

# SAFETY DATA SHEET



SureVector E. coli Selection Kit, Part Number G7518A

## Section 1. Identification

### 1.1 Product identifier

**Product name** : SureVector E. coli Selection Kit, Part Number G7518A  
**Part No. (Chemical Kit)** : G7518A  
**Part No.** :  SureSolution 5190-8625  
 SureVector AmpR Selectable Marker 5190-8807  
 SureVector KanR Selectable Marker 5190-8808  
 SureVector ChIR Selectable Marker 5190-8809  
 SureVector pUC Origin 5190-8810  
 SureVector XP1 Linker 5190-8811  
 SureVector LacI Repressor 5190-8812  
 SureVector T7-HIS6 E. coli Promoter 5190-8813  
 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.  
 SureSolution 0.1 ml (15 reactions)  
 SureVector AmpR Selectable Marker 0.01 ml (5 reactions)  
 SureVector KanR Selectable Marker 0.01 ml (5 reactions)  
 SureVector ChIR 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 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 0.03 ml (15 reactions)

### 1.3 Details of the supplier of the safety data sheet


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

### 1.4 Emergency telephone number

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

## Section 2. Hazards identification

### 2.1 Classification of the substance or mixture

<p><b>OSHA/HCS status</b> :  SureSolution</p> <p>SureVector AmpR Selectable Marker</p> <p>SureVector KanR Selectable Marker</p> <p>SureVector ChIR 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 LacZ Control (N-term)</p> <p>SureVector Enzyme Mix</p> <p>10X SureVector Buffer</p> <p>dNTP Mix</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> <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.

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

: <input checked="" type="checkbox"/> 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

#### Hazard pictograms

:  10X SureVector Buffer






Dpnl





#### Signal word

: <input checked="" type="checkbox"/> 5X SureSolution	Warning
SureVector AmpR Selectable Marker	No signal word.
SureVector KanR Selectable Marker	No signal word.
SureVector ChIR Selectable Marker	No signal word.
SureVector pUC Origin	No signal word.
SureVector XP1 Linker	No signal word.
SureVector LacI Repressor	No signal word.

## Section 2. Hazards identification

	SureVector T7-HIS6 E. coli Promoter	No signal word.
	SureVector LacZ Control (N-term)	No signal word.
	SureVector Enzyme Mix	Warning
	10X SureVector Buffer	Warning
	dNTP Mix	No signal word.
	DpnI	Warning
<b>Hazard statements</b>	:  SureSolution	H227 - Combustible liquid. H320 - Causes eye irritation.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector KanR Selectable Marker	No known significant effects or critical hazards.
	SureVector ChIR 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 LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	H320 - Causes eye irritation.
	10X SureVector Buffer	H319 - Causes serious eye irritation.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	H319 - Causes serious eye irritation.
<b>Precautionary statements</b>		
<b>Prevention</b>	:  SureSolution	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.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector KanR Selectable Marker	Not applicable.
	SureVector ChIR 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 LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	P264 - Wash hands thoroughly after handling.
	10X SureVector Buffer	P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling.
	dNTP Mix	Not applicable.
	DpnI	P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling.
<b>Response</b>	:  SureSolution	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector KanR Selectable	Not applicable.

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	Marker	Not applicable.
	SureVector ChIR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7-HIS6 <i>E. coli</i> Promoter	Not applicable.
	SureVector LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
	10X SureVector Buffer	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
	dNTP Mix	Not applicable.
	DpnI	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
<b>Storage</b>	:  SureSolution	P403 - Store in a well-ventilated place. P235 - Keep cool.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector KanR Selectable Marker	Not applicable.
	SureVector ChIR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7-HIS6 <i>E. coli</i> Promoter	Not applicable.
	SureVector LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
<b>Disposal</b>	:  SureSolution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector KanR Selectable Marker	Not applicable.
	SureVector ChIR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.

