

SAFETY DATA SHEET



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

Section 1. Identification

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|--------------------------------|-------------------------------------------------------------------------|-----------|-----------|
| Product identifier | : SureVector E. coli C-terminal Promoter kit, 5 rxn, Part Number G7518C | | |
| Part No. (Chemical Kit) | : G7518C | | |
| 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 Tac E. coli Promoter | | 5190-8820 |
| | SureVector Rhamnose E. coli Promoter | | 5190-8822 |
| | SureVector HIS6 Expression Tag (C-Term) | | 5190-8823 |
| | SureVector LacZ E. coli Control (C-term) | 5190-7819 | |
| | SureVector Enzyme Mix | | 5190-8621 |
| | 10X SureVector Buffer | | 5190-8622 |
| | dNTP Mix | | 200518-56 |
| | DpnI | | 5190-8624 |

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

Analytical reagent.

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| 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 Tac E. coli Promoter | 0.01 ml (5 reactions) |
| SureVector Rhamnose E. coli Promoter | 0.01 ml (5 reactions) |
| SureVector HIS6 Expression Tag (C-Term) | 0.01 ml (5 reactions) |
| SureVector LacZ E. coli Control (C-term) | 0.01 ml (5 reactions) |
| SureVector Enzyme Mix | 0.015 ml (15 reactions) |
| 10X SureVector Buffer | 0.03 ml (15 reactions) |
| dNTP Mix | 0.03 ml |
| DpnI | 0.015 ml (15 reactions) |

Supplier/Manufacturer : Agilent Technologies Australia Pty Ltd
679 Springvale Road
Mulgrave
Victoria 3170, Australia
1800 802 402

Emergency telephone number (with hours of operation) : CHEMTREC®: +(61)-290372994

Section 2. Hazard(s) identification

Classification of the substance or mixture

| | |
|--------------------------------------|-------------------------------------------------|
| 5X SureSolution H227 | FLAMMABLE LIQUIDS - Category 4 |
| 10X SureVector Buffer H319 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A |

Section 2. Hazard(s) identification

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| <p>SureVector Enzyme Mix</p> <p>10X SureVector Buffer</p> <p>dNTP Mix</p> <p>DpnI</p> <p>10X SureVector Buffer</p> <p>dNTP Mix</p> | <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 3.2%</p> <p>Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5.7%</p> |
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GHS label elements
Hazard pictograms

: 10X SureVector Buffer



Signal word

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| <p>5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector Tac E. coli Promoter SureVector Rhamnose E. coli Promoter SureVector HIS6 Expression Tag (C-Term) SureVector LacZ E. coli Control (C-term) SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI</p> | <p>WARNING</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>No signal word.</p> <p>WARNING</p> <p>No signal word.</p> <p>No signal word.</p> |
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Hazard statements

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| <p>5X SureSolution SureVector AmpR Selectable Marker SureVector pUC Origin SureVector XP1 Linker SureVector LacI Repressor SureVector T7 E. coli Promoter SureVector Tac E. coli Promoter SureVector Rhamnose E. coli Promoter SureVector HIS6 Expression Tag (C-Term)</p> | <p>H227 - Combustible liquid.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> <p>No known significant effects or critical hazards.</p> |
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Section 2. Hazard(s) identification

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| 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 | H319 - Causes serious eye irritation. |
| dNTP Mix | No known significant effects or critical hazards. |
| DpnI | No known significant effects or critical hazards. |

Precautionary statements

Prevention

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|----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| : <input checked="" type="checkbox"/> SureSolution | P280 - Wear protective gloves. Wear eye or face protection. P210 - Keep away from flames and hot surfaces. - 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 Tac E. coli Promoter | Not applicable. |
| SureVector Rhamnose E. coli Promoter | Not applicable. |
| SureVector HIS6 Expression Tag (C-Term) | Not applicable. |
| SureVector LacZ E. coli Control (C-term) | Not applicable. |
| SureVector Enzyme Mix | Not applicable. |
| 10X SureVector Buffer | P280 - Wear eye or face protection. P264 - Wash hands thoroughly after handling. |

Response

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| : <input checked="" type="checkbox"/> SureSolution | Not applicable. |
| SureVector AmpR Selectable Marker | Not applicable. |
| SureVector pUC Origin | Not applicable. |
| SureVector XP1 Linker | Not applicable. |
| SureVector LacI Repressor | Not applicable. |
| SureVector T7 E. coli Promoter | Not applicable. |
| SureVector Tac E. coli Promoter | Not applicable. |
| SureVector Rhamnose E. coli Promoter | Not applicable. |
| SureVector HIS6 Expression Tag (C-Term) | Not applicable. |
| SureVector LacZ E. coli Control (C-term) | Not applicable. |
| SureVector Enzyme Mix | Not applicable. |
| 10X SureVector Buffer | P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention. |
| dNTP Mix | Not applicable. |
| DpnI | Not applicable. |

