

SAFETY DATA SHEET

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

Section 1. Identification

Product identifier	: SureVector E. coli C-terminal Tag kit, 5 rxn, Part Number G7518E
Part no. (chemical kit)	: G7518E
Part no.	: 5X SureSolution 5190-8625 SureVector AmpR Selectable Marker 5190-8807 SureVector pUC Origin 5190-8810 SureVector XP1 Linker 5190-8811 SureVector LacI Repressor 5190-8812 SureVector T7 E. coli Promoter 5190-8818 SureVector CBP Expression Tag C-Term 5190-8827 SureVector SBP Expression Tag C-Term 5190-8828 SureVector Thioredoxin Expression Tag C-Term 5190-8829 SureVector LacZ E. coli Control (C-term) 5190-7819 SureVector Enzyme Mix 5190-8621 10X SureVector Buffer 5190-8622 dNTP Mix 200518-56 DpnI 5190-8624
Material uses	: Analytical reagent. 5X 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 CBP Expression Tag C-Term 0.01 ml (5 reactions) SureVector SBP Expression Tag C-Term 0.01 ml (5 reactions) SureVector Thioredoxin Expression Tag C-Term 0.01 ml (5 reactions) SureVector LacZ E. coli Control (C-term) 0.01 ml (5 reactions) SureVector Enzyme Mix 0.015 ml (15 reactions) 10X SureVector Buffer 0.03 ml (15 reactions) dNTP Mix 0.03 ml DpnI 0.015 ml (15 reactions)
Supplier/Manufacturer	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770
Emergency telephone number (with hours of operation)	: CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

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

Section 2. Hazard identification

10X SureVector Buffer

H319 EYE IRRITATION - Category 2A

Dpnl

H319 EYE IRRITATION - Category 2A

GHS label elements

Hazard pictograms

: 10X SureVector Buffer



Dpnl



Signal word

: 5X SureSolution	Warning
SureVector AmpR	No signal word.
Selectable Marker	
SureVector pUC Origin	No signal word.
SureVector XP1 Linker	No signal word.
SureVector LacI Repressor	No signal word.
SureVector T7 E. coli	No signal word.
Promoter	
SureVector CBP Expression	No signal word.
Tag C-Term	
SureVector SBP Expression	No signal word.
Tag C-Term	
SureVector Thioredoxin	No signal word.
Expression Tag C-Term	
SureVector LacZ E. coli	No signal word.
Control (C-term)	
SureVector Enzyme Mix	Warning
10X SureVector Buffer	Warning
dNTP Mix	No signal word.
Dpnl	Warning

Hazard statements

: 5X SureSolution	H227 - Combustible liquid. H320 - Causes eye irritation.
SureVector AmpR	No known significant effects or critical hazards.
Selectable Marker	
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	No known significant effects or critical hazards.
Promoter	
SureVector CBP Expression	No known significant effects or critical hazards.
Tag C-Term	
SureVector SBP Expression	No known significant effects or critical hazards.
Tag C-Term	
SureVector Thioredoxin	No known significant effects or critical hazards.
Expression Tag C-Term	
SureVector LacZ E. coli	No known significant effects or critical hazards.
Control (C-term)	
SureVector Enzyme Mix	H320 - Causes eye irritation.
10X SureVector Buffer	H319 - Causes serious eye irritation.
dNTP Mix	No known significant effects or critical hazards.
Dpnl	H319 - Causes serious eye irritation.

Section 2. Hazard identification

Precautionary statements

Prevention	: <input checked="" type="checkbox"/> SureSolution	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
	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 CBP Expression Tag C-Term	Not applicable.
	SureVector SBP Expression Tag C-Term	Not applicable.
	SureVector Thioredoxin Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	P280 - Wear eye or face protection.
	dNTP Mix	Not applicable.
	DpnI	P280 - Wear eye or face protection.
Response	: <input checked="" type="checkbox"/> SureSolution	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
	SureVector AmpR Selectable Marker	Not applicable.
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli Promoter	Not applicable.
	SureVector CBP Expression Tag C-Term	Not applicable.
	SureVector SBP Expression Tag C-Term	Not applicable.
	SureVector Thioredoxin Expression Tag C-Term	Not applicable.
	SureVector LacZ E. coli Control (C-term)	Not applicable.
	SureVector Enzyme Mix	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
	10X SureVector Buffer	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
	dNTP Mix	Not applicable.
	DpnI	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Section 2. Hazard identification

Storage	: 5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector CBP Expression Tag C-Term SureVector SBP Expression Tag C-Term SureVector Thioredoxin Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI	Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Disposal	: 5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector CBP Expression Tag C-Term SureVector SBP Expression Tag C-Term SureVector Thioredoxin Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable.
Supplemental label elements	: 5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector CBP Expression Tag C-Term SureVector SBP Expression Tag C-Term SureVector Thioredoxin Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix	None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known. None known.

Section 2. Hazard identification

	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.
Other hazards which do not result in classification	5X 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 CBP Expression Tag C-Term	None known.
	SureVector SBP Expression Tag C-Term	None known.
	SureVector Thioredoxin Expression Tag C-Term	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.