## Section 2. Hazards identification

<b>Supplemental label elements</b>	:	<input type="checkbox"/> SureSolution	None known.
		SureVector AmpR Selectable Marker	None known.
		SureVector KanR Selectable Marker	None known.
		SureVector ChIR Selectable Marker	None known.
		SureVector pUC Origin	None known.
		SureVector XP1 Linker	None known.
		SureVector LacI Repressor	None known.
		SureVector T7-HIS6 E. coli Promoter	None known.
		SureVector LacZ Control (N-term)	None known.
		SureVector Enzyme Mix	None known.
		10X SureVector Buffer	None known.
		dNTP Mix	None known.
		DpnI	None known.
		SureVector T7-HIS6 E. coli Promoter	Not applicable.
		SureVector LacZ Control (N-term)	Not applicable.
		SureVector Enzyme Mix	Not applicable.
		10X SureVector Buffer	Not applicable.
		dNTP Mix	Not applicable.
		DpnI	Not applicable.

### 2.3 Other hazards

#### Hazards not otherwise classified

:	<input checked="" type="checkbox"/> SureSolution	None known.
	SureVector AmpR Selectable Marker	None known.
	SureVector KanR Selectable Marker	None known.
	SureVector ChIR Selectable Marker	None known.
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7-HIS6 E. coli Promoter	None known.
	SureVector LacZ Control (N-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	:	<input checked="" type="checkbox"/> SureSolution	Substance
		SureVector AmpR Selectable Marker	Mixture
		SureVector KanR Selectable Marker	Mixture
		SureVector ChIR Selectable Marker	Mixture
		SureVector pUC Origin	Mixture
		SureVector XP1 Linker	Mixture
		SureVector LacI Repressor	Mixture
		SureVector T7-HIS6 E. coli Promoter	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
<b>5X SureSolution</b> Dimethyl sulfoxide	100	67-68-5
<b>SureVector Enzyme Mix</b> Glycerol	≥50 - ≤75	56-81-5
<b>10X SureVector Buffer</b> 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
<b>dNTP Mix</b> 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate)	≤3	2564-35-4
2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	≤3	1927-31-7
<b>Dpnl</b> Glycerol	≥50 - ≤75	56-81-5
Sodium chloride	≤3	7647-14-5

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

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

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

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

**Eye contact** : 5X SureSolution

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

SureVector AmpR Selectable Marker

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

SureVector KanR Selectable Marker

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

SureVector ChIR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

## Section 4. First aid measures

SureVector T7-HIS6 <i>E. coli</i> Promoter	Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector LacZ Control (N-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Enzyme Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
10X SureVector Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
dNTP Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
DpnI	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
<b>Inhalation</b>	
: 5X SureSolution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
SureVector AmpR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector KanR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector ChIR Selectable Marker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector pUC Origin	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector XP1 Linker	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacI Repressor	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.



## Section 4. First aid measures

SureVector T7-HIS6 <i>E. coli</i> Promoter	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector LacZ Control (N-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureVector Enzyme Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
10X SureVector Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be 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.
DpnI	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

## Section 4. First aid measures

<b>Skin contact</b>	: 5X SureSolution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	SureVector AmpR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector KanR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector ChIR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector pUC Origin	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector 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 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.
	Dpnl	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
<b>Ingestion</b>	: 5X SureSolution	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person.

## Section 4. First aid measures

SureVector AmpR Selectable Marker	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 KanR 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 ChIR Selectable Marker	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector pUC Origin	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector XP1 Linker	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector LacI Repressor	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector T7-HIS6 <i>E. coli</i> Promoter	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting 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

## Section 4. First aid measures

SureVector Enzyme Mix

medical attention if symptoms occur. 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, belt or waistband.

dNTP Mix

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.

DpnI

Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

### [4.2 Most important symptoms/effects, acute and delayed](#)

## Section 4. First aid measures

### Potential acute health effects

#### Eye contact

: <input checked="" type="checkbox"/> SureSolution	Causes eye irritation.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector 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 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.
Dpnl	Causes serious eye irritation.

#### Inhalation

: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector 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 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.

#### 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 KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector 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 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.

