

SAFETY DATA SHEET

Beta SureSelect Max Enzymatic Fragmentation Library Preparation Module, 16 Reactions, Part Number 5280-0061

Section 1. Identification

| | | | |
|--------------------------------|---|------------|--|
| Product identifier | : Beta SureSelect Max Enzymatic Fragmentation Library Preparation Module, 16 Reactions, Part Number 5280-0061 | | |
| Part no. (chemical kit) | : 5280-0061 | | |
| Part no. | : Frag/A-Tail Buffer | 7W0004-3P | |
| | : Frag/A-Tail Enzyme Mix | 7Z0006-1U | |
| | : Ligation Master Mix | 7Z0007-1V | |
| | : SureSelect Max MBC-Free Adaptor Oligo Mix | 52RD-0064 | |
| | : SureSelect Max MBC Adaptor Oligo Mix, ILM | 52RD-0065 | |
| | : Amplification Master Mix | 7K0014-384 | |

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

| | | | |
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| Identified uses | : Analytical reagent. For research use only. | | |
| | : Frag/A-Tail Buffer | 0.072 ml (16 reactions) | |
| | : Frag/A-Tail Enzyme Mix | 0.108 ml (16 reactions) | |
| | : Ligation Master Mix | 0.36 ml (16 reactions) | |
| | : SureSelect Max MBC-Free Adaptor Oligo Mix | 0.08 ml (16 reactions) | |
| | : SureSelect Max MBC Adaptor Oligo Mix, ILM | 0.08 ml (16 reactions) | |
| | : Amplification Master Mix | 0.45 ml (16reactions) | |
| Uses advised against | : Not for use in diagnostic procedures. | | |

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| Supplier/Manufacturer | : Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia 1800 802 402 |
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| Emergency telephone number (with hours of operation) | : CHEMTREC®: +(61)-290372994 |
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Section 2. Hazard(s) identification

Classification of the substance or mixture

| | |
|---------------------------------|---|
| Frag/A-Tail Buffer | |
| H302 | ACUTE TOXICITY (oral) - Category 4 |
| H371 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2 |
| H411 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 |
| Frag/A-Tail Enzyme Mix | |
| H320 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B |
| Ligation Master Mix | |
| H320 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B |
| Amplification Master Mix | |
| H302 | ACUTE TOXICITY (oral) - Category 4 |
| H315 | SKIN CORROSION/IRRITATION - Category 2 |
| H319 | SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A |
| H371 | SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2 |
| H412 | LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 |

Section 2. Hazard(s) identification

GHS label elements

Hazard pictograms

: Frag/A-Tail Buffer



Amplification Master Mix



Signal word

: Frag/A-Tail Buffer
Frag/A-Tail Enzyme Mix
Ligation Master Mix
SureSelect Max MBC-Free
Adaptor Oligo Mix
SureSelect Max MBC
Adaptor Oligo Mix, ILM
Amplification Master Mix

WARNING
WARNING
WARNING
No signal word.
No signal word.

Hazard statements

: Frag/A-Tail Buffer

Frag/A-Tail Enzyme Mix
Ligation Master Mix
SureSelect Max MBC-Free
Adaptor Oligo Mix
SureSelect Max MBC
Adaptor Oligo Mix, ILM
Amplification Master Mix

WARNING
H302 - Harmful if swallowed.
H371 - May cause damage to organs.
H411 - Toxic to aquatic life with long lasting effects.
H320 - Causes eye irritation.
H320 - Causes eye irritation.
No known significant effects or critical hazards.
No known significant effects or critical hazards.
H302 - Harmful if swallowed.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H371 - May cause damage to organs.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Frag/A-Tail Buffer

Frag/A-Tail Enzyme Mix
Ligation Master Mix
SureSelect Max MBC-Free
Adaptor Oligo Mix
SureSelect Max MBC
Adaptor Oligo Mix, ILM
Amplification Master Mix

P273 - Avoid release to the environment.
P260 - Do not breathe vapour.
P270 - Do not eat, drink or smoke when using this product.
P264 - Wash thoroughly after handling.
Not applicable.
Not applicable.
Not applicable.
Not applicable.
P280 - Wear protective gloves. Wear eye or face protection.
P273 - Avoid release to the environment.
P260 - Do not breathe vapour.
P270 - Do not eat, drink or smoke when using this product.