Section 3. Composition/information on ingredients

Substance/mixture	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 CBP Expression Tag C-Term	Mixture
	SureVector SBP Expression Tag C-Term	Mixture
	SureVector Thioredoxin Expression Tag C-Term	Mixture
	SureVector LacZ E. coli Control (C-term)	Mixture
	SureVector Enzyme Mix	Mixture
	10X SureVector Buffer	Mixture
	dNTP Mix	Mixture
	DpnI	Mixture

Ingredient name	% (w/w)	CAS number
5X SureSolution Dimethyl sulfoxide	80 - 100	67-68-5
SureVector Enzyme Mix Glycerol	30 - 60	56-81-5
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	<0.1	9036-19-5
10X SureVector Buffer Potassium chloride	1 - 5	7447-40-7
Ammonium sulphate	0.5 - 1.5	7783-20-2
Polyoxyethylene octyl phenyl ether	0.1 - 1	9002-93-1

Section 3. Composition/information on ingredients

Dpnl		
Glycerol	30 - 60	56-81-5
Sodium chloride	1 - 5	7647-14-5

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

Description of necessary first aid measures

Eye contact	: 5X SureSolution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
	SureVector AmpR Selectable Marker	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector pUC Origin	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector XP1 Linker	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector LacI Repressor	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector T7 E. coli Promoter	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector CBP Expression Tag C-Term	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector SBP Expression Tag C-Term	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector Thioredoxin Expression Tag C-Term	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector LacZ E. coli Control (C-term)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	SureVector Enzyme Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.
	10X SureVector Buffer	Immediately flush eyes with plenty of water,

Section 4. First-aid measures

		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. 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.
	dNTP 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. Get medical attention.
	DpnI	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Inhalation	: 5X SureSolution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	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 CBP Expression Tag C-Term	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureVector SBP Expression Tag C-Term	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureVector Thioredoxin Expression Tag C-Term	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureVector LacZ E. coli Control (C-term)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureVector Enzyme Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

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	10X SureVector Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	dNTP Mix	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	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	: 5X SureSolution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	SureVector AmpR Selectable Marker	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector 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 CBP Expression Tag C-Term	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector SBP Expression Tag C-Term	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureVector Thioredoxin Expression Tag C-Term	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	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.

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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	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
SureVector AmpR Selectable Marker	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector pUC Origin	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector XP1 Linker	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector LacI Repressor	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector T7 E. coli Promoter	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector CBP Expression Tag C-Term	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureVector SBP Expression	Wash out mouth with water. If material has been

Section 4. First-aid measures

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

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belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

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

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	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	: 5X SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	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	No known significant effects or critical hazards.
	Promoter	
	SureVector CBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector SBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector Thioredoxin	No known significant effects or critical hazards.
	Expression Tag C-Term	
	SureVector LacZ E. coli	No known significant effects or critical hazards.
	Control (C-term)	
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	DpnI	No known significant effects or critical hazards.

Over-exposure signs/symptoms

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

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Inhalation	:	5X SureSolution	No specific data.
		SureVector AmpR	No specific data.
		Selectable Marker	
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7 E. coli	No specific data.
		Promoter	
		SureVector CBP Expression	No specific data.
		Tag C-Term	
		SureVector SBP Expression	No specific data.
		Tag C-Term	
		SureVector Thioredoxin	No specific data.
		Expression Tag C-Term	
		SureVector LacZ E. coli	No specific data.
		Control (C-term)	
		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	No specific data.
		Selectable Marker	
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7 E. coli	No specific data.
		Promoter	
		SureVector CBP Expression	No specific data.
		Tag C-Term	
		SureVector SBP Expression	No specific data.
		Tag C-Term	
		SureVector Thioredoxin	No specific data.
		Expression Tag C-Term	
		SureVector LacZ E. coli	No specific data.
		Control (C-term)	
		SureVector Enzyme Mix	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix	No specific data.
		DpnI	No specific data.
Ingestion	:	5X SureSolution	No specific data.
		SureVector AmpR	No specific data.
		Selectable Marker	
		SureVector pUC Origin	No specific data.
		SureVector XP1 Linker	No specific data.
		SureVector LacI Repressor	No specific data.
		SureVector T7 E. coli	No specific data.
		Promoter	
		SureVector CBP Expression	No specific data.
		Tag C-Term	
		SureVector SBP Expression	No specific data.
		Tag C-Term	
		SureVector Thioredoxin	No specific data.
		Expression Tag C-Term	
		SureVector LacZ E. coli	No specific data.
		Control (C-term)	
		SureVector Enzyme Mix	No specific data.
		10X SureVector Buffer	No specific data.
		dNTP Mix	No specific data.
		DpnI	No specific data.

Section 4. First-aid measures

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

Notes to physician	: 5X SureSolution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector AmpR Selectable Marker	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector 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 CBP Expression Tag C-Term	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector SBP Expression Tag C-Term	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector Thioredoxin Expression Tag C-Term	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector LacZ E. coli Control (C-term)	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureVector Enzyme Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	10X SureVector Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	dNTP Mix	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	DpnI	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

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 CBP Expression Tag C-Term	No specific treatment.
	SureVector SBP Expression Tag C-Term	No specific treatment.
	SureVector Thioredoxin Expression Tag C-Term	No specific treatment.

Section 4. First-aid measures

	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 CBP Expression Tag C-Term	No action shall be taken involving any personal risk or without suitable training.
	SureVector SBP Expression Tag C-Term	No action shall be taken involving any personal risk or without suitable training.
	SureVector Thioredoxin Expression Tag C-Term	No action shall be taken involving any personal risk or without suitable training.
	SureVector LacZ E. coli Control (C-term)	No action shall be taken involving any personal risk or without suitable training.
	SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	10X SureVector Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	dNTP Mix	No action shall be taken involving any personal risk or without suitable training.
	DpnI	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	: 5X SureSolution	Use dry chemical, CO ₂ , water spray (fog) or foam.
	SureVector AmpR Selectable Marker	Use an extinguishing agent suitable for the surrounding fire.
	SureVector pUC Origin	Use an extinguishing agent suitable for the surrounding fire.
	SureVector XP1 Linker	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacI Repressor	Use an extinguishing agent suitable for the surrounding fire.
	SureVector T7 E. coli Promoter	Use an extinguishing agent suitable for the surrounding fire.

