

SAFETY DATA SHEET



SureVector E. coli C-terminal Promoter kit, 5 rxn, Part Number G7518C

Section 1. Identification

1.1 Product identifier

Product name : SureVector E. coli C-terminal Promoter kit, 5 rxn, Part Number G7518C
Part No. (Chemical Kit) : G7518C
Part No. : SureSolution 5190-8625
 SureVector AmpR Selectable Marker 5190-8807
 SureVector pUC Origin 5190-8810
 SureVector XP1 Linker 5190-8811
 SureVector LacI Repressor 5190-8812
 SureVector T7 E. coli Promoter 5190-8818
 SureVector Tac E. coli Promoter 5190-8820
 SureVector Rhamnose E. coli Promoter 5190-8822
 SureVector HIS6 Expression Tag (C-Term) 5190-8823
 SureVector LacZ E. coli Control (C-term) 5190-7819
 SureVector Enzyme Mix 5190-8621
 10X SureVector Buffer 5190-8622
 dNTP Mix 200518-56
 DpnI 5190-8624

Validation date : 5/31/2017

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

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

1.3 Details of the supplier of the safety data sheet


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

1.4 Emergency telephone number

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

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status	:  SureSolution	This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).
	SureVector AmpR Selectable Marker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector pUC Origin	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector XP1 Linker	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector LacI Repressor	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector T7 <i>E. coli</i> Promoter	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector Tac <i>E. coli</i> Promoter	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector Rhamnose <i>E. coli</i> Promoter	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector HIS6 Expression Tag (C-Term)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector LacZ <i>E. coli</i> Control (C-term)	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
	SureVector Enzyme Mix	This material is considered hazardous by the OSHA

Section 2. Hazards identification

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

Classification of the substance or mixture

5X SureSolution

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

SureVector Enzyme Mix

H320 EYE IRRITATION - Category 2B

10X SureVector Buffer

H319 EYE IRRITATION - Category 2A

Dpnl



H319 EYE IRRITATION - Category 2A

Ingredients of unknown toxicity

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

2.2 GHS label elements

Hazard pictograms

10X SureVector Buffer	
Dpnl	

Signal word

:

Section 2. Hazards identification

	☒ SureSolution	Warning
	SureVector AmpR Selectable Marker	No signal word.
	SureVector pUC Origin	No signal word.
	SureVector XP1 Linker	No signal word.
	SureVector LacI Repressor	No signal word.
	SureVector T7 E. coli Promoter	No signal word.
	SureVector Tac E. coli Promoter	No signal word.
	SureVector Rhamnose E. coli Promoter	No signal word.
	SureVector HIS6 Expression Tag (C-Term)	No signal word.
	SureVector LacZ E. coli Control (C-term)	No signal word.
	SureVector Enzyme Mix	Warning
	10X SureVector Buffer	Warning
	dNTP Mix	No signal word.
	DpnI	Warning
Hazard statements	☒ SureSolution	H227 - Combustible liquid. H320 - Causes eye irritation.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
	SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
	SureVector HIS6 Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	H320 - Causes eye irritation.
	10X SureVector Buffer	H319 - Causes serious eye irritation.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	H319 - Causes serious eye irritation.
Precautionary statements		
Prevention	☒ 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 pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag (C-Term)	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	P264 - Wash hands thoroughly after handling.
	10X SureVector Buffer	P280 - Wear eye or face protection.

Section 2. Hazards identification

Response

dNTP Mix
Dpnl

:  SureSolution

P264 - Wash hands thoroughly after handling.
Not applicable.

P280 - Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

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 pUC Origin

Not applicable.

SureVector XP1 Linker

Not applicable.

SureVector LacI Repressor

Not applicable.

SureVector T7 *E. coli* Promoter

Not applicable.

SureVector Tac *E. coli* Promoter

Not applicable.

SureVector Rhamnose *E. coli* Promoter

Not applicable.

SureVector HIS6 Expression Tag (C-Term)

Not applicable.

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

Not applicable.

SureVector Enzyme Mix

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

10X SureVector Buffer

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

dNTP Mix
Dpnl

Not applicable.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

Storage

:  SureSolution

SureVector AmpR Selectable Marker

P403 - Store in a well-ventilated place.

P235 - Keep cool.

Not applicable.

SureVector pUC Origin

Not applicable.

SureVector XP1 Linker

Not applicable.

SureVector LacI Repressor

Not applicable.

SureVector T7 *E. coli* Promoter

Not applicable.

SureVector Tac *E. coli* Promoter

Not applicable.

SureVector Rhamnose *E. coli* Promoter

Not applicable.