## Section 4. First aid measures

<b>Ingestion</b>	: 5X SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector KanR Selectable Marker	No known significant effects or critical hazards.
		SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector 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 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.

### Over-exposure signs/symptoms

<b>Eye contact</b>	: 5X SureSolution		Adverse symptoms may include the following: irritation watering redness
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChIR 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 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.
		Dpnl	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: 5X SureSolution	SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChIR Selectable Marker	No specific data.
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7-HIS6 E. coli	No specific data.

## Section 4. First aid measures

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

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

<b>Notes to physician</b>	: <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 KanR Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector ChIR 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

## Section 4. First aid measures

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 LacZ Control (N-term)

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SureVector Enzyme Mix

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

10X SureVector Buffer

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


dNTP Mix

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

DpnI

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

### Specific treatments

:  SureSolution  
 SureVector AmpR Selectable Marker  
 SureVector KanR Selectable Marker  
 SureVector ChIR Selectable Marker  
 SureVector pUC Origin  
 SureVector XP1 Linker  
 SureVector LacI Repressor  
 SureVector T7-HIS6 E. coli Promoter  
 SureVector LacZ Control (N-term)  
 SureVector Enzyme Mix  
 10X SureVector Buffer  
 dNTP Mix  
 DpnI

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

No specific treatment.

### Protection of first-aiders

:  SureSolution

No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

SureVector AmpR Selectable Marker

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

SureVector KanR Selectable Marker

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

SureVector ChIR 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

No action shall be taken involving any personal risk



## Section 4. First aid measures


Promoter	or without suitable training.
SureVector LacZ Control (N-term)	No action shall be taken involving any personal risk or without suitable training.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
dNTP Mix	No action shall be taken involving any personal risk or without suitable training.
DpnI	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)


## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

#### Suitable extinguishing media

:  SureSolution	Use dry chemical, CO <sub>2</sub> , water spray (fog) or foam.
SureVector AmpR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector KanR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector ChIR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector pUC Origin	Use an extinguishing agent suitable for the surrounding fire.
SureVector 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 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 KanR Selectable Marker	None known.
SureVector ChIR Selectable Marker	None known.
SureVector pUC Origin	None known.
SureVector XP1 Linker	None known.
SureVector LacI Repressor	None known.

## Section 5. Fire-fighting measures

SureVector T7-HIS6 E. coli Promoter	None known.
SureVector LacZ Control (N-term)	None known.
SureVector Enzyme Mix	None known.
10X SureVector Buffer	None known.
dNTP Mix	None known.
DpnI	None known.

### 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 KanR Selectable Marker

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

SureVector ChIR Selectable Marker

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

SureVector pUC Origin

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

SureVector 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 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 KanR Selectable Marker

No specific data.

SureVector ChIR 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 LacZ Control (N-term)

No specific data.

## Section 5. Fire-fighting measures

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 KanR Selectable Marker

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

SureVector ChIR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7-HIS6 *E. coli* Promoter

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No

## Section 5. Fire-fighting measures

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

: 5X SureSolution

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

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

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

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

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

SureVector XP1 Linker Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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

SureVector T7-HIS6 E. coli Promoter Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SureVector 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

## Section 5. Fire-fighting measures

10X SureVector Buffer	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.
dNTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Dpnl	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## Section 6. Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

**For non-emergency personnel**

:  SureSolution

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

SureVector AmpR Selectable Marker

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

SureVector KanR Selectable Marker

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

SureVector ChIR Selectable Marker

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


SureVector pUC Origin

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

SureVector XP1 Linker

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

## Section 6. Accidental release measures

SureVector LacI Repressor	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector T7-HIS6 E. coli Promoter	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector LacZ Control (N-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
dNTP Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
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	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector AmpR Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

## Section 6. Accidental release measures

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

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,


## Section 6. Accidental release measures

SureVector ChIR Selectable Marker	waterways, soil or air). Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector pUC Origin	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector XP1 Linker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LacI Repressor	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector T7-HIS6 <i>E. coli</i> Promoter	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LacZ Control (N-term)	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector Enzyme Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
10X SureVector Buffer	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
dNTP Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
DpnI	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and materials for containment and cleaning up