Section 5. Fire-fighting measures

	SureVector CBP Expression Tag C-Term	Use an extinguishing agent suitable for the surrounding fire.
	SureVector SBP Expression Tag C-Term	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Thioredoxin Expression Tag C-Term	Use an extinguishing agent suitable for the surrounding fire.
	SureVector LacZ E. coli Control (C-term)	Use an extinguishing agent suitable for the surrounding fire.
	SureVector Enzyme Mix	Use an extinguishing agent suitable for the surrounding fire.
	10X SureVector Buffer	Use an extinguishing agent suitable for the surrounding fire.
	dNTP Mix	Use an extinguishing agent suitable for the surrounding fire.
	DpnI	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: 5X SureSolution	Do not use water jet.
	SureVector AmpR Selectable Marker	None known.
	SureVector pUC Origin	None known.
	SureVector XP1 Linker	None known.
	SureVector LacI Repressor	None known.
	SureVector T7 E. coli Promoter	None known.
	SureVector CBP Expression Tag C-Term	None known.
	SureVector SBP Expression Tag C-Term	None known.
	SureVector Thioredoxin Expression Tag C-Term	None known.
	SureVector LacZ E. coli Control (C-term)	None known.
	SureVector Enzyme Mix	None known.
	10X SureVector Buffer	None known.
	dNTP Mix	None known.
	DpnI	None known.
Specific hazards arising from the chemical	: 5X SureSolution	Combustible liquid. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.
	SureVector AmpR Selectable Marker	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector 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 CBP Expression Tag C-Term	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector SBP Expression Tag C-Term	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureVector Thioredoxin	In a fire or if heated, a pressure increase will occur

Section 5. Fire-fighting measures

	Expression Tag C-Term SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix	and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. 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	: 5X SureSolution	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides 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 CBP Expression Tag C-Term	No specific data.
	SureVector SBP Expression Tag C-Term	No specific data.
	SureVector Thioredoxin Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	10X SureVector Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
	dNTP Mix	No specific data.
	DpnI	Decomposition products may include the following materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides
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

Section 5. Fire-fighting measures

SureVector pUC Origin	without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector 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 E. coli Promoter	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector CBP Expression Tag C-Term	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector SBP Expression Tag C-Term	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector Thioredoxin Expression Tag C-Term	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector LacZ E. coli Control (C-term)	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureVector Enzyme Mix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
10X SureVector Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
dNTP Mix	Promptly isolate the scene by removing all persons 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

Section 5. Fire-fighting measures

SureVector XP1 Linker	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 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 E. coli Promoter	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector CBP Expression Tag C-Term	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector SBP Expression Tag C-Term	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Thioredoxin Expression Tag C-Term	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector LacZ E. coli Control (C-term)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureVector Enzyme Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
10X SureVector Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
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

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 5X SureSolution

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

SureVector AmpR

No action shall be taken involving any personal risk

Section 6. Accidental release measures

Selectable Marker	or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector pUC Origin	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector XP1 Linker	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector LacI Repressor	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector T7 <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 CBP 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 SBP Expression Tag C-Term	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Thioredoxin Expression Tag C-Term	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector LacZ <i>E. coli</i> Control (C-term)	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.
SureVector Enzyme Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.

Section 6. Accidental release measures

10X SureVector Buffer	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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate.
dNTP Mix	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.
Dpnl	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
For emergency responders : 5X SureSolution	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector AmpR Selectable Marker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector pUC Origin	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector XP1 Linker	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector LacI Repressor	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector T7 <i>E. coli</i> Promoter	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector CBP Expression Tag C-Term	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector SBP Expression Tag C-Term	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector Thioredoxin Expression Tag C-Term	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector LacZ <i>E. coli</i>	If specialized clothing is required to deal with the

Section 6. Accidental release measures

Control (C-term)	spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureVector Enzyme Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
10X SureVector Buffer	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
dNTP Mix	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
DpnI	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Environmental precautions : 5X SureSolution	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector AmpR Selectable Marker	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector 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 CBP Expression Tag C-Term	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector SBP Expression Tag C-Term	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Section 6. Accidental release measures

SureVector Thioredoxin Expression Tag C-Term	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureVector LacZ <i>E. coli</i> 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).
dNTP Mix	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
DpnI	Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Methods for cleaning up : 5X SureSolution

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

Section 6. Accidental release measures

	Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector T7 E. coli Promoter	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector CBP Expression Tag C-Term	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector SBP Expression Tag C-Term	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector Thioredoxin Expression Tag C-Term	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureVector LacZ 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.
Dpnl	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: 5X SureSolution	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureVector AmpR Selectable Marker	Put on appropriate personal protective equipment (see Section 8).
	SureVector 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 E. coli Promoter	Put on appropriate personal protective equipment (see Section 8).
	SureVector CBP Expression Tag C-Term	Put on appropriate personal protective equipment (see Section 8).
	SureVector SBP Expression Tag C-Term	Put on appropriate personal protective equipment (see Section 8).
	SureVector Thioredoxin Expression Tag C-Term	Put on appropriate personal protective equipment (see Section 8).
	SureVector LacZ E. coli Control (C-term)	Put on appropriate personal protective equipment (see Section 8).
	SureVector Enzyme Mix	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	10X SureVector Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	dNTP Mix	Put on appropriate personal protective equipment (see Section 8).
	Dpnl	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

Section 7. Handling and storage

Advice on general occupational hygiene

: 5X SureSolution

reuse container.