SureVector HIS6 Expression Tag (C-Term)

Not applicable.

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

Not applicable.

SureVector Enzyme Mix

Not applicable.

Section 2. Hazards identification

	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Disposal	: <input checked="" type="checkbox"/> SureSolution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector Tac E. coli Promoter	Not applicable.
	SureVector Rhamnose E. coli Promoter	Not applicable.
	SureVector HIS6 Expression Tag (C-Term)	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Supplemental label elements	: <input checked="" type="checkbox"/> SureSolution	None known.
	SureVector AmpR Selectable Marker	None known.
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector Tac E. coli Promoter	None known.
	SureVector Rhamnose E. coli Promoter	None known.
	SureVector HIS6 Expression Tag (C-Term)	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.
2.3 Other hazards		
Hazards not otherwise classified	: <input checked="" type="checkbox"/> SureSolution	None known.
	SureVector AmpR Selectable Marker	None known.
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector Tac E. coli Promoter	None known.
	SureVector Rhamnose E. coli Promoter	None known.
	SureVector HIS6 Expression Tag (C-Term)	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.

Section 2. Hazards identification

10X SureVector Buffer	None known.
dNTP Mix	None known.
Dpnl	None known.

Section 3. Composition/information on ingredients

Substance/mixture	:	5X SureSolution	Substance
		SureVector AmpR Selectable Marker	Mixture
		SureVector pUC Origin	Mixture
		SureVector XP1 Linker	Mixture
		SureVector LacI Repressor	Mixture
		SureVector T7 E. coli Promoter	Mixture
		SureVector Tac E. coli Promoter	Mixture
		SureVector Rhamnose E. coli Promoter	Mixture
		SureVector HIS6 Expression Tag (C-Term)	Mixture
		SureVector LacZ E. coli Control (C-term)	Mixture
		SureVector Enzyme Mix	Mixture
		10X SureVector Buffer	Mixture
		dNTP Mix	Mixture
		Dpnl	Mixture

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

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

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

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

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact

: 5X SureSolution

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. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
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. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector T7 <i>E. coli</i> Promoter	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Tac <i>E. coli</i> Promoter	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Rhamnose <i>E. coli</i> Promoter	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector HIS6 Expression Tag (C-Term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector LacZ <i>E. coli</i> Control (C-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureVector Enzyme Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
10X SureVector Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
dNTP Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Dpnl	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

Section 4. First aid measures

Inhalation

: 5X SureSolution

Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

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

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7 E. coli Promoter

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

SureVector Tac E. coli Promoter

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

SureVector Rhamnose E. coli Promoter

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

SureVector HIS6 Expression Tag (C-Term)

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

SureVector LacZ E. coli Control (C-term)

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

SureVector Enzyme Mix

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

10X SureVector Buffer

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be

Section 4. First aid measures

dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

dNTP Mix

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Dpnl

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be 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.

Skin contact

:  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 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 *E. coli* Promoter

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

SureVector Tac *E. coli* Promoter

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

SureVector Rhamnose *E. coli* Promoter

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

SureVector HIS6 Expression Tag (C-Term)

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

Section 4. First aid measures

SureVector LacZ E. coli Control (C-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.
Ingestion	: 5X SureSolution
SureVector AmpR Selectable Marker	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
SureVector 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

Section 4. First aid measures

	fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector T7 E. coli Promoter	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector Tac E. coli Promoter	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector Rhamnose E. coli Promoter	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector HIS6 Expression Tag (C-Term)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector LacZ E. coli Control (C-term)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector Enzyme Mix	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
10X SureVector Buffer	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in

Section 4. First aid measures




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

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact	: 5X SureSolution	Causes eye irritation.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
	SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
	SureVector HIS6 Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	Causes eye irritation.
	10X SureVector Buffer	Causes serious eye irritation.
	dNTP Mix	No known significant effects or critical hazards.
	Dpnl	Causes serious eye irritation.