Response

: Frag/A-Tail Buffer
Frag/A-Tail Enzyme Mix

Ligation Master Mix

P391 - Collect spillage.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 - If eye irritation persists: Get medical advice or attention.
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Section 2. Hazard(s) identification

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| | | P337 + P313 - If eye irritation persists: Get medical advice or attention. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Not applicable. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Not applicable. |
| Storage | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. |
| Disposal | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. |
| Supplemental label elements | | |
| Additional warning phrases | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. |
| Other hazards which do not result in classification | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | None known. None known. None known. None known. None known. None known. None known. |

Section 3. Composition and ingredient information

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|--------------------------|--|-------------------------------|
| Substance/mixture | : Frag/A-Tail Buffer | Mixture |
| | Frag/A-Tail Enzyme Mix | Mixture |
| | Ligation Master Mix | Mixture |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Mixture |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Mixture Mixture Mixture |

CAS number/other identifiers

Section 3. Composition and ingredient information

| Ingredient name | % (w/w) | CAS number |
|---------------------------------|-----------|------------|
| Frag/A-Tail Buffer | | |
| Magnesium chloride | ≥10 - <25 | 7786-30-3 |
| tetramethylammonium chloride | <10 | 75-57-0 |
| Frag/A-Tail Enzyme Mix | | |
| Glycerol | ≥30 - ≤60 | 56-81-5 |
| Ligation Master Mix | | |
| Glycerol | ≥30 - ≤60 | 56-81-5 |
| 2,2' -oxybisethanol | ≥10 - ≤30 | 111-46-6 |
| Amplification Master Mix | | |
| Glycerol | ≥30 - ≤60 | 56-81-5 |
| Trometamol | ≤10 | 77-86-1 |
| tetramethylammonium chloride | <10 | 75-57-0 |

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

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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 | : Frag/A-Tail 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 following exposure or if feeling unwell. If necessary, call a poison center or physician. |
| | Frag/A-Tail Enzyme Mix | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention. |
| | Ligation Master Mix | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention. |
| | SureSelect Max MBC-Free Adaptor Oligo 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. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | 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. |
| | Amplification Master Mix | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. |

Section 4. First aid measures

Inhalation

: Frag/A-Tail Buffer

Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician.

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 following exposure or if feeling unwell. If necessary, call a poison center or physician. 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.

Frag/A-Tail Enzyme Mix

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

Ligation Master Mix

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

SureSelect Max MBC-Free
Adaptor Oligo Mix

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

SureSelect Max MBC
Adaptor Oligo Mix, ILM

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

Amplification Master Mix

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. 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.

Section 4. First aid measures

| | | |
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| Skin contact | : Frag/A-Tail Buffer | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| | Frag/A-Tail Enzyme Mix | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| | Ligation Master Mix | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. |
| | Amplification Master Mix | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Ingestion | : Frag/A-Tail Buffer | Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. 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. |
| | Frag/A-Tail Enzyme Mix | Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. |
| | Ligation Master Mix | Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never |

Section 4. First aid measures

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| SureSelect Max MBC-Free Adaptor Oligo Mix | Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureSelect Max MBC Adaptor Oligo Mix, ILM | Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| Amplification Master Mix | Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. 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. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

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|---|--|
| : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix | No known significant effects or critical hazards. Causes eye irritation. Causes eye irritation. No known significant effects or critical hazards. |
| SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | No known significant effects or critical hazards. Causes serious eye irritation. |

Inhalation

| | |
|---|--|
| : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | May cause damage to organs following a single exposure if inhaled. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. May cause damage to organs following a single exposure if inhaled. |
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Skin contact

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| : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | May cause damage to organs following a single exposure in contact with skin. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. May cause damage to organs following a single exposure in contact with skin. Causes skin irritation. |
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Section 4. First aid measures

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| Ingestion | : Frag/A-Tail Buffer | Harmful if swallowed. May cause damage to organs following a single exposure if swallowed. |
| | Frag/A-Tail Enzyme Mix | No known significant effects or critical hazards. |
| | Ligation Master Mix | No known significant effects or critical hazards. |
| | SureSelect Max MBC-Free | No known significant effects or critical hazards. |
| | Adaptor Oligo Mix | |
| | SureSelect Max MBC | No known significant effects or critical hazards. |
| | Adaptor Oligo Mix, ILM | |
| | Amplification Master Mix | Harmful if swallowed. May cause damage to organs following a single exposure if swallowed. |

