Section 1. Identification

Product identifier : SureSelect Target Enrichment-Box 1 - 480 Reactions, Part Number 5190-4395
Part No. (Chemical Kit) : 5190-4395
Part No. :
- SureSelect Hyb 1 : 5190-4412
- SureSelect Hyb 2 : 5190-4413
- SureSelect Hyb 4 : 5190-4414
- SureSelect Binding Buffer : 5190-4415
- SureSelect Wash Buffer 1 : 5190-4416
- SureSelect Wash Buffer : 5190-4417
- SureSelect Elution Buffer : 5190-4418
- SureSelect Neutralization Buffer : 5190-4419

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

Analytical reagent.
- SureSelect Hyb 1 : 12 ml
- SureSelect Hyb 2 : 0.48 ml
- SureSelect Hyb 4 : 6.25 ml
- SureSelect Binding Buffer : 400 ml
- SureSelect Wash Buffer 1 : 240 ml
- SureSelect Wash Buffer : 720 ml
- SureSelect Elution Buffer : 29 ml
- SureSelect Neutralization Buffer : 29 ml

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

SureSelect Hyb 1
H319
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A

SureSelect Hyb 2
H319
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
H373
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE (respiratory tract) - Category 2

SureSelect Hyb 4
H402
SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3

SureSelect Neutralization Buffer
H315
SKIN CORROSION/IRRITATION - Category 2
H319
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
# Section 2. Hazard(s) identification

<table>
<thead>
<tr>
<th>SureSelect Hyb 1</th>
<th>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 10 - 30%</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 10 - 30%</td>
</tr>
<tr>
<td></td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%</td>
</tr>
<tr>
<td></td>
<td>Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 10 - 30%</td>
</tr>
</tbody>
</table>

**GHS label elements**

**Hazard pictograms**

- SureSelect Hyb 1
- SureSelect Hyb 2
- SureSelect Neutralization Buffer

**Signal word**

- SureSelect Hyb 1: WARNING
- SureSelect Hyb 2: WARNING
- SureSelect Hyb 4: No signal word.
- SureSelect Binding Buffer: No signal word.
- SureSelect Wash Buffer 1: No signal word.
- SureSelect Wash Buffer: No signal word.
- SureSelect Elution Buffer: No signal word.
- SureSelect Neutralization Buffer: WARNING

**Hazard statements**

- SureSelect Hyb 1: H319 - Causes serious eye irritation.
- SureSelect Hyb 2: H319 - Causes serious eye irritation.
- SureSelect Hyb 4: H373 - May cause damage to organs through prolonged or repeated exposure. (respiratory tract)
- SureSelect Binding Buffer: No known significant effects or critical hazards.
- SureSelect Wash Buffer 1: No known significant effects or critical hazards.
- SureSelect Wash Buffer: No known significant effects or critical hazards.
- SureSelect Elution Buffer: No known significant effects or critical hazards.
- SureSelect Neutralization Buffer: H319 - Causes serious eye irritation.

**Precautionary statements**

- H315 - Causes skin irritation.
## Section 2. Hazard(s) identification

| Prevention | SureSelect Hyb 1 | P280 - Wear eye or face protection.  
P264 - Wash hands thoroughly after handling.  
P280 - Wear eye or face protection.  
P260 - Do not breathe vapour.  
P264 - Wash hands thoroughly after handling.  
SureSelect Hyb 2 | P280 - Wear eye or face protection.  
P260 - Do not breathe vapour.  
P264 - Wash hands thoroughly after handling.  
SureSelect Hyb 4 | P273 - Avoid release to the environment.  
SureSelect Binding Buffer | Not applicable.  
SureSelect Wash Buffer 1 | Not applicable.  
SureSelect Wash Buffer | Not applicable.  
SureSelect Elution Buffer | Not applicable.  
SureSelect Neutralization Buffer | P280 - Wear protective gloves. Wear eye or face protection.  
P264 - Wash hands thoroughly after handling.  
| Response | SureSelect Hyb 1 | 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.  
SureSelect Hyb 2 | P314 - Get medical attention if you feel unwell.  
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.  
SureSelect Hyb 4 | Not applicable.  
SureSelect Binding Buffer | Not applicable.  
SureSelect Wash Buffer 1 | Not applicable.  
SureSelect Wash Buffer | Not applicable.  
SureSelect Elution Buffer | Not applicable.  
SureSelect Neutralization Buffer | P302 + P352 + P362 + P363 - IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse.  
P332 + P313 - If skin irritation occurs: Get medical 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.  
P337 + P313 - If eye irritation persists: Get medical attention.  
| Storage | SureSelect Hyb 1 | Not applicable.  
SureSelect Hyb 2 | Not applicable.  
SureSelect Hyb 4 | Not applicable.  
SureSelect Binding Buffer | Not applicable.  
SureSelect Wash Buffer 1 | Not applicable.  
SureSelect Wash Buffer | Not applicable.  
SureSelect Elution Buffer | Not applicable.  
SureSelect Neutralization Buffer | Not applicable.  
| Disposal | SureSelect Hyb 1 | Not applicable.  
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.  
SureSelect Hyb 2 | Not applicable.  
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.  
SureSelect Hyb 4 | Not applicable.  
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.  
SureSelect Binding Buffer | Not applicable.  
SureSelect Wash Buffer 1 | Not applicable.  
SureSelect Wash Buffer | Not applicable.  
SureSelect Elution Buffer | Not applicable.  
SureSelect Neutralization Buffer | Not applicable.  