## Section 6. Accidental release measures

Methods for cleaning up :  SureSolution

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

## Section 6. Accidental release measures

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

SureVector AmpR Selectable Marker	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 KanR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
SureVector ChIR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
SureVector pUC Origin	Put on appropriate personal protective equipment (see Section 8).
SureVector XP1 Linker	Put on appropriate personal protective equipment (see Section 8).
SureVector LacI Repressor	Put on appropriate personal protective equipment (see Section 8).
SureVector T7-HIS6 <i>E. coli</i> Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector LacZ Control (N-term)	Put on appropriate personal protective equipment (see Section 8).
SureVector Enzyme Mix	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or

## Section 7. Handling and storage

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

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector AmpR Selectable Marker

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector KanR Selectable Marker

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector ChIR Selectable Marker

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector pUC Origin

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector XP1 Linker

Eating, drinking and smoking should be prohibited

## Section 7. Handling and storage

SureVector LacI Repressor

in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector T7-HIS6 *E. coli* Promoter

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector LacZ Control (N-term)

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

SureVector Enzyme Mix

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

10X SureVector Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

dNTP Mix

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

DpnI

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

## Section 7. Handling and storage

### 7.2 Conditions for safe storage, including any incompatibilities

:  SureSolution

Storage temperature: -20°C (-4°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

SureVector AmpR Selectable Marker

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

SureVector KanR Selectable Marker

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

SureVector ChIR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been

## Section 7. Handling and storage

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

## Section 7. Handling and storage

DpnI

until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

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

### 7.3 Specific end use(s)

#### Recommendations

<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> SureSolution</li> <li>SureVector AmpR Selectable Marker</li> <li>SureVector KanR Selectable Marker</li> <li>SureVector ChIR Selectable Marker</li> <li>SureVector pUC Origin</li> <li>SureVector XP1 Linker</li> <li>SureVector LacI Repressor</li> <li>SureVector T7-HIS6 E. coli Promoter</li> <li>SureVector LacZ Control (N-term)</li> <li>SureVector Enzyme Mix</li> <li>10X SureVector Buffer</li> <li>dNTP Mix</li> <li>DpnI</li> </ul>	<ul style="list-style-type: none"> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> <li>Industrial applications, Professional applications.</li> </ul>
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#### Industrial sector specific solutions

<ul style="list-style-type: none"> <li><input checked="" type="checkbox"/> SureSolution</li> <li>SureVector AmpR Selectable Marker</li> <li>SureVector KanR Selectable Marker</li> <li>SureVector ChIR Selectable Marker</li> <li>SureVector pUC Origin</li> <li>SureVector XP1 Linker</li> <li>SureVector LacI Repressor</li> <li>SureVector T7-HIS6 E. coli Promoter</li> <li>SureVector LacZ Control (N-term)</li> <li>SureVector Enzyme Mix</li> <li>10X SureVector Buffer</li> <li>dNTP Mix</li> <li>DpnI</li> </ul>	<ul style="list-style-type: none"> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> <li>Not applicable.</li> </ul>
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## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

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

### 8.2 Exposure controls

#### Appropriate engineering controls

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

#### Environmental exposure controls

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

#### Individual protection measures



## Section 8. Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	:	<input checked="" type="checkbox"/> SureSolution	Liquid. [Clear.]
		SureVector AmpR Selectable Marker	Liquid.
		SureVector KanR Selectable Marker	Liquid.
		SureVector ChIR Selectable Marker	Liquid.
		SureVector pUC Origin	Liquid.
		SureVector XP1 Linker	Liquid.
		SureVector LacI Repressor	Liquid.
		SureVector T7-HIS6 E. coli Promoter	Liquid.
		SureVector LacZ Control (N-term)	Liquid.
		SureVector Enzyme Mix	Liquid.
		10X SureVector Buffer	Liquid.
		dNTP Mix	Liquid.
		DpnI	Liquid.
		<b>Color</b>	:
SureVector AmpR Selectable Marker	Not available.		
SureVector KanR Selectable Marker	Not available.		
SureVector ChIR Selectable Marker	Not available.		
SureVector pUC Origin	Not available.		

