific data.
	SureVector MBP E. coli Expression Tag (N-term)	No specific data.
	SureVector SBP E. coli Expression Tag (N-term)	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	Adverse symptoms may include the following: irritation watering redness
	10X SureVector Buffer	Adverse symptoms may include the following: pain or irritation watering redness
	dNTP Mix	No specific data.
	DpnI	Adverse symptoms may include the following: pain or irritation watering redness

Section 11. Toxicological information

Inhalation	:	<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 GST E. coli Expression Tag (N-term)	No specific data.	
		SureVector MBP E. coli Expression Tag (N-term)	No specific data.	
		SureVector SBP E. coli Expression Tag (N-term)	No specific data.	
		SureVector LacZ Control (N-term)	No specific data.	
		SureVector Enzyme Mix	No specific data.	
		10X SureVector Buffer	No specific data.	
		dNTP Mix	No specific data.	
		DpnI	No specific data.	
	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 GST E. coli Expression Tag (N-term)	No specific data.	
		SureVector MBP E. coli Expression Tag (N-term)	No specific data.	
		SureVector SBP E. coli Expression Tag (N-term)	No specific data.	
		SureVector LacZ Control (N-term)	No specific data.	
		SureVector Enzyme Mix	No specific data.	
		10X SureVector Buffer	No specific data.	
		dNTP Mix	No specific data.	
		DpnI	No specific data.	
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 GST E. coli Expression Tag (N-term)	No specific data.	
		SureVector MBP E. coli Expression Tag (N-term)	No specific data.	
		SureVector SBP E. coli Expression Tag (N-term)	No specific data.	
		SureVector LacZ Control (N-term)	No specific data.	
		SureVector Enzyme Mix	No specific data.	
		10X SureVector Buffer	No specific data.	
		dNTP Mix	No specific data.	

Section 11. Toxicological information

Mutagenicity	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards. 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector LacZ Control (N-term)	No known significant effects or critical hazards.		
		SureVector Enzyme Mix	No known significant effects or critical hazards.		
		10X SureVector Buffer	No known significant effects or critical hazards.		
		dNTP Mix	No known significant effects or critical hazards.		
		DpnI	No known significant effects or critical hazards.		
		Teratogenicity	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards. 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.				
SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.				
SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.				
SureVector LacZ Control (N-term)	No known significant effects or critical hazards.				
SureVector Enzyme Mix	No known significant effects or critical hazards.				
10X SureVector Buffer	No known significant effects or critical hazards.				
dNTP Mix	No known significant effects or critical hazards.				
DpnI	No known significant effects or critical hazards.				
Developmental effects	: <input checked="" type="checkbox"/> SureSolution			SureVector AmpR Selectable Marker	No known significant effects or critical hazards. 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.		
		SureVector LacZ Control (N-term)	No known significant effects or critical hazards.		
		SureVector Enzyme Mix	No known significant effects or critical hazards.		
		10X SureVector Buffer	No known significant effects or critical hazards.		
		dNTP Mix	No known significant effects or critical hazards.		

Section 11. Toxicological information

Fertility effects	Dpnl	No known significant effects or critical hazards.
	: 5 X 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 GST E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector MBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector SBP E. coli Expression Tag (N-term)	No known significant effects or critical hazards.
	SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
dNTP Mix	No known significant effects or critical hazards.	
Dpnl	No known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
1 0X 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
5 X 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
Ammonium sulphate	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
	Acute LC50 880000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 2.6 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours

Section 12. Ecological information

Polyoxyethylene octyl phenyl ether	Acute LC50 14000 to 15000 µg/l Fresh water	dubia - Young Daphnia - Daphnia magna - Young	48 hours
	Acute LC50 68 µg/l Fresh water	Fish - Oncorhynchus gorbuscha - Alevin	96 hours
	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
Dpnl Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 28.85 mg/dm ³ Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1.56 g/L Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks	

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	-	low
	-5.1	-	low
	4.86	-	high
Dpnl Glycerol	-1.76	-	low

Section 12. Ecological information

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

Section 15. Regulatory information

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification	: 5X SureSolution	Fire hazard
	SureVector AmpR Selectable Marker	Immediate (acute) health hazard
	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 GST E. coli Expression Tag (N-term)	Not applicable.
	SureVector MBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector SBP E. coli Expression Tag (N-term)	Not applicable.
	SureVector LacZ Control (N-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.

Section 15. Regulatory information

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.
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	<input checked="" type="checkbox"/> 10X SureVector Buffer Ammonium sulphate	7783-20-2	≤3
Supplier notification	<input checked="" type="checkbox"/> 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.

Section 15. Regulatory information

New Zealand	: Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: <input checked="" type="checkbox"/> All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
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	: 06/30/2015.
Version	: 3

Indicates information that has changed from previously issued version.

Notice to reader

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