Over-exposure signs/symptoms

| | | |
|---------------------|--------------------------|--|
| Eye contact | : Frag/A-Tail Buffer | No specific data. |
| | Frag/A-Tail Enzyme Mix | Adverse symptoms may include the following: irritation watering redness |
| | Ligation Master Mix | Adverse symptoms may include the following: irritation watering redness |
| | SureSelect Max MBC-Free | No specific data. |
| | Adaptor Oligo Mix | |
| | SureSelect Max MBC | No specific data. |
| | Adaptor Oligo Mix, ILM | |
| | Amplification Master Mix | Adverse symptoms may include the following: pain or irritation watering redness |
| Inhalation | : Frag/A-Tail Buffer | No specific data. |
| | Frag/A-Tail Enzyme Mix | No specific data. |
| | Ligation Master Mix | No specific data. |
| | SureSelect Max MBC-Free | No specific data. |
| | Adaptor Oligo Mix | |
| | SureSelect Max MBC | No specific data. |
| | Adaptor Oligo Mix, ILM | |
| | Amplification Master Mix | No specific data. |
| Skin contact | : Frag/A-Tail Buffer | No specific data. |
| | Frag/A-Tail Enzyme Mix | No specific data. |
| | Ligation Master Mix | No specific data. |
| | SureSelect Max MBC-Free | No specific data. |
| | Adaptor Oligo Mix | |
| | SureSelect Max MBC | No specific data. |
| | Adaptor Oligo Mix, ILM | |
| | Amplification Master Mix | Adverse symptoms may include the following: irritation redness |
| Ingestion | : Frag/A-Tail Buffer | No specific data. |
| | Frag/A-Tail Enzyme Mix | No specific data. |
| | Ligation Master Mix | No specific data. |
| | SureSelect Max MBC-Free | No specific data. |
| | Adaptor Oligo Mix | |
| | SureSelect Max MBC | No specific data. |
| | Adaptor Oligo Mix, ILM | |
| | Amplification Master Mix | No specific data. |

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

Section 4. First aid measures

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| Notes to physician | : Frag/A-Tail 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. |
| | Frag/A-Tail Enzyme Mix | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | Ligation Master Mix | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | Amplification Master 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. |
| Specific treatments | : Frag/A-Tail Buffer | No specific treatment. |
| | Frag/A-Tail Enzyme Mix | No specific treatment. |
| | Ligation Master Mix | No specific treatment. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | No specific treatment. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | No specific treatment. |
| | Amplification Master Mix | No specific treatment. |
| Protection of first-aiders | : Frag/A-Tail 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. |
| | Frag/A-Tail Enzyme Mix | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| | Ligation Master Mix | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | No action shall be taken involving any personal risk or without suitable training. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | No action shall be taken involving any personal risk or without suitable training. |
| | Amplification Master Mix | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

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| Suitable extinguishing media | : Frag/A-Tail Buffer | Use an extinguishing agent suitable for the surrounding fire. |
| | Frag/A-Tail Enzyme Mix | Use an extinguishing agent suitable for the surrounding fire. |
| | Ligation Master Mix | Use an extinguishing agent suitable for the surrounding fire. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Use an extinguishing agent suitable for the surrounding fire. |

Section 5. Firefighting measures

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| | SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. |
| Unsuitable extinguishing media | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | None known. None known. None known. None known. None known. None known. None known. |
| Specific hazards arising from the chemical | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. |
| Hazardous thermal decomposition products | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide No specific data. No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds |

Section 5. Firefighting measures

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| Special protective actions for fire-fighters | : Frag/A-Tail 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. |
| | Frag/A-Tail 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. |
| | Ligation Master 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. |
| | SureSelect Max MBC-Free Adaptor Oligo 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. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| Special protective equipment for fire-fighters | : Frag/A-Tail 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. |
| | Frag/A-Tail 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. |
| | Ligation Master Mix | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |
| Hazchem code | : Frag/A-Tail Buffer | •3Z |
| | Frag/A-Tail Enzyme Mix | Not available. |
| | Ligation Master Mix | Not available. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Not available. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | Not available. |
| Amplification Master Mix | Not available. | |

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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| For non-emergency personnel | : Frag/A-Tail 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. |
| | Frag/A-Tail 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| | Ligation Master 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| | SureSelect Max MBC-Free Adaptor Oligo 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. |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | 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. |
| | Amplification Master 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| For emergency responders | : Frag/A-Tail 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". |
| | Frag/A-Tail 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". |
| | Ligation Master 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". |
| | SureSelect Max MBC-Free Adaptor Oligo 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". |
| | SureSelect Max MBC | If specialised clothing is required to deal with the |

Section 6. Accidental release measures

| | |
|--------------------------|---|
| Adaptor Oligo Mix, ILM | spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| Amplification Master 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". |

| | |
|---|--|
| Environmental precautions : Frag/A-Tail 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). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage. |
| Frag/A-Tail 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). |
| Ligation Master 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). |
| SureSelect Max MBC-Free Adaptor Oligo 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). |
| SureSelect Max MBC Adaptor Oligo Mix, ILM | 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). |
| Amplification Master 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). Water polluting material. May be harmful to the environment if released in large quantities. |

Methods and material for containment and cleaning up

| | |
|---|---|
| Methods for cleaning up : Frag/A-Tail 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. |
| Frag/A-Tail 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. |
| Ligation Master 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. |
| SureSelect Max MBC-Free | Stop leak if without risk. Move containers from spill |