Section 4. First aid measures

Inhalation	:  SureSolution	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
		SureVector pUC Origin	No known significant effects or critical hazards.
		SureVector XP1 Linker	No known significant effects or critical hazards.
		SureVector LacI Repressor	No known significant effects or critical hazards.
		SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
		SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
		SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
		SureVector HIS6 Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
		SureVector Enzyme Mix	No known significant effects or critical hazards.
		10X SureVector Buffer	No known significant effects or critical hazards.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	No known significant effects or critical hazards.
		Skin contact	:  SureSolution
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 E. coli Promoter	No known significant effects or critical hazards.		
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.		
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.		
SureVector HIS6 Expression Tag (C-Term)	No known significant effects or critical hazards.		
SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.		
SureVector Enzyme Mix	No known significant effects or critical hazards.		
10X SureVector Buffer	No known significant effects or critical hazards.		
dNTP Mix	No known significant effects or critical hazards.		
DpnI	No known significant effects or critical hazards.		
Ingestion	:  SureSolution		
		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 E. coli Promoter	No known significant effects or critical hazards.
		SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
		SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
		SureVector HIS6 Expression Tag (C-Term)	No known significant effects or critical hazards.
		SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
		SureVector Enzyme Mix	No known significant effects or critical hazards.
		10X SureVector Buffer	No known significant effects or critical hazards.
		dNTP Mix	No known significant effects or critical hazards.
		DpnI	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Section 4. First aid measures

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

Section 4. First aid measures

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

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

Notes to physician	:	<input checked="" type="checkbox"/> SureSolution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector AmpR Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector pUC Origin	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector XP1 Linker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector LacI Repressor	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector T7 E. coli Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector Tac E. coli Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector Rhamnose E. coli Promoter	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector HIS6 Expression Tag (C-Term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		SureVector LacZ E. coli Control (C-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 4. First aid measures

	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	: 5X SureSolution	No specific treatment.
	SureVector AmpR Selectable Marker	No specific treatment.
	SureVector pUC Origin	No specific treatment.
	SureVector XP1 Linker	No specific treatment.
	SureVector LacI Repressor	No specific treatment.
	SureVector T7 E. coli Promoter	No specific treatment.
	SureVector Tac E. coli Promoter	No specific treatment.
	SureVector Rhamnose E. coli Promoter	No specific treatment.
	SureVector HIS6 Expression Tag (C-Term)	No specific treatment.
	SureVector LacZ E. coli Control (C-term)	No specific treatment.
	SureVector Enzyme Mix	No specific treatment.
	10X SureVector Buffer	No specific treatment.
	dNTP Mix	No specific treatment.
	DpnI	No specific treatment.
Protection of first-aiders	: 5X SureSolution	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	SureVector AmpR Selectable Marker	No action shall be taken involving any personal risk or without suitable training.
	SureVector pUC Origin	No action shall be taken involving any personal risk or without suitable training.
	SureVector XP1 Linker	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacI Repressor	No action shall be taken involving any personal risk or without suitable training.
	SureVector T7 E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
	SureVector Tac E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
	SureVector Rhamnose E. coli Promoter	No action shall be taken involving any personal risk or without suitable training.
	SureVector HIS6 Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacZ E. coli Control (C-term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Section 4. First aid measures


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

See toxicological information (Section 11)


Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

:  SureSolution	Use dry chemical, CO ₂ , water spray (fog) or foam.
SureVector AmpR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
SureVector pUC Origin	Use an extinguishing agent suitable for the surrounding fire.
SureVector XP1 Linker	Use an extinguishing agent suitable for the surrounding fire.
SureVector LacI Repressor	Use an extinguishing agent suitable for the surrounding fire.
SureVector T7 <i>E. coli</i> Promoter	Use an extinguishing agent suitable for the surrounding fire.
SureVector Tac <i>E. coli</i> Promoter	Use an extinguishing agent suitable for the surrounding fire.
SureVector Rhamnose <i>E. coli</i> Promoter	Use an extinguishing agent suitable for the surrounding fire.
SureVector HIS6 Expression Tag (C-Term)	Use an extinguishing agent suitable for the surrounding fire.
SureVector LacZ <i>E. coli</i> Control (C-term)	Use an extinguishing agent suitable for the surrounding fire.
SureVector Enzyme Mix	Use an extinguishing agent suitable for the surrounding fire.
10X SureVector Buffer	Use an extinguishing agent suitable for the surrounding fire.
dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.
Dpnl	Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media

:  SureSolution	Do not use water jet.
SureVector AmpR Selectable Marker	None known.
SureVector pUC Origin	None known.
SureVector XP1 Linker	None known.
SureVector LacI Repressor	None known.
SureVector T7 <i>E. coli</i> Promoter	None known.
SureVector Tac <i>E. coli</i> Promoter	None known.
SureVector Rhamnose <i>E. coli</i> Promoter	None known.
SureVector HIS6 Expression Tag (C-Term)	None known.
SureVector LacZ <i>E. coli</i> Control (C-term)	None known.
SureVector Enzyme Mix	None known.