Section 2. Hazard(s) identification

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| Storage | : <input checked="" type="checkbox"/> SureSolution | P403 - Store in a well-ventilated place. P235 - Keep cool. |
| | SureVector AmpR Selectable Marker | Not applicable. |
| | SureVector pUC Origin | Not applicable. |
| | SureVector XP1 Linker | Not applicable. |
| | SureVector LacI Repressor | Not applicable. |
| | SureVector T7 E. coli Promoter | Not applicable. |
| | SureVector Tac E. coli Promoter | Not applicable. |
| | SureVector Rhamnose E. coli Promoter | Not applicable. |
| | SureVector HIS6 Expression Tag (C-Term) | Not applicable. |
| | SureVector LacZ E. coli Control (C-term) | Not applicable. |
| | SureVector Enzyme Mix | Not applicable. |
| | 10X SureVector Buffer | Not applicable. |
| | dNTP Mix | Not applicable. |
| | DpnI | Not applicable. |
| Disposal | : <input checked="" type="checkbox"/> SureSolution | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| | SureVector AmpR Selectable Marker | Not applicable. |
| | SureVector pUC Origin | Not applicable. |
| | SureVector XP1 Linker | Not applicable. |
| | SureVector LacI Repressor | Not applicable. |
| | SureVector T7 E. coli Promoter | Not applicable. |
| | SureVector Tac E. coli Promoter | Not applicable. |
| | SureVector Rhamnose E. coli Promoter | Not applicable. |
| | SureVector HIS6 Expression Tag (C-Term) | Not applicable. |
| | SureVector LacZ E. coli Control (C-term) | Not applicable. |
| | SureVector Enzyme Mix | Not applicable. |
| | 10X SureVector Buffer | Not applicable. |
| | dNTP Mix | Not applicable. |
| | DpnI | Not applicable. |
| Supplemental label elements | : <input checked="" type="checkbox"/> SureSolution | Not applicable. |
| | SureVector AmpR Selectable Marker | Not applicable. |
| | SureVector pUC Origin | Not applicable. |
| | SureVector XP1 Linker | Not applicable. |
| | SureVector LacI Repressor | Not applicable. |
| | SureVector T7 E. coli Promoter | Not applicable. |
| | SureVector Tac E. coli Promoter | Not applicable. |
| | SureVector Rhamnose E. coli Promoter | Not applicable. |
| | SureVector HIS6 Expression Tag (C-Term) | Not applicable. |
| | SureVector LacZ E. coli Control (C-term) | Not applicable. |
| | SureVector Enzyme Mix | Not applicable. |
| | 10X SureVector Buffer | Not applicable. |
| | dNTP Mix | Not applicable. |

Section 2. Hazard(s) identification

DpnI Not applicable.

Other hazards which do not result in classification :

- SureSolution None known.
- SureVector AmpR None known.
- Selectable Marker
- SureVector pUC Origin None known.
- SureVector XP1 Linker None known.
- SureVector LacI Repressor None known.
- SureVector T7 E. coli Promoter None known.
- SureVector Tac E. coli Promoter None known.
- SureVector Rhamnose E. coli Promoter None known.
- SureVector HIS6 Expression Tag (C-Term) None known.
- SureVector LacZ E. coli Control (C-term) None known.
- SureVector Enzyme Mix 10X SureVector Buffer dNTP Mix DpnI None known.

Section 3. Composition and ingredient information

Substance/mixture :

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

CAS number/other identifiers

| Ingredient name | % (w/w) | CAS number |
|------------------------------------------------------------------------|-----------|------------|
| <input checked="" type="checkbox"/> SureSolution Dimethyl sulfoxide | 100 | 67-68-5 |
| SureVector Enzyme Mix Glycerol | ≥30 - ≤60 | 56-81-5 |
| 10X SureVector Buffer Polyoxyethylene octyl phenyl ether | ≤2.3 | 9002-93-1 |
| DpnI Glycerol | ≥30 - ≤60 | 56-81-5 |

Section 3. Composition and ingredient information

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

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| 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. Get medical attention if irritation occurs. |
| | 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 Tac 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 Rhamnose 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 HIS6 Expression Tag (C-Term) | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| | SureVector LacZ 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. Get medical attention if irritation occurs. |
| | 10X SureVector Buffer | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. |
| | dNTP Mix | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. |
| | Dpnl | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. |

Section 4. First aid measures

Inhalation

: 5X SureSolution

Check for and remove any contact lenses. Get medical attention if irritation occurs.

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

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7 E. coli Promoter

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

SureVector Tac E. coli Promoter

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

SureVector Rhamnose E. coli Promoter

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

SureVector HIS6 Expression Tag (C-Term)

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

SureVector LacZ E. coli Control (C-term)

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

SureVector Enzyme Mix

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

10X SureVector Buffer

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

dNTP Mix

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

Section 4. First aid measures

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| | DpnI | under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. |
| 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 Tac E. coli Promoter | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | SureVector Rhamnose E. coli Promoter | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | SureVector HIS6 Expression Tag (C-Term) | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | SureVector LacZ E. coli Control (C-term) | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | SureVector Enzyme Mix | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | 10X SureVector Buffer | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| | dNTP Mix | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | DpnI | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| Ingestion | : 5X SureSolution | Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, |

Section 4. First aid measures

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| SureVector AmpR Selectable Marker | belt or waistband. Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector pUC Origin | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector XP1 Linker | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector LacI Repressor | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector T7 E. coli Promoter | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector Tac E. coli Promoter | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector Rhamnose E. coli Promoter | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector HIS6 Expression Tag (C-Term) | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureVector LacZ E. coli Control (C-term) | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Section 4. First aid measures

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

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

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|----------------------------------------------------|---------------------------------------------------|
| : <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| SureVector Enzyme Mix | No known significant effects or critical hazards. |
| 10X SureVector Buffer | Causes serious eye irritation. |
| dNTP Mix | No known significant effects or critical hazards. |
| DpnI | No known significant effects or critical hazards. |