Section 6. Accidental release measures

| | |
|--|---|
| Adaptor Oligo Mix | 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. |
| SureSelect Max MBC Adaptor Oligo Mix, ILM | 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. |
| Amplification Master 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. |

Section 7. Handling and storage

[Precautions for safe handling](#)

| | | |
|----------------------------|--|--|
| Protective measures | : Frag/A-Tail Buffer | Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. |
| | Frag/A-Tail Enzyme Mix | 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. |
| | Ligation Master Mix | 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. |
| | SureSelect Max MBC-Free Adaptor Oligo Mix | Put on appropriate personal protective equipment (see Section 8). |
| | SureSelect Max MBC Adaptor Oligo Mix, ILM | Put on appropriate personal protective equipment (see Section 8). |
| | Amplification Master Mix | Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. 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. |

Section 7. Handling and storage

Advice on general occupational hygiene

: Frag/A-Tail Buffer

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

Frag/A-Tail 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.

Ligation Master 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.

SureSelect Max MBC-Free Adaptor Oligo 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.

SureSelect Max MBC Adaptor Oligo Mix, ILM

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.

Amplification Master 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.

Conditions for safe storage, including any incompatibilities

: Frag/A-Tail Buffer

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Frag/A-Tail Enzyme Mix

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

Section 7. Handling and storage

Ligation Master Mix

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

SureSelect Max MBC-Free Adaptor Oligo 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. See Section 10 for incompatible materials before handling or use.

SureSelect Max MBC Adaptor Oligo Mix, ILM

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. See Section 10 for incompatible materials before handling or use.

Amplification Master 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. Store locked up. 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. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls and personal protection

[Control parameters](#)

[Occupational exposure limits](#)

| Ingredient name | Exposure limits |
|---|--|
| Frag/A-Tail Enzyme Mix Glycerol | Safe Work Australia (Australia, 10/2022). TWA: 10 mg/m ³ 8 hours. |
| Ligation Master Mix Glycerol 2,2' -oxybisethanol | Safe Work Australia (Australia, 10/2022). TWA: 10 mg/m ³ 8 hours. Safe Work Australia (Australia, 10/2022). TWA: 23 ppm 8 hours. |

Section 8. Exposure controls and personal protection

| | |
|---|---|
| Amplification Master Mix Glycerol | TWA: 100 mg/m ³ 8 hours. Safe Work Australia (Australia, 10/2022). TWA: 10 mg/m ³ 8 hours. |
|---|---|

Biological exposure indices

No exposure indices known.

- Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

Section 9. Physical and chemical properties and safety characteristics

| | | | |
|--|---|--------------------------|----------------|
| Physical state | : | Frag/A-Tail Buffer | Liquid. |
| | | Frag/A-Tail Enzyme Mix | Liquid. |
| | | Ligation Master Mix | Liquid. |
| | | SureSelect Max MBC-Free | Liquid. |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | Liquid. |
| | | Adaptor Oligo Mix, ILM | |
| Colour | : | Frag/A-Tail Buffer | Not available. |
| | | Frag/A-Tail Enzyme Mix | Not available. |
| | | Ligation Master Mix | Not available. |
| | | SureSelect Max MBC-Free | Not available. |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | Not available. |
| | | Adaptor Oligo Mix, ILM | |
| Odour | : | Frag/A-Tail Buffer | Not available. |
| | | Frag/A-Tail Enzyme Mix | Not available. |
| | | Ligation Master Mix | Not available. |
| | | SureSelect Max MBC-Free | Not available. |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | Not available. |
| | | Adaptor Oligo Mix, ILM | |
| Odour threshold | : | Frag/A-Tail Buffer | Not available. |
| | | Frag/A-Tail Enzyme Mix | Not available. |
| | | Ligation Master Mix | Not available. |
| | | SureSelect Max MBC-Free | Not available. |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | Not available. |
| | | Adaptor Oligo Mix, ILM | |
| pH | : | Frag/A-Tail Buffer | 8.3 |
| | | Frag/A-Tail Enzyme Mix | 7 |
| | | Ligation Master Mix | 7.8 |
| | | SureSelect Max MBC-Free | 7.5 |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | 7.5 |
| | | Adaptor Oligo Mix, ILM | |
| Melting point/freezing point | : | Frag/A-Tail Buffer | Not available. |
| | | Frag/A-Tail Enzyme Mix | Not available. |
| | | Ligation Master Mix | Not available. |
| | | SureSelect Max MBC-Free | 0°C (32°F) |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | 0°C (32°F) |
| | | Adaptor Oligo Mix, ILM | |
| Boiling point, initial boiling point, and boiling range | : | Frag/A-Tail Buffer | Not available. |
| | | Frag/A-Tail Enzyme Mix | Not available. |
| | | Ligation Master Mix | Not available. |
| | | SureSelect Max MBC-Free | 100°C (212°F) |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | 100°C (212°F) |
| | | Adaptor Oligo Mix, ILM | |
| Flash point | : | Amplification Master Mix | Not available. |
| | | | |