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

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

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 E. coli Promoter

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

SureVector CBP 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 SBP 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 Thioredoxin Expression Tag C-Term

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face

Section 7. Handling and storage

SureVector LacZ E. coli Control (C-term)

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

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

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.

Dpnl

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.

Conditions for safe storage, including any incompatibilities : 5X SureSolution

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

SureVector AmpR Selectable Marker

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

Section 7. Handling and storage

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

Section 7. Handling and storage

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

Section 7. Handling and storage

Dpnl

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

Section 8. Exposure controls/personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
<p>5X SureSolution Dimethyl sulfoxide</p> <p>SureVector Enzyme Mix Glycerol</p> <p>Dpnl Glycerol</p>	<p>OARS WEEL (United States, 1/2021). TWA: 250 ppm 8 hours.</p> <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. Form: Mist</p> <p>CA Quebec Provincial (Canada, 7/2019). TWAEV: 10 mg/m³ 8 hours. Form: mist</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. Form: mist TWA: 10 mg/m³ 8 hours. Form: mist</p> <p>CA British Columbia Provincial (Canada, 1/2021). TWA: 3 mg/m³ 8 hours. Form: respirable mist TWA: 10 mg/m³ 8 hours. Form: total mist</p> <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 10 mg/m³ 8 hours. Form: Mist</p> <p>CA Quebec Provincial (Canada, 7/2019). TWAEV: 10 mg/m³ 8 hours. Form: mist</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. Form: mist TWA: 10 mg/m³ 8 hours. Form: mist</p> <p>CA British Columbia Provincial (Canada, 1/2021). TWA: 3 mg/m³ 8 hours. Form: respirable mist TWA: 10 mg/m³ 8 hours. Form: total mist</p>

Section 8. Exposure controls/personal protection

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

Individual protection measures

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

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

Skin protection

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

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

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

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

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

- Physical state**
- | | |
|--------------------------------------|------------------|
| 5X SureSolution | Liquid. [Clear.] |
| SureVector AmpR Selectable Marker | Liquid. |
| SureVector pUC Origin | Liquid. |
| SureVector XP1 Linker | Liquid. |
| SureVector LacI Repressor | Liquid. |
| SureVector T7 E. coli Promoter | Liquid. |
| SureVector CBP Expression Tag C-Term | Liquid. |
| SureVector SBP Expression Tag C-Term | Liquid. |
| SureVector Thioredoxin | Liquid. |


Section 9. Physical and chemical properties and safety characteristics


	Expression Tag C-Term	
	SureVector LacZ E. coli	Liquid.
	Control (C-term)	
	SureVector Enzyme Mix	Liquid.
	10X SureVector Buffer	Liquid.
	dNTP Mix	Liquid.
	DpnI	Liquid.
Color	: 5X SureSolution	Blue.
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli	Not available.
	Promoter	
	SureVector CBP Expression	Not available.
	Tag C-Term	
	SureVector SBP Expression	Not available.
	Tag C-Term	
	SureVector Thioredoxin	Not available.
	Expression Tag C-Term	
	SureVector LacZ E. coli	Not available.
	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Odor	: 5X SureSolution	Odorless. [Slight]
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli	Not available.
	Promoter	
	SureVector CBP Expression	Not available.
	Tag C-Term	
	SureVector SBP Expression	Not available.
	Tag C-Term	
	SureVector Thioredoxin	Not available.
	Expression Tag C-Term	
	SureVector LacZ E. coli	Not available.
	Control (C-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	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli	Not available.
	Promoter	
	SureVector CBP Expression	Not available.
	Tag C-Term	
	SureVector SBP Expression	Not available.

Section 9. Physical and chemical properties and safety characteristics

	Tag C-Term	
	SureVector Thioredoxin	Not available.
	Expression Tag C-Term	
	SureVector LacZ E. coli	Not available.
	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
pH	: 5X SureSolution	Not available.
	SureVector AmpR	8
	Selectable Marker	
	SureVector pUC Origin	8
	SureVector XP1 Linker	8
	SureVector LacI Repressor	8
	SureVector T7 E. coli	8
	Promoter	
	SureVector CBP Expression	8
	Tag C-Term	
	SureVector SBP Expression	8
	Tag C-Term	
	SureVector Thioredoxin	8
	Expression Tag C-Term	
	SureVector LacZ E. coli	8
	Control (C-term)	
	SureVector Enzyme Mix	8.2
	10X SureVector Buffer	8.8
	dNTP Mix	7.5
	DpnI	7.5
Melting point/freezing point	: 5X SureSolution	18.5°C (65.3°F)
	SureVector AmpR	0°C (32°F)
	Selectable Marker	
	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	0°C (32°F)
	Promoter	
	SureVector CBP Expression	0°C (32°F)
	Tag C-Term	
	SureVector SBP Expression	0°C (32°F)
	Tag C-Term	
	SureVector Thioredoxin	0°C (32°F)
	Expression Tag C-Term	
	SureVector LacZ E. coli	0°C (32°F)
	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	0°C (32°F)
	DpnI	Not available.
Boiling point, initial boiling point, and boiling range	: 5X SureSolution	189°C (372.2°F)
	SureVector AmpR	100°C (212°F)
	Selectable Marker	
	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	100°C (212°F)
	Promoter	
	SureVector CBP Expression	100°C (212°F)