## Section 9. Physical and chemical properties

	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 <i>E. coli</i> Promoter	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
<b>Odor</b>	: 5X SureSolution	Odorless. [Slight]
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 <i>E. coli</i> Promoter	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
<b>Odor threshold</b>	: 5X SureSolution	Not available.
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7-HIS6 <i>E. coli</i> Promoter	Not available.
	SureVector LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
<b>pH</b>	: 5X SureSolution	Not available.
	SureVector AmpR Selectable Marker	8
	SureVector KanR Selectable Marker	8
	SureVector ChIR Selectable Marker	8
	SureVector pUC Origin	8
	SureVector XP1 Linker	8
	SureVector LacI Repressor	8
	SureVector T7-HIS6 <i>E. coli</i> Promoter	8
	SureVector LacZ Control (N-term)	8
	SureVector Enzyme Mix	8.2
	10X SureVector Buffer	8.8
	dNTP Mix	7.5

## Section 9. Physical and chemical properties

	DpnI	7.5
<b>Melting point</b>	: 5X SureSolution	18.5°C (65.3°F)
	SureVector AmpR Selectable Marker	0°C (32°F)
	SureVector KanR Selectable Marker	0°C (32°F)
	SureVector ChIR 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 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.
<b>Boiling point</b>	: 5X SureSolution	189°C (372.2°F)
	SureVector AmpR Selectable Marker	100°C (212°F)
	SureVector KanR Selectable Marker	100°C (212°F)
	SureVector ChIR 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 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.
<b>Flash point</b>	: 5X SureSolution	Closed cup: 87°C (188.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR 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 LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.

## Section 9. Physical and chemical properties

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

## Section 9. Physical and chemical properties

<b>Vapor pressure</b>	:	<input checked="" type="checkbox"/> SureSolution	0.056 kPa (0.42 mm Hg) [room temperature]		
		SureVector AmpR Selectable Marker	Not available.		
		SureVector KanR Selectable Marker	Not available.		
		SureVector ChIR Selectable Marker	Not available.		
		SureVector pUC Origin	Not available.		
		SureVector XP1 Linker	Not available.		
		SureVector LacI Repressor	Not available.		
		SureVector T7-HIS6 <i>E. coli</i> Promoter	Not available.		
		SureVector LacZ Control (N-term)	Not available.		
		SureVector Enzyme Mix	Not available.		
		10X SureVector Buffer	Not available.		
		dNTP Mix	Not available.		
		DpnI	Not available.		
		<b>Vapor density</b>	:	<input checked="" type="checkbox"/> SureSolution	2.7 [Air = 1]
				SureVector AmpR Selectable Marker	Not available.
SureVector KanR Selectable Marker	Not available.				
SureVector ChIR Selectable Marker	Not available.				
SureVector pUC Origin	Not available.				
SureVector XP1 Linker	Not available.				
SureVector LacI Repressor	Not available.				
SureVector T7-HIS6 <i>E. coli</i> Promoter	Not available.				
SureVector LacZ Control (N-term)	Not available.				
SureVector Enzyme Mix	Not available.				
10X SureVector Buffer	Not available.				
dNTP Mix	Not available.				
DpnI	Not available.				
<b>Relative density</b>	:			<input checked="" type="checkbox"/> SureSolution	1.1
				SureVector AmpR Selectable Marker	Not available.
		SureVector KanR Selectable Marker	Not available.		
		SureVector ChIR Selectable Marker	Not available.		
		SureVector pUC Origin	Not available.		
		SureVector XP1 Linker	Not available.		
		SureVector LacI Repressor	Not available.		
		SureVector T7-HIS6 <i>E. coli</i> Promoter	Not available.		
		SureVector LacZ Control (N-term)	Not available.		
		SureVector Enzyme Mix	Not available.		
		10X SureVector Buffer	Not available.		
		dNTP Mix	Not available.		
		DpnI	Not available.		
		<b>Solubility</b>	:	<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 KanR Selectable Marker	Easily soluble in the following materials: cold water and hot water.				
SureVector ChIR Selectable Marker	Easily soluble in the following materials: cold water and hot water.				