Section 9. Physical and chemical properties and safety characteristics

| Ingredient name | Closed cup | | | Open cup | | |
|---------------------------------|------------|----|--------|----------|-------|--------|
| | °C | °F | Method | °C | °F | Method |
| Frag/A-Tail Enzyme Mix | | | | | | |
| Glycerol | - | - | - | 177 | 350.6 | - |
| Ligation Master Mix | | | | | | |
| 2,2' -oxybisethanol | - | - | - | 138 | 280.4 | - |
| Glycerol | - | - | - | 177 | 350.6 | - |
| Amplification Master Mix | | | | | | |
| Glycerol | - | - | - | 177 | 350.6 | - |

Evaporation rate :

- Frag/A-Tail Buffer Not available.
- Frag/A-Tail Enzyme Mix Not available.
- Ligation Master Mix Not available.
- SureSelect Max MBC-Free Not available.
- Adaptor Oligo Mix Not available.
- SureSelect Max MBC Not available.
- Adaptor Oligo Mix, ILM Not available.
- Amplification Master Mix Not available.

Flammability :

- Frag/A-Tail Buffer Not applicable.
- Frag/A-Tail Enzyme Mix Not applicable.
- Ligation Master Mix Not applicable.
- SureSelect Max MBC-Free Not applicable.
- Adaptor Oligo Mix Not applicable.
- SureSelect Max MBC Not applicable.
- Adaptor Oligo Mix, ILM Not applicable.
- Amplification Master Mix Not applicable.

Lower and upper explosion limit/flammability limit :

- Frag/A-Tail Buffer Not available.
- Frag/A-Tail Enzyme Mix Not available.
- Ligation Master Mix Not available.
- SureSelect Max MBC-Free Not available.
- Adaptor Oligo Mix Not available.
- SureSelect Max MBC Not available.
- Adaptor Oligo Mix, ILM Not available.
- Amplification Master Mix Not available.

Vapour pressure :

| Ingredient name | Vapour Pressure at 20°C | | | Vapour pressure at 50°C | | |
|-------------------------------|-------------------------|--------------|--------|-------------------------|------|--------|
| | mm Hg | kPa | Method | mm Hg | kPa | Method |
| Frag/A-Tail Buffer | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| tetramethylammonium chloride | 0.000000001 | 0.0000000013 | EU A.4 | - | - | - |
| Frag/A-Tail Enzyme Mix | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |

Section 9. Physical and chemical properties and safety characteristics

| | | | | | | |
|--|-------------|---------|---|--------|---------|---|
| Glycerol | 0.000075 | 0.00001 | - | 0.0025 | 0.00033 | - |
| Ligation Master Mix | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| 2,2' -oxybisethanol | 0.006 | 0.0008 | - | - | - | - |
| SureSelect Max MBC-Free Adaptor Oligo Mix | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| SureSelect Max MBC Adaptor Oligo Mix, ILM | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| Amplification Master Mix | | | | | | |
| water | 17.5 | 2.3 | - | 92.258 | 12.3 | - |
| Trometamol | <0.00075006 | <0.0001 | - | - | - | - |

Relative vapour density :

- Frag/A-Tail Buffer Not available.
- Frag/A-Tail Enzyme Mix Not available.
- Ligation Master Mix Not available.
- SureSelect Max MBC-Free Adaptor Oligo Mix Not available.
- SureSelect Max MBC Adaptor Oligo Mix, ILM Not available.
- Amplification Master Mix Not available.

Relative density :

- Frag/A-Tail Buffer Not available.
- Frag/A-Tail Enzyme Mix Not available.
- Ligation Master Mix Not available.
- SureSelect Max MBC-Free Adaptor Oligo Mix Not available.
- SureSelect Max MBC Adaptor Oligo Mix, ILM Not available.
- Amplification Master Mix Not available.