Section 9. Physical and chemical properties and safety characteristics

	Tag C-Term	
	SureVector SBP Expression	100°C (212°F)
	Tag C-Term	
	SureVector Thioredoxin	100°C (212°F)
	Expression Tag C-Term	
	SureVector LacZ E. coli	100°C (212°F)
	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	100°C (212°F)
	DpnI	Not available.
Flash point	:  SureSolution	Closed cup: 87°C (188.6°F) [ASTM D 93] Open cup: 87°C (188.6°F)
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli	Not available.
	Promoter	
	SureVector CBP Expression	Not available.
	Tag C-Term	
	SureVector SBP Expression	Not available.
	Tag C-Term	
	SureVector Thioredoxin	Not available.
	Expression Tag C-Term	
	SureVector LacZ E. coli	Not available.
	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
 SureVector AmpR Selectable Marker						
Edetic acid	>100	>212	DIN 51758			
SureVector pUC Origin						
Edetic acid	>100	>212	DIN 51758			
SureVector XP1 Linker						
Edetic acid	>100	>212	DIN 51758			
SureVector LacI Repressor						
Edetic acid	>100	>212	DIN 51758			
SureVector T7 E. coli Promoter						
Edetic acid	>100	>212	DIN 51758			
SureVector CBP Expression Tag C-						

Section 9. Physical and chemical properties and safety characteristics

Term						
Edetic acid	>100	>212	DIN 51758			
SureVector SBP Expression Tag C-Term						
Edetic acid	>100	>212	DIN 51758			
SureVector Thioredoxin Expression Tag C-Term						
Edetic acid	>100	>212	DIN 51758			
SureVector LacZ E. coli Control (C-term)						
Edetic acid	>100	>212	DIN 51758			
SureVector Enzyme Mix						
Edetic acid	>100	>212	DIN 51758			
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	>109.85	>229.7				
10X SureVector Buffer						
Polyoxyethylene octyl phenyl ether	>109.85	>229.7				
dNTP Mix						
Edetic acid	>100	>212	DIN 51758			
Dpnl						
Edetic acid	>100	>212	DIN 51758			
(R*,R*)-1,4-Dimercaptobutane-2,3-diol	>110	>230				

Evaporation rate	: 5X SureSolution	0.026 (butyl acetate = 1)
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag C-Term	Not available.
	SureVector SBP Expression Tag C-Term	Not available.
	SureVector Thioredoxin Expression Tag C-Term	Not available.
	SureVector LacZ E. coli	Not available.

Section 9. Physical and chemical properties and safety characteristics

	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Flammability	: 5X SureSolution	Not applicable.
	SureVector AmpR	Not applicable.
	Selectable Marker	
	SureVector pUC Origin	Not applicable.
	SureVector XP1 Linker	Not applicable.
	SureVector LacI Repressor	Not applicable.
	SureVector T7 E. coli	Not applicable.
	Promoter	
	SureVector CBP Expression	Not applicable.
	Tag C-Term	
	SureVector SBP Expression	Not applicable.
	Tag C-Term	
	SureVector Thioredoxin	Not applicable.
	Expression Tag C-Term	
	SureVector LacZ E. coli	Not applicable.
	Control (C-term)	
	SureVector Enzyme Mix	Not applicable.
	10X SureVector Buffer	Not applicable.
	dNTP Mix	Not applicable.
	DpnI	Not applicable.
Lower and upper explosion limit/flammability limit	: 5X SureSolution	Lower: 2.6% Upper: 28.5%
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli	Not available.
	Promoter	
	SureVector CBP Expression	Not available.
	Tag C-Term	
	SureVector SBP Expression	Not available.
	Tag C-Term	
	SureVector Thioredoxin	Not available.
	Expression Tag C-Term	
	SureVector LacZ E. coli	Not available.
	Control (C-term)	
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Vapor pressure	: 5X SureSolution	0.056 kPa (0.42 mm Hg) [EU A.4]
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli	Not available.
	Promoter	
	SureVector CBP Expression	Not available.
	Tag C-Term	
	SureVector SBP Expression	Not available.
	Tag C-Term	

Section 9. Physical and chemical properties and safety characteristics

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

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
SureVector AmpR Selectable Marker						
Water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureVector pUC Origin						
Water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureVector XP1 Linker						
Water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureVector LacI Repressor						
Water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureVector T7 E. coli Promoter						
Water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureVector CBP Expression Tag C-Term						
Water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureVector SBP						

Section 9. Physical and chemical properties and safety characteristics

Expression Tag C-Term					
Water	23.8	3.2		92.258	12.3
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001
SureVector Thioredoxin Expression Tag C-Term					
Water	23.8	3.2		92.258	12.3
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001
SureVector LacZ E. coli Control (C-term)					
Water	23.8	3.2		92.258	12.3
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001
SureVector Enzyme Mix					
Water	23.8	3.2		92.258	12.3
Sorbitan monolaurate, ethoxylated	<1	<0.13			
10X SureVector Buffer					
Water	23.8	3.2		92.258	12.3
Polyoxyethylene octyl phenyl ether	<1	<0.13			
dNTP Mix					
Water	23.8	3.2		92.258	12.3
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001
Dpnl					
Water	23.8	3.2		92.258	12.3
Glycerol	0.000075	0.00001		0.0025	0.00033

Relative vapor density

: 5X SureSolution	2.7 [Air = 1]
SureVector AmpR	Not available.
Selectable Marker	
SureVector pUC Origin	Not available.
SureVector XP1 Linker	Not available.
SureVector LacI Repressor	Not available.
SureVector T7 E. coli Promoter	Not available.
SureVector CBP Expression Tag C-Term	Not available.