Section 4. First aid measures

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|------------------------------------------|---------------------------------------------------|--------------------------------------------------|---------------------------------------------------|
| Inhalation | : | <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |
| | | Skin contact | : |
| 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 Tac E. coli Promoter | No known significant effects or critical hazards. | | |
| SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. | | |
| SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. | | |
| SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. | | |
| SureVector Enzyme Mix | No known significant effects or critical hazards. | | |
| 10X SureVector Buffer | No known significant effects or critical hazards. | | |
| dNTP Mix | No known significant effects or critical hazards. | | |
| DpnI | No known significant effects or critical hazards. | | |
| Ingestion | : | | |
| | | 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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |

Over-exposure signs/symptoms

Section 4. First aid measures

| | | | | | |
|------------------------------------------|-------------------|--------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------|-------------------|
| Eye contact | : | <input checked="" type="checkbox"/> 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 Promoter | No specific data. | | |
| | | SureVector Tac E. coli Promoter | No specific data. | | |
| | | SureVector Rhamnose E. coli Promoter | No specific data. | | |
| | | SureVector HIS6 Expression Tag (C-Term) | No specific data. | | |
| | | SureVector LacZ E. coli Control (C-term) | No specific data. | | |
| | | SureVector Enzyme Mix | No specific data. | | |
| | | 10X SureVector Buffer | Adverse symptoms may include the following: pain or irritation watering redness | | |
| | | dNTP Mix | No specific data. | | |
| | | DpnI | No specific data. | | |
| | | Inhalation | : | <input checked="" type="checkbox"/> 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 Promoter | No specific data. | | | | |
| SureVector Tac E. coli Promoter | No specific data. | | | | |
| SureVector Rhamnose E. coli Promoter | No specific data. | | | | |
| SureVector HIS6 Expression Tag (C-Term) | No specific data. | | | | |
| SureVector LacZ E. coli Control (C-term) | No specific data. | | | | |
| SureVector Enzyme Mix | No specific data. | | | | |
| 10X SureVector Buffer | No specific data. | | | | |
| dNTP Mix | No specific data. | | | | |
| DpnI | No specific data. | | | | |
| Skin contact | : | | | <input checked="" type="checkbox"/> 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 Promoter | No specific data. | | |
| | | SureVector Tac E. coli Promoter | No specific data. | | |
| | | SureVector Rhamnose E. coli Promoter | No specific data. | | |
| | | SureVector HIS6 Expression Tag (C-Term) | No specific data. | | |
| | | SureVector LacZ E. coli Control (C-term) | No specific data. | | |
| | | SureVector Enzyme Mix | No specific data. | | |
| | | 10X SureVector Buffer | No specific data. | | |
| | | dNTP Mix | No specific data. | | |
| | | DpnI | No specific data. | | |

Section 4. First aid measures

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

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 | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | Selectable Marker | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector pUC Origin | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector XP1 Linker | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector LacI Repressor | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector T7 E. coli Promoter | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector Tac E. coli Promoter | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector Rhamnose E. coli Promoter | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector HIS6 Expression Tag (C-Term) | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector LacZ E. coli Control (C-term) | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureVector Enzyme Mix | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | 10X SureVector Buffer | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| | dNTP Mix | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |

Section 4. First aid measures

| | | |
|-----------------------------------|----------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | DpnI | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : <input checked="" type="checkbox"/> SureSolution | No specific treatment. |
| | SureVector AmpR | No specific treatment. |
| | Selectable Marker | |
| | SureVector pUC Origin | No specific treatment. |
| | SureVector XP1 Linker | No specific treatment. |
| | SureVector LacI Repressor | No specific treatment. |
| | SureVector T7 E. coli Promoter | No specific treatment. |
| | SureVector Tac E. coli Promoter | No specific treatment. |
| | SureVector Rhamnose E. coli Promoter | No specific treatment. |
| | SureVector HIS6 Expression Tag (C-Term) | No specific treatment. |
| | SureVector LacZ E. coli Control (C-term) | No specific treatment. |
| | SureVector Enzyme Mix | No specific treatment. |
| | 10X SureVector Buffer | No specific treatment. |
| | dNTP Mix | No specific treatment. |
| | DpnI | No specific treatment. |
| Protection of first-aiders | : <input checked="" type="checkbox"/> 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 | No action shall be taken involving any personal risk or without suitable training. |
| | Selectable Marker | |
| | SureVector pUC Origin | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector XP1 Linker | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector LacI Repressor | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector T7 E. coli Promoter | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector Tac E. coli Promoter | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector Rhamnose E. coli Promoter | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector HIS6 Expression Tag (C-Term) | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector LacZ E. coli Control (C-term) | No action shall be taken involving any personal risk or without suitable training. |
| | SureVector Enzyme Mix | No action shall be taken involving any personal risk or without suitable training. |
| | 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. |