## Section 9. Physical and chemical properties

	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 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.
	Dpnl	Soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: <input checked="" type="checkbox"/> SureSolution	-1.35
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR 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 LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	Dpnl	Not available.
<b>Auto-ignition temperature</b>	: <input checked="" type="checkbox"/> SureSolution	300 to 302°C (572 to 575.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector KanR Selectable Marker	Not available.
	SureVector ChIR 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 LacZ Control (N-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	Dpnl	Not available.

## Section 9. Physical and chemical properties

<b>Decomposition temperature</b>	<b>:</b>	5X SureSolution	140 to 189°C (284 to 372.2°F)	
		SureVector AmpR Selectable Marker	Not available.	
		SureVector KanR Selectable Marker	Not available.	
		SureVector ChIR 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 LacZ Control (N-term)	Not available.	
		SureVector Enzyme Mix	Not available.	
		10X SureVector Buffer	Not available.	
		dNTP Mix	Not available.	
		DpnI	Not available.	
	<b>Viscosity</b>	<b>:</b>	5X SureSolution	Dynamic (room temperature): 2.14 mPa·s (2.14 cP)
			SureVector AmpR Selectable Marker	Not available.
			SureVector KanR Selectable Marker	Not available.
			SureVector ChIR 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 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

<b>10.1 Reactivity</b>	<b>:</b>	5X SureSolution	No specific test data related to reactivity available for this product or its ingredients.
		SureVector AmpR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
		SureVector KanR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
		SureVector ChIR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
		SureVector pUC Origin	No specific test data related to reactivity available for this product or its ingredients.
		SureVector 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 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.

## Section 10. Stability and reactivity

	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.
<b>10.2 Chemical stability</b>	:  SureSolution	The product is stable.
	SureVector AmpR Selectable Marker	The product is stable.
	SureVector KanR Selectable Marker	The product is stable.
	SureVector ChIR Selectable Marker	The product is stable.
	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 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.
<b>10.3 Possibility of hazardous reactions</b>	:  SureSolution	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector KanR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector ChIR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector pUC Origin	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector 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 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.
<b>10.4 Conditions to avoid</b>	:  SureSolution	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable	No specific data.



## Section 10. Stability and reactivity

Marker	No specific data.
SureVector ChIR 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 <i>E. coli</i> Promoter	No specific data.
SureVector LacZ Control (N-term)	No specific data.
SureVector Enzyme Mix	No specific data.
10X SureVector Buffer	No specific data.
dNTP Mix	No specific data.
DpnI	No specific data.

### 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 KanR Selectable Marker	May react or be incompatible with oxidizing materials.
SureVector ChIR 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 <i>E. coli</i> Promoter	May react or be incompatible with oxidizing materials.
SureVector LacZ Control (N-term)	May react or be incompatible with oxidizing materials.
SureVector Enzyme Mix	May react or be incompatible with oxidizing materials.
10X SureVector Buffer	May react or be incompatible with oxidizing materials.
dNTP Mix	May react or be incompatible with oxidizing materials.
DpnI	May react or be incompatible with oxidizing materials.

### 10.6 Hazardous decomposition products : SureSolution

	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector KanR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector ChIR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector pUC Origin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector XP1 Linker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 10. Stability and reactivity

SureVector LacI Repressor	produced. 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 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

Product/ingredient name	Result	Species	Dose	Exposure
<b>5X SureSolution</b> Dimethyl sulfoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	- -
<b>SureVector Enzyme Mix</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>10X SureVector Buffer</b> 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	-
<b>DpnI</b> 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
<b>5X SureSolution</b> Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	100 milligrams	-

## Section 11. Toxicological information

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

### Sensitization

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

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

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

## Section 11. Toxicological information

### Information on the likely routes of exposure

: 5X SureSolution	Routes of entry anticipated: Oral, Dermal, Inhalation.
SureVector AmpR Selectable Marker	Not available.
SureVector KanR Selectable Marker	Not available.
SureVector ChIR 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 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

#### Eye contact

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

: 5X SureSolution	No known significant effects or critical hazards.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
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 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.