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	SureVector SBP Expression Tag C-Term	Not available.
	SureVector Thioredoxin Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
Relative density	: 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 CBP Expression Tag C-Term	Not available.
	SureVector SBP Expression Tag C-Term	Not available.
	SureVector Thioredoxin Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.
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 CBP Expression Tag C-Term	Easily soluble in the following materials: cold water and hot water.
	SureVector SBP Expression Tag C-Term	Easily soluble in the following materials: cold water and hot water.
	SureVector Thioredoxin Expression Tag C-Term	Easily soluble in the following materials: cold water and hot water.
	SureVector LacZ E. coli Control (C-term)	Easily soluble in the following materials: cold water and hot water.
	SureVector Enzyme Mix	Soluble in the following materials: cold water and hot water.
	10X SureVector Buffer	Easily soluble in the following materials: cold water and hot water.
	dNTP Mix	Easily soluble in the following materials: cold water and hot water.
	DpnI	Soluble in the following materials: cold water and hot water.

Section 9. Physical and chemical properties and safety characteristics

Partition coefficient: n-octanol/water	5X SureSolution	-1.35	
	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 CBP Expression Tag C-Term	Not applicable.	
	SureVector SBP Expression Tag C-Term	Not applicable.	
	SureVector Thioredoxin Expression Tag C-Term	Not applicable.	
	SureVector LacZ E. coli Control (C-term)	Not applicable.	
	SureVector Enzyme Mix	Not applicable.	
	10X SureVector Buffer	Not applicable.	
	dNTP Mix	Not applicable.	
	DpnI	Not applicable.	
	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 CBP Expression Tag C-Term		Not available.	
SureVector SBP Expression Tag C-Term		Not available.	
SureVector Thioredoxin Expression Tag C-Term		Not available.	
SureVector LacZ E. coli Control (C-term)		Not available.	
SureVector Enzyme Mix		Not available.	
10X SureVector Buffer		Not available.	
dNTP Mix		Not available.	
DpnI		Not available.	

Ingredient name	°C	°F	Method
SureVector AmpR Selectable Marker			
Edetic acid	>400	>752	VDI 2263
SureVector pUC Origin			
Edetic acid	>400	>752	VDI 2263
SureVector XP1 Linker			
Edetic acid	>400	>752	VDI 2263
SureVector LacI Repressor			
Edetic acid	>400	>752	VDI 2263
SureVector T7 E. coli Promoter			

Section 9. Physical and chemical properties and safety characteristics

Edetic acid	>400	>752	VDI 2263
SureVector CBP Expression Tag C-Term			
Edetic acid	>400	>752	VDI 2263
SureVector SBP Expression Tag C-Term			
Edetic acid	>400	>752	VDI 2263
SureVector Thioredoxin Expression Tag C-Term			
Edetic acid	>400	>752	VDI 2263
SureVector LacZ E. coli Control (C-term)			
Edetic acid	>400	>752	VDI 2263
SureVector Enzyme Mix			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263
dNTP Mix			
Edetic acid	>400	>752	VDI 2263
Dpnl			
Glycerol	370	698	
Edetic acid	>400	>752	VDI 2263

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

Section 9. Physical and chemical properties and safety characteristics

Viscosity	: <input checked="" type="checkbox"/> 5X SureSolution	Dynamic: 2.14 mPa·s (2.14 cP)
	SureVector AmpR	Not available.
	Selectable Marker	
	SureVector pUC Origin	Not available.
	SureVector XP1 Linker	Not available.
	SureVector LacI Repressor	Not available.
	SureVector T7 E. coli Promoter	Not available.
	SureVector CBP Expression Tag C-Term	Not available.
	SureVector SBP Expression Tag C-Term	Not available.
	SureVector Thioredoxin Expression Tag C-Term	Not available.
	SureVector LacZ E. coli Control (C-term)	Not available.
	SureVector Enzyme Mix	Not available.
	10X SureVector Buffer	Not available.
	dNTP Mix	Not available.
	DpnI	Not available.

Particle characteristics

Median particle size

: <input checked="" type="checkbox"/> 5X SureSolution	Not applicable.
SureVector AmpR	Not applicable.
Selectable Marker	
SureVector pUC Origin	Not applicable.
SureVector XP1 Linker	Not applicable.
SureVector LacI Repressor	Not applicable.
SureVector T7 E. coli Promoter	Not applicable.
SureVector CBP Expression Tag C-Term	Not applicable.
SureVector SBP Expression Tag C-Term	Not applicable.
SureVector Thioredoxin Expression Tag C-Term	Not applicable.
SureVector LacZ E. coli Control (C-term)	Not applicable.
SureVector Enzyme Mix	Not applicable.
10X SureVector Buffer	Not applicable.
dNTP Mix	Not applicable.
DpnI	Not applicable.

Section 10. Stability and reactivity

Reactivity	: 5X SureSolution	No specific test data related to reactivity available for this product or its ingredients.
	SureVector AmpR	No specific test data related to reactivity available for this product or its ingredients.
	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 CBP Expression Tag C-Term	No specific test data related to reactivity available for this product or its ingredients.
	SureVector SBP Expression	No specific test data related to reactivity available for

Section 10. Stability and reactivity

Tag C-Term	this product or its ingredients.
SureVector Thioredoxin Expression Tag C-Term	No specific test data related to reactivity available for this product or its ingredients.
SureVector LacZ E. coli Control (C-term)	No specific test data related to reactivity available for this product or its ingredients.
SureVector Enzyme Mix	No specific test data related to reactivity available for this product or its ingredients.
10X SureVector Buffer	No specific test data related to reactivity available for this product or its ingredients.
dNTP Mix	No specific test data related to reactivity available for this product or its ingredients.
DpnI	No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

: 5X 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 CBP Expression Tag C-Term	The product is stable.
SureVector SBP Expression Tag C-Term	The product is stable.
SureVector Thioredoxin Expression Tag C-Term	The product is stable.
SureVector LacZ E. coli Control (C-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.