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

| | | |
|-------------------------------------|------------------------------------------|----------------------------------------------------------------|
| Suitable extinguishing media | : 5X SureSolution | Use dry chemical, CO ₂ , water spray (fog) or foam. |
| | SureVector AmpR | Use an extinguishing agent suitable for the surrounding fire. |
| | 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. |
| | SureVector Tac E. coli Promoter | Use an extinguishing agent suitable for the surrounding fire. |
| | SureVector Rhamnose E. coli Promoter | Use an extinguishing agent suitable for the surrounding fire. |
| | SureVector HIS6 Expression Tag (C-Term) | Use an extinguishing agent suitable for the surrounding fire. |
| | SureVector LacZ 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 | None known. |
| | Selectable Marker | None known. |
| | SureVector pUC Origin | None known. |
| | SureVector XP1 Linker | None known. |
| | SureVector LacI Repressor | None known. |
| | SureVector T7 E. coli Promoter | None known. |
| | SureVector Tac E. coli Promoter | None known. |
| | SureVector Rhamnose E. coli Promoter | None known. |
| | SureVector HIS6 Expression Tag (C-Term) | None known. |
| | SureVector LacZ E. coli Control (C-term) | None known. |
| | SureVector Enzyme Mix | None known. |
| | 10X SureVector Buffer | None known. |
| | dNTP Mix | None known. |
| | DpnI | None known. |

| | | |
|---------------------------------------------------|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Specific hazards arising from the chemical | : 5X SureSolution | Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. |
| | SureVector AmpR | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | 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 |

Section 5. Firefighting measures

Hazardous thermal decomposition products

| | |
|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SureVector LacI Repressor | and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. |
| SureVector T7 E. coli Promoter | In a fire or if heated, a pressure increase will occur and the container may burst. |
| SureVector Tac E. coli Promoter | In a fire or if heated, a pressure increase will occur and the container may burst. |
| SureVector Rhamnose E. coli Promoter | In a fire or if heated, a pressure increase will occur and the container may burst. |
| SureVector HIS6 Expression Tag (C-Term) | In a fire or if heated, a pressure increase will occur and the container may burst. |
| SureVector LacZ E. coli Control (C-term) | In a fire or if heated, a pressure increase will occur and the container may burst. |
| SureVector Enzyme Mix | In a fire or if heated, a pressure increase will occur and the container may burst. |
| 10X SureVector Buffer | In a fire or if heated, a pressure increase will occur and the container may burst. |
| dNTP Mix | In a fire or if heated, a pressure increase will occur and the container may burst. |
| DpnI | In a fire or if heated, a pressure increase will occur and the container may burst. |
| ☒ 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 Tac E. coli Promoter | No specific data. |
| SureVector Rhamnose E. coli Promoter | No specific data. |
| SureVector HIS6 Expression Tag (C-Term) | No specific data. |
| SureVector LacZ E. coli Control (C-term) | No specific data. |
| SureVector Enzyme Mix | Decomposition products may include the following materials: carbon dioxide carbon monoxide |
| 10X SureVector Buffer | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides |
| dNTP Mix | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides |
| DpnI | Decomposition products may include the following materials: carbon dioxide carbon monoxide |

Section 5. Firefighting measures

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 without suitable training.

SureVector pUC Origin

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

SureVector XP1 Linker

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

SureVector LacI Repressor

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

SureVector T7 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 Tac 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 Rhamnose 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 HIS6 Expression
Tag (C-Term)

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

SureVector LacZ 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.

Section 5. Firefighting measures

Special protective equipment for fire-fighters

| | |
|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| :  SureSolution | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| SureVector AmpR Selectable Marker | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| SureVector pUC Origin | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| SureVector XP1 Linker | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| SureVector LacI Repressor | Fire-fighters should wear appropriate protective 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 Tac 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 Rhamnose 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 HIS6 Expression Tag (C-Term) | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive 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

: 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 spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

SureVector AmpR Selectable Marker

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

SureVector T7 E. coli Promoter

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

SureVector Tac E. coli Promoter

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

SureVector Rhamnose E. coli Promoter

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

SureVector HIS6 Expression Tag (C-Term)

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

SureVector LacZ E. coli 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

Section 6. Accidental release measures

| | |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | through spilt 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 spilt material. Put on appropriate personal protective equipment. |
| 10X SureVector Buffer | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| dNTP Mix | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment. |
| DpnI | 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 spilt material. Put on appropriate personal protective equipment. |
| For emergency responders : 5X SureSolution | If specialised 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 specialised 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 specialised 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 specialised 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 specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| SureVector T7 E. coli Promoter | If specialised 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 Tac E. coli Promoter | If specialised 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 Rhamnose E. coli Promoter | If specialised 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 HIS6 Expression Tag (C-Term) | If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the |

Section 6. Accidental release measures

| | |
|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| SureVector LacZ E. coli Control (C-term) | information in "For non-emergency personnel". If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| SureVector Enzyme Mix | If specialised 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 specialised 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 specialised 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 specialised 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 :  SureSolution | Avoid dispersal of spilt 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 spilt 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 spilt 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 spilt 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 spilt 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 spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| SureVector Tac E. coli Promoter | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| SureVector Rhamnose E. coli Promoter | Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| SureVector HIS6 Expression | Avoid dispersal of spilt material and runoff and |

Section 6. Accidental release measures

| | |
|------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Tag (C-Term) | contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| SureVector LacZ E. coli Control (C-term) | Avoid dispersal of spilt 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 spilt 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 spilt 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 spilt 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 spilt 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 material for containment and cleaning up

Methods for cleaning up :  SureSolution

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



Section 6. Accidental release measures

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

Section 7. Handling and storage

[Precautions for safe handling](#)

Section 7. Handling and storage

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

Section 7. Handling and storage

| | |
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| | 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 Tac 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 Rhamnose 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 HIS6 Expression Tag (C-Term) | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| SureVector LacZ E. coli Control (C-term) | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| SureVector Enzyme Mix | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. |
| 10X SureVector Buffer | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and |

Section 7. Handling and storage

dNTP Mix

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

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

DpnI

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

Conditions for safe storage, including any incompatibilities :  SureSolution

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

SureVector AmpR Selectable Marker

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

SureVector pUC Origin

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

SureVector XP1 Linker

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

Section 7. Handling and storage

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

Section 7. Handling and storage

10X SureVector Buffer

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 unlabelled containers. Use appropriate containment to avoid environmental contamination.