Section 5. Fire-fighting measures

10X SureVector Buffer	None known.
dNTP Mix	None known.
DpnI	None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

: SureSolution

Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7 *E. coli* Promoter

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

SureVector Tac *E. coli* Promoter

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

SureVector Rhamnose *E. coli* Promoter

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

SureVector HIS6 Expression Tag (C-Term)

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

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

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

SureVector Enzyme Mix

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

10X SureVector Buffer

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

dNTP Mix

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

DpnI

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

Hazardous thermal decomposition products

: SureSolution

Decomposition products may include the following materials:

- carbon dioxide
- carbon monoxide
- sulfur oxides

SureVector AmpR Selectable Marker

No specific data.

SureVector pUC Origin

No specific data.

SureVector XP1 Linker

No specific data.

SureVector LacI Repressor

No specific data.

SureVector T7 *E. coli* Promoter

No specific data.

SureVector Tac *E. coli* Promoter

No specific data.

SureVector Rhamnose *E. coli* Promoter

No specific data.

SureVector HIS6 Expression Tag (C-Term)

No specific data.

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

No specific data.

SureVector Enzyme Mix

Decomposition products may include the following

Section 5. Fire-fighting measures

10X SureVector Buffer	materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
dNTP Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
Dpnl	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters

: 5X SureSolution	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
SureVector AmpR Selectable Marker	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector pUC Origin	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector XP1 Linker	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector LacI Repressor	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector T7 <i>E. coli</i> Promoter	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector Tac <i>E. coli</i> Promoter	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector Rhamnose <i>E. coli</i> Promoter	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 5. Fire-fighting measures

SureVector HIS6 Expression Tag (C-Term)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector LacZ <i>E. coli</i> Control (C-term)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector Enzyme Mix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
10X SureVector Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
dNTP Mix	Promptly isolate the scene by removing all persons 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 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 <i>E. coli</i> 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 Tac <i>E. coli</i> 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 Rhamnose <i>E. coli</i> 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 HIS6 Expression Tag (C-Term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

Section 5. Fire-fighting measures

SureVector LacZ E. coli Control (C-term)	pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Enzyme Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
10X SureVector Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
dNTP Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
DpnI	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: SureSolution

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

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

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

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.

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 AmpR Selectable Marker

SureVector pUC Origin

SureVector XP1 Linker

SureVector LacI Repressor

Section 6. Accidental release measures

SureVector T7 <i>E. coli</i> Promoter	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Tac <i>E. coli</i> Promoter	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Rhamnose <i>E. coli</i> Promoter	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector HIS6 Expression Tag (C-Term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector LacZ <i>E. coli</i> Control (C-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
dNTP Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
Dpnl	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid

Section 6. Accidental release measures

For emergency responders :  SureSolution

SureVector AmpR Selectable Marker

SureVector pUC Origin

SureVector XP1 Linker

SureVector LacI Repressor

SureVector T7 *E. coli* Promoter

SureVector Tac *E. coli* Promoter

SureVector Rhamnose *E. coli* Promoter

SureVector HIS6 Expression Tag (C-Term)

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

SureVector Enzyme Mix

10X SureVector Buffer

dNTP Mix

DpnI

breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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".

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".

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".

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".

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".

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".

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".

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".

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".

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".

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".

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".

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".

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

Section 6. Accidental release measures

the information in "For non-emergency personnel".

6.2 Environmental precautions

: 5X SureSolution

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7 E. coli Promoter

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

SureVector Tac E. coli Promoter

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

SureVector Rhamnose E. coli Promoter

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

SureVector HIS6 Expression Tag (C-Term)

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

SureVector LacZ E. coli Control (C-term)

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

SureVector Enzyme Mix

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

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).

Section 6. Accidental release measures

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

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. 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 <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 Tac <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.

Section 6. Accidental release measures

SureVector Rhamnose E. coli Promoter	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.
SureVector HIS6 Expression Tag (C-Term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector LacZ E. coli Control (C-term)	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector Enzyme Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
10X SureVector Buffer	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
dNTP Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
DpnI	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.


Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures :  SureSolution

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating,

Section 7. Handling and storage

	lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
SureVector AmpR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
SureVector pUC Origin	Put on appropriate personal protective equipment (see Section 8).
SureVector XP1 Linker	Put on appropriate personal protective equipment (see Section 8).
SureVector LacI Repressor	Put on appropriate personal protective equipment (see Section 8).
SureVector T7 <i>E. coli</i> Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector Tac <i>E. coli</i> Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector Rhamnose <i>E. coli</i> Promoter	Put on appropriate personal protective equipment (see Section 8).
SureVector HIS6 Expression Tag (C-Term)	Put on appropriate personal protective equipment (see Section 8).
SureVector LacZ <i>E. coli</i> Control (C-term)	Put on appropriate personal protective equipment (see Section 8).
SureVector Enzyme Mix	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
10X SureVector Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
DpnI	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	:  SureSolution
SureVector AmpR Selectable Marker	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. 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

Section 7. Handling and storage

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

Section 7. Handling and storage

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.