Possibility of hazardous reactions

: 5X SureSolution	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector 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 CBP Expression Tag C-Term	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector SBP Expression Tag C-Term	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector Thioredoxin Expression Tag C-Term	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous reactions will not occur.
SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
10X SureVector Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.

Section 10. Stability and reactivity

	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.
Conditions to avoid	: 5X SureSolution	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.
	SureVector AmpR Selectable Marker	No specific data.
	SureVector 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 CBP Expression Tag C-Term	No specific data.
	SureVector SBP Expression Tag C-Term	No specific data.
	SureVector Thioredoxin Expression Tag C-Term	No specific data.
	SureVector LacZ E. coli Control (C-term)	No specific data.
	SureVector Enzyme Mix	No specific data.
	10X SureVector Buffer	No specific data.
	dNTP Mix	No specific data.
	DpnI	No specific data.
Incompatible materials	: 5X SureSolution	Reactive or incompatible with the following materials: oxidizing materials
	SureVector AmpR Selectable Marker	May react or be incompatible with oxidizing materials.
	SureVector 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 CBP Expression Tag C-Term	May react or be incompatible with oxidizing materials.
	SureVector SBP Expression Tag C-Term	May react or be incompatible with oxidizing materials.
	SureVector Thioredoxin Expression Tag C-Term	May react or be incompatible with oxidizing materials.
	SureVector LacZ E. coli Control (C-term)	May react or be incompatible with oxidizing materials.
	SureVector Enzyme Mix	May react or be incompatible with oxidizing materials.
	10X SureVector Buffer	May react or be incompatible with oxidizing materials.
	dNTP Mix	May react or be incompatible with oxidizing materials.
	DpnI	May react or be incompatible with oxidizing materials.

Section 10. Stability and reactivity

Hazardous decomposition products	: 5X SureSolution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector AmpR Selectable Marker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector pUC Origin	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector XP1 Linker	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector LacI Repressor	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector T7 E. coli Promoter	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector CBP Expression Tag C-Term	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector SBP Expression Tag C-Term	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector Thioredoxin Expression Tag C-Term	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector LacZ E. coli Control (C-term)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureVector Enzyme Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10X SureVector Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	dNTP Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	DpnI	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
5X SureSolution Dimethyl sulfoxide	LD50 Dermal	Rat	40000 mg/kg	-
	LD50 Oral	Rat	14500 mg/kg	-
SureVector Enzyme Mix Glycerol Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	12600 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-

Section 11. Toxicological information

10X SureVector Buffer				
Potassium chloride	LD50 Oral	Rat	2600 mg/kg	-
Ammonium sulphate	LD50 Oral	Rat	2840 mg/kg	-
Polyoxyethylene octyl phenyl ether	LD50 Oral	Rat	1800 mg/kg	-
Dpnl				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
5X SureSolution					
Dimethyl sulfoxide	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	100 mg	-
SureVector Enzyme Mix					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
10X SureVector Buffer					
Potassium chloride	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Polyoxyethylene octyl phenyl ether	Skin - Mild irritant	Rabbit	-	24 hours 500 uL	-
Dpnl					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Section 11. Toxicological information

Inhalation	:	5X SureSolution	No known significant effects or critical hazards.
		SureVector AmpR	No known significant effects or critical hazards.
		Selectable Marker	
		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	No known significant effects or critical hazards.
		Promoter	
		SureVector CBP Expression	No known significant effects or critical hazards.
		Tag C-Term	
		SureVector SBP Expression	No known significant effects or critical hazards.
		Tag C-Term	
		SureVector Thioredoxin	No known significant effects or critical hazards.
		Expression Tag C-Term	
		SureVector LacZ E. coli	No known significant effects or critical hazards.
		Control (C-term)	
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	:	5X SureSolution	No known significant effects or critical hazards.
		SureVector AmpR	No known significant effects or critical hazards.
		Selectable Marker	
		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	No known significant effects or critical hazards.
		Promoter	
		SureVector CBP Expression	No known significant effects or critical hazards.
		Tag C-Term	
		SureVector SBP Expression	No known significant effects or critical hazards.
		Tag C-Term	
		SureVector Thioredoxin	No known significant effects or critical hazards.
		Expression Tag C-Term	
		SureVector LacZ E. coli	No known significant effects or critical hazards.
		Control (C-term)	
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	:	5X SureSolution	No known significant effects or critical hazards.
		SureVector AmpR	No known significant effects or critical hazards.
		Selectable Marker	
		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	No known significant effects or critical hazards.
		Promoter	
		SureVector CBP Expression	No known significant effects or critical hazards.
		Tag C-Term	
		SureVector SBP Expression	No known significant effects or critical hazards.
		Tag C-Term	
		SureVector Thioredoxin	No known significant effects or critical hazards.
		Expression Tag C-Term	
		SureVector LacZ E. coli	No known significant effects or critical hazards.
		Control (C-term)	
SureVector Enzyme Mix	No known significant effects or critical hazards.		
10X SureVector Buffer	No known significant effects or critical hazards.		
dNTP Mix	No known significant effects or critical hazards.		
DpnI	No known significant effects or critical hazards.		