## Section 11. Toxicological information

<b>Skin contact</b>	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.		
		SureVector KanR Selectable Marker	No known significant effects or critical hazards.		
		SureVector ChIR Selectable Marker	No known significant effects or critical hazards.		
		SureVector pUC Origin	No known significant effects or critical hazards.		
		SureVector 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 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.		
		<b>Ingestion</b>	: <input checked="" type="checkbox"/> SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
				SureVector KanR Selectable Marker	No known significant effects or critical hazards.
SureVector ChIR Selectable Marker	No known significant effects or critical hazards.				
SureVector pUC Origin	No known significant effects or critical hazards.				
SureVector 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 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

<b>Eye contact</b>	: <input checked="" type="checkbox"/> SureSolution		Adverse symptoms may include the following: irritation watering redness
		SureVector AmpR Selectable Marker	No specific data.
		SureVector KanR Selectable Marker	No specific data.
		SureVector ChIR 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 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

## Section 11. Toxicological information

	dNTP Mix	watering
	DpnI	redness
		No specific data.
		Adverse symptoms may include the following:
		pain or irritation
		watering
		redness
<b>Inhalation</b>	: SureSolution	No specific data.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChIR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
<b>Skin contact</b>	: SureSolution	No specific data.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChIR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
<b>Ingestion</b>	: SureSolution	No specific data.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector KanR Selectable Marker	No specific data.
	SureVector ChIR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7-HIS6 E. coli Promoter	No specific data.
	SureVector LacZ Control (N-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.

## Section 11. Toxicological information

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

<b>General</b>	:	<del>5X</del> SureSolution	No known significant effects or critical hazards.
		SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector KanR Selectable Marker	No known significant effects or critical hazards.
		SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector 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 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.
<b>Carcinogenicity</b>	:	<del>5X</del> SureSolution	No known significant effects or critical hazards.
		SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector KanR Selectable Marker	No known significant effects or critical hazards.
		SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector 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 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.
<b>Mutagenicity</b>	:	<del>5X</del> SureSolution	No known significant effects or critical hazards.
		SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector KanR Selectable Marker	No known significant effects or critical hazards.
		SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector XP1 Linker	No known significant effects or critical hazards.
		SureVector LacI Repressor	No known significant effects or critical hazards.
		SureVector T7-HIS6 E. coli	No known significant effects or critical hazards.

## Section 11. Toxicological information

	Promoter	
	SureVector LacZ Control (N-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector KanR Selectable Marker	No known significant effects or critical hazards.
	SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector 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 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.
<b>Developmental effects</b>	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector KanR Selectable Marker	No known significant effects or critical hazards.
	SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector 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 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.
<b>Fertility effects</b>	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector KanR Selectable Marker	No known significant effects or critical hazards.
	SureVector ChIR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector 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 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.