7.2 Conditions for safe storage, including any incompatibilities

:  SureSolution

SureVector AmpR Selectable Marker

SureVector pUC Origin

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.

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.

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

Section 7. Handling and storage

SureVector XP1 Linker	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 LacI Repressor	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.
SureVector T7 <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 Tac <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 Rhamnose <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 HIS6 Expression Tag (C-Term)	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been

Section 7. Handling and storage

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

[7.3 Specific end use\(s\)](#)

Section 8. Exposure controls/personal protection

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

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.

Section 8. Exposure controls/personal protection

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

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

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

Section 9. Physical and chemical properties

		term)	
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
Odor threshold	:	5X SureSolution	Not available.
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector Tac E. coli Promoter	Not available.
		SureVector Rhamnose E. coli Promoter	Not available.
		SureVector HIS6 Expression Tag (C-Term)	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
pH	:	5X SureSolution	Not available.
		SureVector AmpR Selectable Marker	8
		SureVector pUC Origin	8
		SureVector XP1 Linker	8
		SureVector LacI Repressor	8
		SureVector T7 E. coli Promoter	8
		SureVector Tac E. coli Promoter	8
		SureVector Rhamnose E. coli Promoter	8
		SureVector HIS6 Expression Tag (C-Term)	8
		SureVector LacZ E. coli Control (C-term)	8
		SureVector Enzyme Mix	8.2
		10X SureVector Buffer	8.8
		dNTP Mix	7.5
		DpnI	7.5
Melting point	:	5X SureSolution	18.5°C (65.3°F)
		SureVector AmpR Selectable Marker	0°C (32°F)
		SureVector pUC Origin	0°C (32°F)
		SureVector XP1 Linker	0°C (32°F)
		SureVector LacI Repressor	0°C (32°F)
		SureVector T7 E. coli Promoter	0°C (32°F)
		SureVector Tac E. coli Promoter	0°C (32°F)
		SureVector Rhamnose E. coli Promoter	0°C (32°F)
		SureVector HIS6 Expression Tag (C-Term)	0°C (32°F)
		SureVector LacZ E. coli Control (C-term)	0°C (32°F)
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.

Section 9. Physical and chemical properties

	DpnI	Not available.
Boiling point	: <input checked="" type="checkbox"/> SureSolution	189°C (372.2°F)
	SureVector AmpR Selectable Marker	100°C (212°F)
	SureVector pUC Origin	100°C (212°F)
	SureVector XP1 Linker	100°C (212°F)
	SureVector LacI Repressor	100°C (212°F)
	SureVector T7 E. coli Promoter	100°C (212°F)
	SureVector Tac E. coli Promoter	100°C (212°F)
	SureVector Rhamnose E. coli Promoter	100°C (212°F)
	SureVector HIS6 Expression Tag (C-Term)	100°C (212°F)
	SureVector LacZ E. coli Control (C-term)	100°C (212°F)
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Flash point	: <input checked="" type="checkbox"/> SureSolution	Closed cup: 87°C (188.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Evaporation rate	: <input checked="" type="checkbox"/> SureSolution	0.026 (butyl acetate = 1)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.

Section 9. Physical and chemical properties

Flammability (solid, gas)	:	<input checked="" type="checkbox"/> SureSolution	Not applicable.
		SureVector AmpR Selectable Marker	Not applicable.
		SureVector pUC Origin	Not applicable.
		SureVector XP1 Linker	Not applicable.
		SureVector LacI Repressor	Not applicable.
		SureVector T7 E. coli Promoter	Not applicable.
		SureVector Tac E. coli Promoter	Not applicable.
		SureVector Rhamnose E. coli Promoter	Not applicable.
		SureVector HIS6 Expression Tag (C-Term)	Not applicable.
		SureVector LacZ E. coli Control (C-term)	Not applicable.
		SureVector Enzyme Mix	Not applicable.
		10X SureVector Buffer	Not applicable.
		dNTP Mix	Not applicable.
		DpnI	Not applicable.
		Lower and upper explosive (flammable) limits	:
SureVector AmpR Selectable Marker	Not available.		
SureVector pUC Origin	Not available.		
SureVector XP1 Linker	Not available.		
SureVector LacI Repressor	Not available.		
SureVector T7 E. coli Promoter	Not available.		
SureVector Tac E. coli Promoter	Not available.		
SureVector Rhamnose E. coli Promoter	Not available.		
SureVector HIS6 Expression Tag (C-Term)	Not available.		
SureVector LacZ E. coli Control (C-term)	Not available.		
SureVector Enzyme Mix	Not available.		
10X SureVector Buffer	Not available.		
dNTP Mix	Not available.		
DpnI	Not available.		
Vapor pressure	:		
		SureVector AmpR Selectable Marker	Not available.
		SureVector pUC Origin	Not available.
		SureVector XP1 Linker	Not available.
		SureVector LacI Repressor	Not available.
		SureVector T7 E. coli Promoter	Not available.
		SureVector Tac E. coli Promoter	Not available.
		SureVector Rhamnose E. coli Promoter	Not available.
		SureVector HIS6 Expression Tag (C-Term)	Not available.
		SureVector LacZ E. coli Control (C-term)	Not available.
		SureVector Enzyme Mix	Not available.
		10X SureVector Buffer	Not available.
		dNTP Mix	Not available.
		DpnI	Not available.
		Vapor density	:

Section 9. Physical and chemical properties

	5X SureSolution	2.7 [Air = 1]
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Relative density	: 5X SureSolution	1.1
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Solubility	: 5X SureSolution	Easily soluble in the following materials: cold water and hot water.
	SureVector AmpR Selectable Marker	Easily soluble in the following materials: cold water and hot water.
	SureVector pUC Origin	Easily soluble in the following materials: cold water and hot water.
	SureVector XP1 Linker	Easily soluble in the following materials: cold water and hot water.
	SureVector LacI Repressor	Easily soluble in the following materials: cold water and hot water.
	SureVector T7 E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
	SureVector Tac E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
	SureVector Rhamnose E. coli Promoter	Easily soluble in the following materials: cold water and hot water.
	SureVector HIS6 Expression Tag (C-Term)	Easily soluble in the following materials: cold water and hot water.
	SureVector LacZ E. coli Control (C-term)	Easily soluble in the following materials: cold water and hot water.
	SureVector Enzyme Mix	Soluble in the following materials: cold water and hot water.

Section 9. Physical and chemical properties

	10X SureVector Buffer	Easily soluble in the following materials: cold water and hot water.
	dNTP Mix	Easily soluble in the following materials: cold water and hot water.
	DpnI	Soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: 5X SureSolution	-1.35
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Auto-ignition temperature	: 5X SureSolution	300 to 302°C (572 to 575.6°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Decomposition temperature	: 5X SureSolution	140 to 189°C (284 to 372.2°F)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.




Section 9. Physical and chemical properties

Viscosity	dNTP Mix	Not available.
	DpnI	Not available.
	: 5X SureSolution	Dynamic (room temperature): 2.14 mPa·s (2.14 cP)
	SureVector AmpR Selectable Marker	Not available.
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector Tac E. coli Promoter	Not available.
	SureVector Rhamnose E. coli Promoter	Not available.
	SureVector HIS6 Expression Tag (C-Term)	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
dNTP Mix	Not available.	
DpnI	Not available.	

Section 10. Stability and reactivity

10.1 Reactivity	: 5X SureSolution	No specific test data related to reactivity available for this product or its ingredients.
	SureVector AmpR Selectable Marker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector pUC Origin	No specific test data related to reactivity available for this product or its ingredients.
	SureVector XP1 Linker	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacI Repressor	No specific test data related to reactivity available for this product or its ingredients.
	SureVector T7 E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Tac E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Rhamnose E. coli Promoter	No specific test data related to reactivity available for this product or its ingredients.
	SureVector HIS6 Expression Tag (C-Term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector LacZ E. coli Control (C-term)	No specific test data related to reactivity available for this product or its ingredients.
	SureVector Enzyme Mix	No specific test data related to reactivity available for this product or its ingredients.
	10X SureVector Buffer	No specific test data related to reactivity available for this product or its ingredients.
	dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
	DpnI	No specific test data related to reactivity available for this product or its ingredients.

Section 10. Stability and reactivity

10.2 Chemical stability	:  SureSolution	The product is stable.
	SureVector AmpR Selectable Marker	The product is stable.
	SureVector pUC Origin	The product is stable.
	SureVector XP1 Linker	The product is stable.
	SureVector LacI Repressor	The product is stable.
	SureVector T7 E. coli Promoter	The product is stable.
	SureVector Tac E. coli Promoter	The product is stable.
	SureVector Rhamnose E. coli Promoter	The product is stable.
	SureVector HIS6 Expression Tag (C-Term)	The product is stable.
	SureVector LacZ E. coli Control (C-term)	The product is stable.
	SureVector Enzyme Mix	The product is stable.
	10X SureVector Buffer	The product is stable.
	dNTP Mix	The product is stable.
	DpnI	The product is stable.
10.3 Possibility of hazardous reactions	:  SureSolution	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector pUC Origin	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector XP1 Linker	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector LacI Repressor	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector Tac E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector Rhamnose E. coli Promoter	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector HIS6 Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	10X SureVector Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	dNTP Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	DpnI	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:  SureSolution	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.