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

dNTP Mix

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

Dpnl

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

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

| Ingredient name | Exposure limits |
|------------------------------------------|---------------------------------------------------------------------------------------|
| SureVector Enzyme Mix Glycerol | Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours. |
| Dpnl Glycerol | Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours. |

Appropriate engineering controls

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

Environmental exposure controls

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

Section 8. Exposure controls and personal protection

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

Appearance

- Physical state** :
- | | |
|--------------------------------------------------|------------------|
| <input checked="" type="checkbox"/> SureSolution | Liquid. [Clear.] |
| SureVector AmpR | Liquid. |
| Selectable Marker | |
| SureVector pUC Origin | Liquid. |
| SureVector XP1 Linker | Liquid. |
| SureVector LacI Repressor | Liquid. |
| SureVector T7 E. coli | Liquid. |
| Promoter | |
| SureVector Tac E. coli | Liquid. |
| Promoter | |
| SureVector Rhamnose E. coli | Liquid. |
| Promoter | |
| SureVector HIS6 Expression | Liquid. |
| Tag (C-Term) | |
| SureVector LacZ E. coli | Liquid. |
| Control (C-term) | |
| SureVector Enzyme Mix | Liquid. |
| 10X SureVector Buffer | Liquid. |
| dNTP Mix | Liquid. |
| DpnI | Liquid. |
- Colour** :
- | | |
|--------------------------------------------------|----------------|
| <input checked="" type="checkbox"/> 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. |

Section 9. Physical and chemical properties

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|------------------------|----------------------------------------------------|---------------------|
| | Promoter | |
| | SureVector Tac E. coli | Not available. |
| | Promoter | |
| | SureVector Rhamnose E. coli | Not available. |
| | Promoter | |
| | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Odour | : <input checked="" type="checkbox"/> SureSolution | Odourless. [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 Tac E. coli | Not available. |
| | Promoter | |
| | SureVector Rhamnose E. coli | Not available. |
| | Promoter | |
| | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Odour threshold | : <input checked="" type="checkbox"/> 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 Tac E. coli | Not available. |
| | Promoter | |
| | SureVector Rhamnose E. coli | Not available. |
| | Promoter | |
| | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| pH | : <input checked="" type="checkbox"/> 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 Tac E. coli | 8 |
| | Promoter | |

Section 9. Physical and chemical properties

| | | |
|----------------------|----------------------------------------------------|----------------------------|
| | SureVector Rhamnose E. coli Promoter | 8 |
| | SureVector HIS6 Expression Tag (C-Term) | 8 |
| | SureVector LacZ E. coli Control (C-term) | 8 |
| | SureVector Enzyme Mix | 8.2 |
| | 10X SureVector Buffer | 8.8 |
| | dNTP Mix | 7.5 |
| | DpnI | 7.5 |
| Melting point | : <input checked="" type="checkbox"/> 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 Promoter | 0°C (32°F) |
| | SureVector Tac E. coli Promoter | 0°C (32°F) |
| | SureVector Rhamnose E. coli Promoter | 0°C (32°F) |
| | SureVector HIS6 Expression Tag (C-Term) | 0°C (32°F) |
| | SureVector LacZ E. coli Control (C-term) | 0°C (32°F) |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Boiling point | : <input checked="" type="checkbox"/> 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 Promoter | 100°C (212°F) |
| | SureVector Tac E. coli Promoter | 100°C (212°F) |
| | SureVector Rhamnose E. coli Promoter | 100°C (212°F) |
| | SureVector HIS6 Expression Tag (C-Term) | 100°C (212°F) |
| | SureVector LacZ E. coli Control (C-term) | 100°C (212°F) |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Flash point | : <input checked="" type="checkbox"/> SureSolution | Closed cup: 87°C (188.6°F) |
| | SureVector AmpR | 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 Tac E. coli Promoter | Not available. |
| | SureVector Rhamnose E. coli Promoter | Not available. |
| | SureVector HIS6 Expression | Not available. |

Section 9. Physical and chemical properties

| | | |
|-----------------------------------------------------|----------------------------------------------------|-----------------------------|
| | Tag (C-Term) | |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Evaporation rate | : <input checked="" type="checkbox"/> SureSolution | 0.026 (butyl acetate = 1) |
| | SureVector AmpR | 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 Tac E. coli Promoter | Not available. |
| | SureVector Rhamnose E. coli Promoter | Not available. |
| | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Flammability (solid, gas) | : <input checked="" type="checkbox"/> 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 Tac E. coli Promoter | Not applicable. |
| | SureVector Rhamnose E. coli Promoter | Not applicable. |
| | SureVector HIS6 Expression Tag (C-Term) | Not applicable. |
| | SureVector LacZ E. coli Control (C-term) | Not applicable. |
| | SureVector Enzyme Mix | Not applicable. |
| | 10X SureVector Buffer | Not applicable. |
| | dNTP Mix | Not applicable. |
| | DpnI | Not applicable. |
| Lower and upper explosive (flammable) limits | : <input checked="" type="checkbox"/> 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 Promoter | Not available. |
| | SureVector Tac E. coli Promoter | Not available. |
| | SureVector Rhamnose E. coli Promoter | Not available. |
| | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | SureVector LacZ E. coli | Not available. |