Section 11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

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

Section 11. Toxicological information

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 CBP Expression Tag C-Term	No specific data.	
	SureVector SBP Expression Tag C-Term	No specific data.	
	SureVector Thioredoxin Expression Tag C-Term	No specific data.	
	SureVector LacZ E. coli Control (C-term)	No specific data.	
	SureVector Enzyme Mix	No specific data.	
	10X SureVector Buffer	No specific data.	
	dNTP Mix	No specific data.	
	DpnI	No specific data.	
	Ingestion	: 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 CBP Expression Tag C-Term		No specific data.	
SureVector SBP Expression Tag C-Term		No specific data.	
SureVector Thioredoxin Expression Tag C-Term		No specific data.	
SureVector LacZ E. coli Control (C-term)		No specific data.	
SureVector Enzyme Mix		No specific data.	
10X SureVector Buffer		No specific data.	
dNTP Mix		No specific data.	
DpnI		No specific data.	

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Section 11. Toxicological information

General	: 5X SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	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	No known significant effects or critical hazards.
	Promoter	
	SureVector CBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector SBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector Thioredoxin	No known significant effects or critical hazards.
	Expression Tag C-Term	
	SureVector LacZ E. coli	No known significant effects or critical hazards.
	Control (C-term)	
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	: 5X SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	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	No known significant effects or critical hazards.
	Promoter	
	SureVector CBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector SBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector Thioredoxin	No known significant effects or critical hazards.
	Expression Tag C-Term	
	SureVector LacZ E. coli	No known significant effects or critical hazards.
	Control (C-term)	
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	: 5X SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	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	No known significant effects or critical hazards.
	Promoter	
	SureVector CBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector SBP Expression	No known significant effects or critical hazards.
	Tag C-Term	
	SureVector Thioredoxin	No known significant effects or critical hazards.
	Expression Tag C-Term	
	SureVector LacZ E. coli	No known significant effects or critical hazards.
	Control (C-term)	
SureVector Enzyme Mix	No known significant effects or critical hazards.	
10X SureVector Buffer	No known significant effects or critical hazards.	
dNTP Mix	No known significant effects or critical hazards.	
DpnI	No known significant effects or critical hazards.	

Section 11. Toxicological information

Reproductive toxicity	: <input checked="" type="checkbox"/> SureSolution	No known significant effects or critical hazards.
	SureVector AmpR	No known significant effects or critical hazards.
	Selectable Marker	
	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 CBP Expression Tag C-Term	No known significant effects or critical hazards.
	SureVector SBP Expression Tag C-Term	No known significant effects or critical hazards.
	SureVector Thioredoxin Expression Tag C-Term	No known significant effects or critical hazards.
	SureVector LacZ E. coli Control (C-term)	No known significant effects or critical hazards.
	SureVector Enzyme Mix	No known significant effects or critical hazards.
	10X SureVector Buffer	No known significant effects or critical hazards.
	dNTP Mix	No known significant effects or critical hazards.
	Dpnl	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
5X SureSolution					
Dimethyl sulfoxide	14500	40000	N/A	N/A	N/A
SureVector Enzyme Mix					
Glycerol	12600	N/A	N/A	N/A	N/A
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	2800	N/A	N/A	N/A	N/A
10X SureVector Buffer					
10X SureVector Buffer	41044.5	N/A	N/A	N/A	N/A
Potassium chloride	2600	N/A	N/A	N/A	N/A
Ammonium sulphate	2840	N/A	N/A	N/A	N/A
Polyoxyethylene octyl phenyl ether	1800	N/A	N/A	N/A	N/A
Dpnl					
Dpnl	128314.8	N/A	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
Sodium chloride	3000	N/A	N/A	N/A	N/A

Section 12. Ecological information

Toxicity

Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
5X SureSolution Dimethyl sulfoxide	Acute LC50 25000 ppm Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 34000000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
	Chronic NOEC 100 µl/L Marine water	Algae - Ulva lactuca	72 hours
	Chronic NOEC 100 µl/L Fresh water	Daphnia - Daphnia magna - Juvenile (Fledgling, Hatchling, Weanling)	21 days
SureVector Enzyme Mix Glycerol Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 210 µg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - Pandalus montagui - Adult	48 hours
	Acute LC50 8600 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 7200 µg/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 83000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
Ammonium sulphate	Acute LC50 509.65 mg/l Fresh water	Fish - Danio rerio	96 hours
	Chronic NOEC 7.5 mg/l Marine water	Algae - Phaeodactylum tricornutum - Exponential growth phase	96 hours
Polyoxyethylene octyl phenyl ether	Acute LC50 5.85 mg/l Fresh water	Crustaceans - Ceriodaphnia rigaudi - Neonate	48 hours
	Acute LC50 11.2 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 4500 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Dpnl Glycerol Sodium chloride	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days	
Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks	

Persistence and degradability

Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
5X SureSolution Dimethyl sulfoxide	OECD 301D Ready Biodegradability - Closed Bottle Test	31 % - Not readily - 28 days	-	-
SureVector Enzyme Mix Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Dpnl Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

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

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
5X SureSolution Dimethyl sulfoxide	-1.35	3.16	low
SureVector Enzyme Mix Glycerol	-1.76	-	low
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	3.77	78.67	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

Mobility in soil

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

Section 12. Ecological information

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

Section 13. Disposal considerations

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

Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : All components are listed or exempted.

Europe : All components are listed or exempted.

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

Section 15. Regulatory information

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

Section 16. Other information

History

Date of issue/Date of revision	: 03/22/2022
Date of previous issue	: 08/02/2019
Version	: 4

Key to abbreviations

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

Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> SureSolution FLAMMABLE LIQUIDS - Category 4 EYE IRRITATION - Category 2B	On basis of test data On basis of test data
SureVector Enzyme Mix EYE IRRITATION - Category 2B	Calculation method
10X SureVector Buffer EYE IRRITATION - Category 2A	Calculation method
Dpnl EYE IRRITATION - Category 2A	Calculation method

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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