Section 10. Stability and reactivity

SureVector T7 E. coli Promoter	No specific data.
SureVector Tac E. coli Promoter	No specific data.
SureVector Rhamnose E. coli Promoter	No specific data.
SureVector HIS6 Expression Tag (C-Term)	No specific data.
SureVector LacZ E. coli Control (C-term)	No specific data.
SureVector Enzyme Mix	No specific data.
10X SureVector Buffer	No specific data.
dNTP Mix	No specific data.
DpnI	No specific data.

10.5 Incompatible materials :  SureSolution

Reactive or incompatible with the following materials:

SureVector AmpR Selectable Marker	May react or be incompatible with oxidizing materials.
SureVector pUC Origin	May react or be incompatible with oxidizing materials.
SureVector XP1 Linker	May react or be incompatible with oxidizing materials.
SureVector LacI Repressor	May react or be incompatible with oxidizing materials.
SureVector T7 E. coli Promoter	May react or be incompatible with oxidizing materials.
SureVector Tac E. coli Promoter	May react or be incompatible with oxidizing materials.
SureVector Rhamnose E. coli Promoter	May react or be incompatible with oxidizing materials.
SureVector HIS6 Expression Tag (C-Term)	May react or be incompatible with oxidizing materials.
SureVector LacZ E. coli Control (C-term)	May react or be incompatible with oxidizing materials.
SureVector Enzyme Mix	May react or be incompatible with oxidizing materials.
10X SureVector Buffer	May react or be incompatible with oxidizing materials.
dNTP Mix	May react or be incompatible with oxidizing materials.
DpnI	May react or be incompatible with oxidizing materials.

10.6 Hazardous decomposition products : 

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

Section 10. Stability and reactivity

SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector Tac E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector Rhamnose E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector HIS6 Expression Tag (C-Term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
10X SureVector Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Dpnl	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
5X SureSolution Dimethyl sulfoxide	LD50 Dermal LD50 Oral	Rat Rat	40000 mg/kg 14500 mg/kg	- -
SureVector Enzyme Mix Glycerol	LD50 Oral	Rat	12600 mg/kg	-
10X SureVector Buffer Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
Ammonium sulphate	LD50 Oral	Rat	2840 mg/kg	-
Polyoxyethylene octyl phenyl ether	LD50 Oral	Rat	1800 mg/kg	-
Dpnl Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

Irritation/Corrosion

Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation	
5X SureSolution Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	100 milligrams	-	
SureVector Enzyme Mix Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
10X SureVector Buffer Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Polyoxyethylene octyl phenyl ether	Eyes - Moderate irritant	Rabbit	-	24 hours 10 microliters	-
		Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-
Dpnl Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	
Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-	
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-	
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-	

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

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

Section 11. Toxicological information

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure

: <input checked="" type="checkbox"/> SureSolution	Routes of entry anticipated: Oral, Dermal, Inhalation.
SureVector AmpR Selectable Marker	Not available.
SureVector pUC Origin	Not available.
SureVector XP1 Linker	Not available.
SureVector LacI Repressor	Not available.
SureVector T7 E. coli Promoter	Not available.
SureVector Tac E. coli Promoter	Not available.
SureVector Rhamnose E. coli Promoter	Not available.
SureVector HIS6 Expression Tag (C-Term)	Not available.
SureVector LacZ E. coli Control (C-term)	Not available.
SureVector Enzyme Mix	Routes of entry anticipated: Oral, Dermal, Inhalation.
10X SureVector Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
dNTP Mix	Not available.
DpnI	Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential acute health effects

Eye contact

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

Inhalation

: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
SureVector pUC Origin	No known significant effects or critical hazards.
SureVector XP1 Linker	No known significant effects or critical hazards.
SureVector LacI Repressor	No known significant effects or critical hazards.
SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.

Section 11. Toxicological information

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

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: <input checked="" type="checkbox"/> SureSolution	Adverse symptoms may include the following: irritation watering redness
	SureVector AmpR Selectable Marker	No specific data.
	SureVector pUC Origin	No specific data.
	SureVector XP1 Linker	No specific data.
	SureVector LacI Repressor	No specific data.
	SureVector T7 E. coli Promoter	No specific data.
	SureVector Tac E. coli Promoter	No specific data.
	SureVector Rhamnose E. coli	No specific data.