Section 9. Physical and chemical properties

| | | | |
|-------------------------|---|--------------------------------------------------|-------------------------------------------|
| | | Control (C-term) | |
| | | SureVector Enzyme Mix | Not available. |
| | | 10X SureVector Buffer | Not available. |
| | | dNTP Mix | Not available. |
| | | DpnI | Not available. |
| Vapour pressure | : | <input checked="" type="checkbox"/> SureSolution | 0.056 kPa (0.42 mm Hg) [room temperature] |
| | | 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 Tac E. coli Promoter | Not available. |
| | | SureVector Rhamnose E. coli Promoter | Not available. |
| | | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | | SureVector LacZ E. coli Control (C-term) | Not available. |
| | | SureVector Enzyme Mix | Not available. |
| | | 10X SureVector Buffer | Not available. |
| | | dNTP Mix | Not available. |
| | | DpnI | Not available. |
| Vapour density | : | <input checked="" type="checkbox"/> 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 Tac E. coli Promoter | Not available. |
| | | SureVector Rhamnose E. coli Promoter | Not available. |
| | | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | | SureVector LacZ E. coli Control (C-term) | Not available. |
| | | SureVector Enzyme Mix | Not available. |
| | | 10X SureVector Buffer | Not available. |
| | | dNTP Mix | Not available. |
| | | DpnI | Not available. |
| Relative density | : | <input checked="" type="checkbox"/> SureSolution | 1.1 |
| | | 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 Tac E. coli Promoter | Not available. |
| | | SureVector Rhamnose E. coli Promoter | Not available. |
| | | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | | SureVector LacZ E. coli Control (C-term) | Not available. |
| | | SureVector Enzyme Mix | Not available. |
| | | 10X SureVector Buffer | Not available. |

Section 9. Physical and chemical properties

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

Section 9. Physical and chemical properties

| | | |
|----------------------------------|--------------------------------------------------|--------------------------------------------------|
| | Tag (C-Term) | |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Decomposition temperature | <input checked="" type="checkbox"/> SureSolution | 140 to 189°C (284 to 372.2°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 Promoter | Not available. |
| | SureVector Tac E. coli Promoter | Not available. |
| | SureVector Rhamnose E. coli Promoter | Not available. |
| | SureVector HIS6 Expression | Not available. |
| | Tag (C-Term) | |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |
| Viscosity | <input checked="" type="checkbox"/> SureSolution | Dynamic (room temperature): 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 Tac E. coli Promoter | Not available. |
| | SureVector Rhamnose E. coli Promoter | Not available. |
| | SureVector HIS6 Expression | Not available. |
| | Tag (C-Term) | |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Not available. |
| | 10X SureVector Buffer | Not available. |
| | dNTP Mix | Not available. |
| | DpnI | Not available. |


Section 10. Stability and reactivity

| | | |
|-------------------|--------------------------------------------------|--------------------------------------------------------------------------------------------|
| Reactivity | <input checked="" type="checkbox"/> 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 Tac E. coli Promoter | No specific test data related to reactivity available for this product or its ingredients. |


Section 10. Stability and reactivity

| | |
|------------------------------------------|--------------------------------------------------------------------------------------------|
| SureVector Rhamnose E. coli Promoter | No specific test data related to reactivity available for this product or its ingredients. |
| SureVector HIS6 Expression Tag (C-Term) | No specific test data related to reactivity available for this product or its ingredients. |
| SureVector LacZ E. coli Control (C-term) | No specific test data related to reactivity available for this product or its ingredients. |
| SureVector Enzyme Mix | No specific test data related to reactivity available for this product or its ingredients. |
| 10X SureVector Buffer | No specific test data related to reactivity available for this product or its ingredients. |
| dNTP Mix | No specific test data related to reactivity available for this product or its ingredients. |
| DpnI | No specific test data related to reactivity available for this product or its ingredients. |

Chemical stability




| | |
|--------------------------------------------------------------------------------------------------|------------------------|
| :  SureSolution | The product is stable. |
| SureVector AmpR Selectable Marker | The product is stable. |
| SureVector pUC Origin | The product is stable. |
| SureVector XP1 Linker | The product is stable. |
| SureVector LacI Repressor | The product is stable. |
| SureVector T7 E. coli Promoter | The product is stable. |
| SureVector Tac E. coli Promoter | The product is stable. |
| SureVector Rhamnose E. coli Promoter | The product is stable. |
| SureVector HIS6 Expression Tag (C-Term) | The product is stable. |
| SureVector LacZ E. coli Control (C-term) | The product is stable. |
| SureVector Enzyme Mix | The product is stable. |
| 10X SureVector Buffer | The product is stable. |
| dNTP Mix | The product is stable. |
| DpnI | The product is stable. |

Possibility of hazardous reactions

| | |
|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| :  SureSolution | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector AmpR Selectable Marker | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector pUC Origin | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector XP1 Linker | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector LacI Repressor | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector T7 E. coli Promoter | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector Tac E. coli Promoter | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector Rhamnose E. coli Promoter | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector HIS6 Expression Tag (C-Term) | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector LacZ E. coli Control (C-term) | Under normal conditions of storage and use, hazardous reactions will not occur. |
| SureVector Enzyme Mix | Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10X SureVector Buffer | Under normal conditions of storage and use, hazardous reactions will not occur. |
| dNTP Mix | Under normal conditions of storage and use, hazardous reactions will not occur. |
| DpnI | Under normal conditions of storage and use, |