Solubility(ies) :

| Media | Result |
|--|---------|
| Frag/A-Tail Buffer | |
| water | Soluble |
| Frag/A-Tail Enzyme Mix | |
| water | Soluble |
| Ligation Master Mix | |
| water | Soluble |
| SureSelect Max MBC-Free Adaptor Oligo Mix | |
| water | Soluble |
| SureSelect Max MBC Adaptor Oligo Mix, ILM | |
| water | Soluble |
| Amplification Master Mix | |

Section 9. Physical and chemical properties and safety characteristics

| | water | Soluble | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|---|----------------|----|--------|-------------------------------|--|--|--|----------|-----|-----|---|----------------------------|--|--|--|---------------------|-----|-------|----------------|----------|-----|-----|---|---------------------------------|--|--|--|----------|-----|-----|---|--|
| Partition coefficient: n-octanol/water | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Auto-ignition temperature | : <table border="1"> <thead> <tr> <th>Ingredient name</th> <th>°C</th> <th>°F</th> <th>Method</th> </tr> </thead> <tbody> <tr> <td colspan="4">Frag/A-Tail Enzyme Mix</td> </tr> <tr> <td>Glycerol</td> <td>370</td> <td>698</td> <td>-</td> </tr> <tr> <td colspan="4">Ligation Master Mix</td> </tr> <tr> <td>2,2' -oxybisethanol</td> <td>229</td> <td>444.2</td> <td>DIN EN 14522-S</td> </tr> <tr> <td>Glycerol</td> <td>370</td> <td>698</td> <td>-</td> </tr> <tr> <td colspan="4">Amplification Master Mix</td> </tr> <tr> <td>Glycerol</td> <td>370</td> <td>698</td> <td>-</td> </tr> </tbody> </table> | Ingredient name | °C | °F | Method | Frag/A-Tail Enzyme Mix | | | | Glycerol | 370 | 698 | - | Ligation Master Mix | | | | 2,2' -oxybisethanol | 229 | 444.2 | DIN EN 14522-S | Glycerol | 370 | 698 | - | Amplification Master Mix | | | | Glycerol | 370 | 698 | - | |
| Ingredient name | °C | °F | Method | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Frag/A-Tail Enzyme Mix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glycerol | 370 | 698 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Ligation Master Mix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2,2' -oxybisethanol | 229 | 444.2 | DIN EN 14522-S | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glycerol | 370 | 698 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Amplification Master Mix | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Glycerol | 370 | 698 | - | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Decomposition temperature | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Not available. Not available. Not available. Not available. Not available. Not available. Not available. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Viscosity | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Not available. Not available. Not available. Not available. Not available. Not available. Not available. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Particle characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Median particle size | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Section 10. Stability and reactivity

| | | |
|-------------------|--|---|
| Reactivity | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free | No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for |
|-------------------|--|---|

Section 10. Stability and reactivity

| | | |
|---|---|---|
| | Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | The product is stable. The product is stable. The product is stable. The product is stable. The product is stable. The product is stable. |
| Possibility of hazardous reactions | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. |
| Incompatible materials | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM Amplification Master Mix | May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. |
| Hazardous decomposition products | : Frag/A-Tail Buffer Frag/A-Tail Enzyme Mix Ligation Master Mix SureSelect Max MBC-Free Adaptor Oligo Mix SureSelect Max MBC Adaptor Oligo Mix, ILM | Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 10. Stability and reactivity

Amplification Master Mix

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 |
|--|-------------|--------------------------|----------------------|----------|
| Frag/A-Tail Buffer Magnesium chloride | LD50 Dermal | Rat - Male, Female | >2000 mg/kg | - |
| tetramethylammonium chloride | LD50 Oral | Rat | 2800 mg/kg | - |
| | LD50 Dermal | Rabbit - Male, Female | 200 to 500 mg/ kg | - |
| | LD50 Oral | Rat | 50 mg/kg | - |
| Frag/A-Tail Enzyme Mix Glycerol | LD50 Oral | Rat | 12600 mg/kg | - |
| Ligation Master Mix Glycerol 2,2' -oxybisethanol | LD50 Oral | Rat | 12600 mg/kg | - |
| | LD50 Dermal | Rabbit | 11890 mg/kg | - |
| | LD50 Oral | Rat | 12000 mg/kg | - |
| Amplification Master Mix Glycerol Trometamol tetramethylammonium chloride | LD50 Oral | Rat | 12600 mg/kg | - |
| | LD50 Dermal | Rat | >5000 mg/kg | - |
| | LD50 Dermal | Rabbit - Male, Female | 200 to 500 mg/ kg | - |
| | LD50 Oral | Rat | 50 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|---|--------------------------|---------|-------|--------------------|-------------|
| Frag/A-Tail Enzyme Mix Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| Ligation Master Mix Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| 2,2' -oxybisethanol | Eyes - Mild irritant | Rabbit | - | 50 mg | - |
| | Skin - Mild irritant | Rabbit | - | 500 mg | - |
| Amplification Master Mix Glycerol | Eyes - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| Trometamol | Skin - Moderate irritant | Rabbit | - | 25 % | - |
| | Skin - Severe irritant | Rabbit | - | 500 mg | - |

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Section 11. Toxicological information