Section 11. Toxicological information

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

Section 11. Toxicological information

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

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

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

Section 11. Toxicological information

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

Section 11. Toxicological information

Fertility effects	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.
	5X SureSolution	No known significant effects or critical hazards.
	SureVector AmpR Selectable Marker	No known significant effects or critical hazards.
	SureVector pUC Origin	No known significant effects or critical hazards.
	SureVector XP1 Linker	No known significant effects or critical hazards.
	SureVector LacI Repressor	No known significant effects or critical hazards.
	SureVector T7 E. coli Promoter	No known significant effects or critical hazards.
	SureVector Tac E. coli Promoter	No known significant effects or critical hazards.
	SureVector Rhamnose E. coli Promoter	No known significant effects or critical hazards.
	SureVector HIS6 Expression Tag (C-Term)	No known significant effects or critical hazards.
	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
SureVector Enzyme Mix	No known significant effects or critical hazards.	
10X SureVector Buffer	No known significant effects or critical hazards.	
dNTP Mix	No known significant effects or critical hazards.	
DpnI	No known significant effects or critical hazards.	

Numerical measures of toxicity

Acute toxicity estimates

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

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
5X SureSolution Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 100 ul/L Marine water	Algae - Ulva lactuca	72 hours
SureVector Enzyme Mix Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
10X SureVector Buffer Potassium chloride	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 141460 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 12.92 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
Ammonium sulphate	Acute LC50 880000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute LC50 2.6 mg/l Fresh water	Crustaceans - Ceriodaphnia	48 hours

Section 12. Ecological information

Polyoxyethylene octyl phenyl ether	Acute LC50 14000 to 15000 µg/l Fresh water	dubia - Young	48 hours
	Acute LC50 68 µg/l Fresh water	Daphnia - Daphnia magna - Young	96 hours
	Chronic NOEC 7.5 mg/l Marine water	Fish - Oncorhynchus gorbuscha - Alevin	96 hours
	Chronic NOEC 143 µg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	5 weeks
	Acute LC50 5.85 mg/l Fresh water	Fish - Salmo salar - Post-smolt	48 hours
	Acute LC50 11.2 mg/l Fresh water	Crustaceans - Ceriodaphnia rigaudi - Neonate	48 hours
Dpnl Glycerol Sodium chloride	Acute LC50 4500 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	96 hours
	Acute LC50 54000 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute EC50 2430000 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 28.85 mg/dm ³ Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute IC50 6.87 g/L Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute LC50 1.56 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Chronic LC10 781 mg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic NOEC 6 g/L Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
Chronic NOEC 0.314 g/L Fresh water	Aquatic plants - Lemna minor	96 hours	
Chronic NOEC 100 mg/l Fresh water	Daphnia - Daphnia pulex	21 days	
	Fish - Gambusia holbrooki - Adult	8 weeks	

12.2 Persistence and degradability

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

12.3 Bioaccumulative potential

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

Section 12. Ecological information

12.4 Mobility in soil

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

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

Section 13. Disposal considerations

13.1 Waste treatment methods

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

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

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

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

Section 14. Transport information

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

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

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

Section 15. Regulatory information

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

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

Section 15. Regulatory information

Clean Air Act Section 112 : Not listed

(b) Hazardous Air Pollutants (HAPs)

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification

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

Composition/information on ingredients

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

Section 15. Regulatory information

dNTP Mix 2'-Deoxyguanosine 5'-(tetrahydrogen triphosphate)	≤3	No.	No.	No.	Yes.	No.
2'-Deoxyadenosine 5'-(tetrahydrogen triphosphate)	≤3	No.	No.	No.	Yes.	No.
Dpnl Glycerol	≥50 - ≤75	No.	No.	No.	Yes.	No.
Sodium chloride	≤3	No.	No.	No.	Yes.	No.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	<input checked="" type="checkbox"/> 10X SureVector Buffer Ammonium sulphate	7783-20-2	≤3
Supplier notification	<input checked="" type="checkbox"/> 10X SureVector Buffer Ammonium sulphate	7783-20-2	≤3

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

State regulations

- Massachusetts** : The following components are listed: GLYCERINE MIST
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: DIMETHYL SULFOXIDE; METHANE, SULFINYLBI-; 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.

Section 15. Regulatory information

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

Section 16. Other information

History

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

Indicates information that has changed from previously issued version.

Notice to reader

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.