Section 10. Stability and reactivity

hazardous reactions will not occur.

| | | |
|-----------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Conditions to avoid | :  SureSolution | Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapour to accumulate in low or confined areas. No specific data. |
| | SureVector AmpR Selectable Marker | No specific data. |
| | SureVector pUC Origin | No specific data. |
| | SureVector XP1 Linker | No specific data. |
| | SureVector LacI Repressor | No specific data. |
| | SureVector T7 E. coli Promoter | No specific data. |
| | SureVector Tac E. coli Promoter | No specific data. |
| | SureVector Rhamnose E. coli Promoter | No specific data. |
| | SureVector HIS6 Expression Tag (C-Term) | No specific data. |
| | SureVector LacZ E. coli Control (C-term) | No specific data. |
| | SureVector Enzyme Mix | No specific data. |
| | 10X SureVector Buffer | No specific data. |
| | dNTP Mix | No specific data. |
| | DpnI | No specific data. |
| Incompatible materials | :  SureSolution | Reactive or incompatible with the following materials: oxidizing materials May react or be incompatible with oxidising materials. |
| | SureVector AmpR Selectable Marker | May react or be incompatible with oxidising materials. |
| | SureVector pUC Origin | May react or be incompatible with oxidising materials. |
| | SureVector XP1 Linker | May react or be incompatible with oxidising materials. |
| | SureVector LacI Repressor | May react or be incompatible with oxidising materials. |
| | SureVector T7 E. coli Promoter | May react or be incompatible with oxidising materials. |
| | SureVector Tac E. coli Promoter | May react or be incompatible with oxidising materials. |
| | SureVector Rhamnose E. coli Promoter | May react or be incompatible with oxidising materials. |
| | SureVector HIS6 Expression Tag (C-Term) | May react or be incompatible with oxidising materials. |
| | SureVector LacZ E. coli Control (C-term) | May react or be incompatible with oxidising materials. |
| | SureVector Enzyme Mix | May react or be incompatible with oxidising materials. |
| | 10X SureVector Buffer | May react or be incompatible with oxidising materials. |
| | dNTP Mix | May react or be incompatible with oxidising materials. |
| | DpnI | May react or be incompatible with oxidising materials. |
| Hazardous decomposition products | :  SureSolution | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| | SureVector AmpR Selectable Marker | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| | SureVector pUC Origin | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| | SureVector XP1 Linker | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| | SureVector LacI Repressor | Under normal conditions of storage and use, |

Section 10. Stability and reactivity

| | |
|------------------------------------------|------------------------------------------------------------------------------------------------------|
| SureVector T7 E. coli Promoter | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| SureVector Tac E. coli Promoter | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| SureVector Rhamnose E. coli Promoter | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| SureVector HIS6 Expression Tag (C-Term) | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| SureVector LacZ E. coli Control (C-term) | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| SureVector Enzyme Mix | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| 10X SureVector Buffer | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| dNTP Mix | Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| 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 LD50 Oral | Rat Rat | 40000 mg/kg 14500 mg/kg | - - |
| SureVector Enzyme Mix Glycerol | LD50 Oral | Rat | 12600 mg/kg | - |
| 10X SureVector Buffer Polyoxyethylene octyl phenyl ether | LD50 Oral | Rat | 1800 mg/kg | - |
| DpnI Glycerol | LD50 Oral | Rat | 12600 mg/kg | - |

Irritation/Corrosion

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

Section 11. Toxicological information

| | | | | | |
|--------------------------------------------------------------------|--------------------------|--------|---|--------------------------|---|
| Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| 10X SureVector Buffer Polyoxyethylene octyl phenyl ether | Eyes - Moderate irritant | Rabbit | - | 24 hours 10 microliters | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 microliters | - |
| Dpnl Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 milligrams | - |

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

| | | |
|-------------------------------------------------|--------------------------------------------------------|--------------------------------------------------------|
| Information on likely routes of exposure | 5X SureSolution | Routes of entry anticipated: Oral, Dermal, Inhalation. |
| | 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 Tac E. coli Promoter | Not available. |
| | SureVector Rhamnose E. coli Promoter | Not available. |
| | SureVector HIS6 Expression Tag (C-Term) | Not available. |
| | SureVector LacZ E. coli Control (C-term) | Not available. |
| | SureVector Enzyme Mix | Routes of entry anticipated: Oral, Dermal, Inhalation. |
| | 10X SureVector Buffer | Routes of entry anticipated: Oral, Dermal, Inhalation. |
| dNTP Mix | Not available. | |
| Dpnl | Routes of entry anticipated: Oral, Dermal, Inhalation. | |

Potential acute health effects

Section 11. Toxicological information

| | | | |
|---------------------|---|--------------------------------------------------|---------------------------------------------------|
| Eye contact | : | <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | Causes serious eye irritation. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |
| Inhalation | : | <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |
| Skin contact | : | <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |

Section 11. Toxicological information

| | | | |
|------------------|---|--------------------------------------------------|---------------------------------------------------|
| Ingestion | : | <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

| | | | |
|--------------------|---|--------------------------------------------------|------------------------------------------------------------------------------------------|
| Eye contact | : | <input checked="" type="checkbox"/> SureSolution | 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 Promoter | No specific data. |
| | | SureVector Tac E. coli Promoter | No specific data. |
| | | SureVector Rhamnose E. coli Promoter | No specific data. |
| | | SureVector HIS6 Expression Tag (C-Term) | No specific data. |
| | | SureVector LacZ E. coli Control (C-term) | No specific data. |
| | | SureVector Enzyme Mix | No specific data. |
| | | 10X SureVector Buffer | Adverse symptoms may include the following: pain or irritation watering redness |
| | | dNTP Mix | No specific data. |
| | | DpnI | No specific data. |

| | | | |
|-------------------|---|--------------------------------------------------|-------------------|
| Inhalation | : | <input checked="" type="checkbox"/> 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 Promoter | No specific data. |
| | | SureVector Tac E. coli Promoter | No specific data. |
| | | SureVector Rhamnose E. coli Promoter | No specific data. |
| | | SureVector HIS6 Expression Tag (C-Term) | No specific data. |
| | | SureVector LacZ E. coli Control (C-term) | No specific data. |
| | | SureVector Enzyme Mix | No specific data. |
| | | 10X SureVector Buffer | No specific data. |

Section 11. Toxicological information

| | | |
|---------------------|----------------------------------------------------|-------------------|
| | dNTP Mix | No specific data. |
| | DpnI | No specific data. |
| Skin contact | : <input checked="" type="checkbox"/> 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 Tac E. coli | No specific data. |
| | Promoter | |
| | SureVector Rhamnose E. | No specific data. |
| | coli Promoter | |
| | SureVector HIS6 Expression | No specific data. |
| | 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 | : <input checked="" type="checkbox"/> 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 Tac E. coli | No specific data. |
| | Promoter | |
| | SureVector Rhamnose E. | No specific data. |
| | coli Promoter | |
| | SureVector HIS6 Expression | No specific data. |
| | 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. |

Delayed and immediate effects as well as 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

Not available.

Section 11. Toxicological information

| | | | |
|------------------------------------------|---------------------------------------------------|--------------------------------------------------|---------------------------------------------------|
| General | : | <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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |
| | | Carcinogenicity | : |
| 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 Tac E. coli Promoter | No known significant effects or critical hazards. | | |
| SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. | | |
| SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. | | |
| SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. | | |
| SureVector Enzyme Mix | No known significant effects or critical hazards. | | |
| 10X SureVector Buffer | No known significant effects or critical hazards. | | |
| dNTP Mix | No known significant effects or critical hazards. | | |
| DpnI | No known significant effects or critical hazards. | | |
| Mutagenicity | : | | |
| | | 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 Tac E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector Rhamnose E. coli Promoter | No known significant effects or critical hazards. |
| | | SureVector HIS6 Expression Tag (C-Term) | No known significant effects or critical hazards. |
| | | SureVector LacZ E. coli Control (C-term) | No known significant effects or critical hazards. |
| | | SureVector Enzyme Mix | No known significant effects or critical hazards. |
| | | 10X SureVector Buffer | No known significant effects or critical hazards. |
| | | dNTP Mix | No known significant effects or critical hazards. |
| | | DpnI | No known significant effects or critical hazards. |

Section 11. Toxicological information

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

Numerical measures of toxicity

Section 11. Toxicological information

Acute toxicity estimates

| Route | ATE value |
|-------------------------------|--------------|
| 10X SureVector Buffer Oral | 180000 mg/kg |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------------------------------------------|--------------------------------------|----------------------------------------------|----------|
| 5X SureSolution Dimethyl sulfoxide | Acute LC50 25000 ppm Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
| | Acute LC50 34000000 µg/l Fresh water | Fish - Pimephales promelas | 96 hours |
| | Chronic NOEC 100 µl/L Marine water | Algae - Ulva lactuca | 72 hours |
| SureVector Enzyme Mix Glycerol | Acute LC50 54000 mg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |
| 10X SureVector Buffer 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 | Acute LC50 54000 mg/l Fresh water | Fish - Oncorhynchus mykiss | 96 hours |

Persistence and degradability

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------------------------------------------|-------------------|------------|------------------|
| 10X SureVector Buffer 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 |
| 10X SureVector Buffer 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 minimised 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

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

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

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

6

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.
Canada : Not determined.
China : All components are listed or exempted.
Europe : All components are listed or exempted.

Section 15. Regulatory information

| | |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Japan | : <input checked="" type="checkbox"/> Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined. |
| Malaysia | : Not determined. |
| New Zealand | : <input checked="" type="checkbox"/> Not determined. |
| Philippines | : Not determined. |
| Republic of Korea | : Not determined. |
| Taiwan | : All components are listed or exempted. |
| Thailand | : <input checked="" type="checkbox"/> Not determined. |
| Turkey | : <input checked="" type="checkbox"/> Not determined. |
| United States | : All components are listed or exempted. |
| Viet Nam | : <input checked="" type="checkbox"/> Not determined. |

Section 16. Any other relevant information

History

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

Key to abbreviations

| |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| : ADG = Australian Dangerous Goods |
| : ATE = Acute Toxicity Estimate |
| : BCF = Bioconcentration Factor |
| : GHS = Globally Harmonized System of Classification and Labelling of Chemicals |
| : 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) |
| : NOHSC = National Occupational Health and Safety Commission |
| : SUSMP = Standard Uniform Schedule of Medicine and Poisons |
| : UN = United Nations |

Procedure used to derive the classification

| Classification | Justification |
|----------------------------------------------------------------------------------|-----------------------|
| <input checked="" type="checkbox"/> 5X SureSolution Flam. Liq. 4, H227 | On basis of test data |
| 10X SureVector Buffer Eye Irrit. 2A, H319 | Calculation method |

References : Not available.

Indicates information that has changed from previously issued version.

Notice to reader

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