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

| Name | Category | Route of exposure | Target organs |
|---|------------|-------------------|------------------------------|
| Frag/A-Tail Buffer tetramethylammonium chloride | Category 1 | oral | central nervous system (CNS) |
| Amplification Master Mix Trometamol | Category 3 | - | Respiratory tract irritation |
| tetramethylammonium chloride | Category 1 | oral | central nervous system (CNS) |

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

| | | |
|---|--------------------------|--|
| Information on likely routes of exposure | : Frag/A-Tail Buffer | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| | Frag/A-Tail Enzyme Mix | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| | Ligation Master Mix | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| | SureSelect Max MBC-Free | Not available. |
| | Adaptor Oligo Mix | Not available. |
| | SureSelect Max MBC | Not available. |
| | Adaptor Oligo Mix, ILM | Not available. |
| | Amplification Master Mix | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |

Potential acute health effects

| | | |
|--------------------|--------------------------|--|
| Eye contact | : Frag/A-Tail Buffer | No known significant effects or critical hazards. |
| | Frag/A-Tail Enzyme Mix | Causes eye irritation. |
| | Ligation Master Mix | Causes eye irritation. |
| | SureSelect Max MBC-Free | No known significant effects or critical hazards. |
| | Adaptor Oligo Mix | No known significant effects or critical hazards. |
| | SureSelect Max MBC | No known significant effects or critical hazards. |
| | Adaptor Oligo Mix, ILM | No known significant effects or critical hazards. |
| | Amplification Master Mix | Causes serious eye irritation. |
| Inhalation | : Frag/A-Tail Buffer | May cause damage to organs following a single exposure if inhaled. |
| | Frag/A-Tail Enzyme Mix | No known significant effects or critical hazards. |
| | Ligation Master Mix | No known significant effects or critical hazards. |
| | SureSelect Max MBC-Free | No known significant effects or critical hazards. |
| | Adaptor Oligo Mix | No known significant effects or critical hazards. |
| | SureSelect Max MBC | No known significant effects or critical hazards. |
| | Adaptor Oligo Mix, ILM | No known significant effects or critical hazards. |
| | Amplification Master Mix | May cause damage to organs following a single exposure if inhaled. |

Section 11. Toxicological information

| | | | |
|------------------|---|--------------------------|-------------------|
| Ingestion | : | Frag/A-Tail Buffer | No specific data. |
| | | Frag/A-Tail Enzyme Mix | No specific data. |
| | | Ligation Master Mix | No specific data. |
| | | SureSelect Max MBC-Free | No specific data. |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | No specific data. |
| | | Adaptor Oligo Mix, ILM | |
| | | Amplification Master Mix | 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

| | | | |
|------------------------------|---|--------------------------|---|
| General | : | Frag/A-Tail Buffer | No known significant effects or critical hazards. |
| | | Frag/A-Tail Enzyme Mix | No known significant effects or critical hazards. |
| | | Ligation Master Mix | No known significant effects or critical hazards. |
| | | SureSelect Max MBC-Free | No known significant effects or critical hazards. |
| | | Adaptor Oligo Mix | |
| Carcinogenicity | : | SureSelect Max MBC | No known significant effects or critical hazards. |
| | | Adaptor Oligo Mix, ILM | |
| | | Amplification Master Mix | No known significant effects or critical hazards. |
| | | Frag/A-Tail Buffer | No known significant effects or critical hazards. |
| | | Frag/A-Tail Enzyme Mix | No known significant effects or critical hazards. |
| Mutagenicity | : | Ligation Master Mix | No known significant effects or critical hazards. |
| | | SureSelect Max MBC-Free | No known significant effects or critical hazards. |
| | | Adaptor Oligo Mix | |
| | | SureSelect Max MBC | No known significant effects or critical hazards. |
| | | Adaptor Oligo Mix, ILM | |
| Reproductive toxicity | : | Amplification Master Mix | No known significant effects or critical hazards. |
| | | Frag/A-Tail Buffer | No known significant effects or critical hazards. |
| | | Frag/A-Tail Enzyme Mix | No known significant effects or critical hazards. |
| | | Ligation Master Mix | No known significant effects or critical hazards. |
| | | SureSelect Max MBC-Free | No known significant effects or critical hazards. |