## Section 11. Toxicological information

### Numerical measures of toxicity

#### Acute toxicity estimates

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

## Section 12. Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>5X SureSolution</b> Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water Chronic NOEC 100 ul/L Marine water	Fish - Pimephales promelas Algae - Ulva lactuca	96 hours 72 hours
<b>SureVector Enzyme Mix</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>10X SureVector Buffer</b> Potassium chloride	Acute EC50 1337000 µg/l Fresh water Acute EC50 9.24 g/L Fresh water	Algae - Navicula seminulum Algae - Desmodesmus subspicatus	96 hours 72 hours
	Acute EC50 141460 µg/l Fresh water Acute LC50 12.92 mg/l Fresh water	Daphnia - Daphnia magna Crustaceans - Pseudosida ramosa - Neonate	48 hours 48 hours
Ammonium sulphate	Acute LC50 880000 µg/l Fresh water Acute LC50 2.6 mg/l Fresh water	Fish - Pimephales promelas Crustaceans - Ceriodaphnia dubia - Young	96 hours 48 hours
	Acute LC50 14000 to 15000 µg/l Fresh water Acute LC50 68 µg/l Fresh water	Daphnia - Daphnia magna - Young Fish - Oncorhynchus gorbuscha - Alevin	48 hours 96 hours
	Chronic NOEC 7.5 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
Polyoxyethylene octyl phenyl ether	Chronic NOEC 143 µg/l Marine water Acute LC50 5.85 mg/l Fresh water	Fish - Salmo salar - Post-smolt Crustaceans - Ceriodaphnia rigaudi - Neonate	5 weeks 48 hours
	Acute LC50 11.2 mg/l Fresh water Acute LC50 4500 µg/l Fresh water	Daphnia - Daphnia magna - Neonate Fish - Pimephales promelas	48 hours 96 hours
<b>Dpnl</b> Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water Acute EC50 2430000 µg/l Fresh water Acute EC50 28.85 mg/dm <sup>3</sup> Fresh water	Fish - Oncorhynchus mykiss Algae - Navicula seminulum Algae - Pseudokirchneriella subcapitata	96 hours 96 hours 72 hours
	Acute EC50 519.6 mg/l Fresh water Acute IC50 6.87 g/L Fresh water Acute LC50 1.56 g/L Fresh water	Crustaceans - Cypris subglobosa Aquatic plants - Lemna minor Daphnia - Daphnia magna	48 hours 96 hours 48 hours

## Section 12. Ecological information

	Acute LC50 1000000 µg/l Fresh water Chronic LC10 781 mg/l Fresh water	Fish - Morone saxatilis - Larvae Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	96 hours 3 weeks
	Chronic NOEC 6 g/L Fresh water Chronic NOEC 0.314 g/L Fresh water Chronic NOEC 100 mg/l Fresh water	Aquatic plants - Lemna minor Daphnia - Daphnia pulex Fish - Gambusia holbrooki - Adult	96 hours 21 days 8 weeks

### 12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>10X SureVector Buffer</b> Potassium chloride Ammonium sulphate Polyoxyethylene octyl phenyl ether	- - -	- - -	Readily Readily Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>5X SureSolution</b> Dimethyl sulfoxide	-1.35	3.16	low
<b>SureVector Enzyme Mix</b> Glycerol	-1.76	-	low
<b>10X SureVector Buffer</b> Potassium chloride Ammonium sulphate Polyoxyethylene octyl phenyl ether	-0.46 -5.1 4.86	- - -	low low high
<b>Dpnl</b> Glycerol	-1.76	-	low

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : 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

## Section 13. Disposal considerations

inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

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

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

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

## Section 14. Transport information

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

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

**Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) PAIR:** Polyoxyethylene octyl phenyl ether; Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-  
**TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** Edetic acid

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

## Section 15. Regulatory information

<b>Classification</b>	: 5X SureSolution	Fire hazard
	SureVector AmpR Selectable Marker	Immediate (acute) health hazard
	SureVector KanR Selectable Marker	Not applicable.
	SureVector ChIR 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 LacZ Control (N-term)	Not applicable.
	SureVector Enzyme Mix	Immediate (acute) health hazard
	10X SureVector Buffer	Immediate (acute) health hazard
	dNTP Mix	Not applicable.
	Dpnl	Immediate (acute) health hazard

### Composition/information on ingredients

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

### SARA 313

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

## Section 15. Regulatory information

- Massachusetts** : The following components are listed: GLYCERINE MIST
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: DIMETHYL SULFOXIDE; METHANE, SULFINYLBIIS-; GLYCERIN; 1,2,3-PROPANETRIOL
- Pennsylvania** : The following components are listed: 1,2,3-PROPANETRIOL
- California Prop. 65**  
 Not available.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

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

## Section 16. Other information

### History

- Date of issue** : 05/31/2017
- Date of previous issue** : 02/10/2015.
- Version** : 2

Indicates information that has changed from previously issued version.

### Notice to reader

## Section 16. Other information

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