Numerical measures of toxicity

Acute toxicity estimates

Section 11. Toxicological information

| Product/ingredient name | Oral (mg/kg) | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapours) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|---------------------------------|--------------|----------------|--------------------------|-----------------------------|-------------------------------------|
| Frag/A-Tail Buffer | | | | | |
| Frag/A-Tail Buffer | 1000 | 6000.0 | N/A | N/A | N/A |
| Magnesium chloride | 2800 | N/A | N/A | N/A | N/A |
| tetramethylammonium chloride | 50 | 300 | N/A | N/A | N/A |
| Frag/A-Tail Enzyme Mix | | | | | |
| Glycerol | 12600 | N/A | N/A | N/A | N/A |
| Ligation Master Mix | | | | | |
| Ligation Master Mix | 2975.4 | N/A | N/A | N/A | N/A |
| Glycerol | 12600 | N/A | N/A | N/A | N/A |
| 2,2' -oxybisethanol | 500 | 11890 | N/A | N/A | N/A |
| Amplification Master Mix | | | | | |
| Amplification Master Mix | 1279.5 | 7677.0 | N/A | N/A | N/A |
| Glycerol | 12600 | N/A | N/A | N/A | N/A |
| tetramethylammonium chloride | 50 | 300 | N/A | N/A | N/A |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|---------------------------------|--------------------------------------|--|----------|
| Frag/A-Tail Buffer | | | |
| Magnesium chloride | Acute EC50 >100 mg/l Fresh water | Algae - <i>Desmodesmus subspicatus</i> | 72 hours |
| | Acute EC50 180000 µg/l Fresh water | Crustaceans - <i>Eudiaptomus padanus</i> ssp. <i>padanus</i> - Adult | 48 hours |
| | Acute IC50 6.8 mg/l Fresh water | Aquatic plants - <i>Lemna aequinoctialis</i> | 96 hours |
| | Acute LC50 32000 µg/l Fresh water | Daphnia - <i>Daphnia hyalina</i> - Adult | 48 hours |
| | Acute LC50 2120 mg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Acute NOEC 100 mg/l Fresh water | Algae - <i>Desmodesmus subspicatus</i> | 72 hours |
| tetramethylammonium chloride | Chronic NOEC 0.1 mg/l Fresh water | Fish - <i>Cyprinus carpio</i> | 35 days |
| | Acute LC50 462 mg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| Frag/A-Tail Enzyme Mix | | | |
| Glycerol | Acute LC50 54000 mg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| Ligation Master Mix | | | |
| Glycerol | Acute LC50 54000 mg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| 2,2' -oxybisethanol | Acute LC50 75200000 µg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| Amplification Master Mix | | | |
| Glycerol | Acute LC50 54000 mg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| Trometamol | Acute EC50 >980 mg/l Fresh water | Daphnia | 48 hours |
| | Acute NOEC 520 mg/l Fresh water | Daphnia | 48 hours |
| tetramethylammonium chloride | Acute LC50 462 mg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |

Persistence and degradability

Section 12. Ecological information

| Product/ingredient name | Test | Result | Dose | Inoculum |
|---|---|----------------------------|---------|----------|
| Frag/A-Tail Enzyme Mix Glycerol | 301D Ready Biodegradability - Closed Bottle Test | 93 % - 30 days | - | - |
| Ligation Master Mix Glycerol | 301D Ready Biodegradability - Closed Bottle Test | 93 % - 30 days | - | - |
| Amplification Master Mix Glycerol | 301D Ready Biodegradability - Closed Bottle Test | 93 % - 30 days | - | - |
| Trometamol | OECD 301F Ready Biodegradability - Manometric Respirometry Test | 97.1 % - Readily - 28 days | 30 mg/l | - |

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|---|-------------------|------------|------------------|
| Frag/A-Tail Buffer tetramethylammonium chloride | - | - | Readily |
| Amplification Master Mix Trometamol | - | - | Readily |
| tetramethylammonium chloride | - | - | Readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|-----|-----------|
| Frag/A-Tail Buffer tetramethylammonium chloride | <-1.6 | - | Low |
| Frag/A-Tail Enzyme Mix Glycerol | -1.76 | - | Low |
| Ligation Master Mix Glycerol | -1.76 | - | Low |
| 2,2' -oxybisethanol | -1.98 | 100 | Low |
| Amplification Master Mix Glycerol | -1.76 | - | Low |
| Trometamol | -2.31 | - | Low |
| tetramethylammonium chloride | <-1.6 | - | Low |

Mobility in soil

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

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. 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 .

Additional information

Remarks : De minimis quantities

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Standard for the Uniform Scheduling of Medicines 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

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.

New Zealand : Not determined.

United States : Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 15/01/2024

Date of previous issue : No previous validation

Version : 1

Key to abbreviations

: ADG = Australian Dangerous Goods
 ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
 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)
 N/A = Not available
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

| Classification | Justification |
|--|--|
| Frag/A-Tail Buffer ACUTE TOXICITY (oral) - Category 4 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 | Calculation method Calculation method Calculation method |
| Frag/A-Tail Enzyme Mix SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B | Calculation method |
| Ligation Master Mix SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B | Calculation method |
| Amplification Master Mix ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 | Calculation method Calculation method Calculation method Calculation method Calculation method |

✔ Indicates information that has changed from previously issued version.

Notice to reader

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