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Section 2. Hazard(s) identification

Supplemental label elements

Additional warning phrases:
- SureSelect Hyb 1: Not applicable.
- SureSelect Hyb 2: Not applicable.
- SureSelect Hyb 4: Not applicable.
- SureSelect Binding Buffer: Not applicable.
- SureSelect Wash Buffer 1: Not applicable.
- SureSelect Wash Buffer: Not applicable.
- SureSelect Elution Buffer: Not applicable.
- SureSelect Neutralization Buffer: Not applicable.

Other hazards which do not result in classification:
- SureSelect Hyb 1: None known.
- SureSelect Hyb 2: None known.
- SureSelect Hyb 4: None known.
- SureSelect Binding Buffer: None known.
- SureSelect Wash Buffer 1: None known.
- SureSelect Wash Buffer: None known.
- SureSelect Elution Buffer: None known.
- SureSelect Neutralization Buffer: None known.

Section 3. Composition and ingredient information

Substance/mixture:
- SureSelect Hyb 1: Mixture
- SureSelect Hyb 2: Mixture
- SureSelect Hyb 4: Mixture
- SureSelect Binding Buffer: Mixture
- SureSelect Wash Buffer 1: Mixture
- SureSelect Wash Buffer: Mixture
- SureSelect Elution Buffer: Mixture
- SureSelect Neutralization Buffer: Mixture

CAS number/other identifiers:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>% (w/w)</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SureSelect Hyb 1</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>≥10 - ≤30</td>
<td>7647-14-5</td>
</tr>
<tr>
<td><strong>SureSelect Hyb 2</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Disodium dihydrogen ethylenediaminetetraacetate</td>
<td>≥10 - &lt;30</td>
<td>139-33-3</td>
</tr>
<tr>
<td><strong>SureSelect Hyb 4</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sulfuric acid monododecyl ester sodium salt (1:1)</td>
<td>&lt;2.5</td>
<td>8012-56-4</td>
</tr>
<tr>
<td><strong>SureSelect Neutralization Buffer</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td>≥10 - &lt;20</td>
<td>1185-53-1</td>
</tr>
</tbody>
</table>

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

Occupational exposure limits, if available, are listed in Section 8.
Section 4. First aid measures

**Description of necessary first aid measures**

**Eye contact**

**SureSelect Hyb 1**
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.

**SureSelect Hyb 2**
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.

**SureSelect Hyb 4**
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.

**SureSelect Binding Buffer**
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 Wash Buffer 1**
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 Wash Buffer**
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 Elution Buffer**
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 Neutralization 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.

**Inhalation**

**SureSelect Hyb 1**
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 Hyb 2**
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 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.

**SureSelect Hyb 4**
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,
Section 4. First aid measures

SureSelect Target Enrichment-Box 1 - 480 Reactions, Part Number 5190-4395

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

**SureSelect Wash Buffer 1**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

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

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

**SureSelect Neutralization Buffer**
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**Skin contact**

**SureSelect Hyb 1**
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 Hyb 2**
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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

**SureSelect Hyb 4**
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.

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

SureSelect Wash Buffer 1
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

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

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

SureSelect Neutralization 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.

SureSelect Binding Buffer
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SureSelect Wash Buffer 1
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

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

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

SureSelect Neutralization Buffer
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention.
Section 4. First aid measures

**Ingestion**

SureSelect Hyb 1

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.

SureSelect Hyb 2

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.

SureSelect Hyb 4

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.

SureSelect Binding Buffer

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.

SureSelect Wash Buffer 1

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...
Section 4. First aid measures

SureSelect Wash Buffer  
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.

SureSelect Elution Buffer  
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.

SureSelect Neutralization 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. 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.

**Most important symptoms/effects, acute and delayed**

**Potential acute health effects**

| **Eye contact** | **SureSelect Hyb 1** | Causes serious eye irritation. |
| **SureSelect Hyb 2** | Causes serious eye irritation. |
| **SureSelect Hyb 4** | No known significant effects or critical hazards. |
| **SureSelect Binding Buffer** | No known significant effects or critical hazards. |
| **SureSelect Wash Buffer 1** | No known significant effects or critical hazards. |
| **SureSelect Wash Buffer** | No known significant effects or critical hazards. |
| **SureSelect Elution Buffer** | No known significant effects or critical hazards. |
| **SureSelect Neutralization Buffer** | Causes serious eye irritation. |

| **Inhalation** | **SureSelect Hyb 1** | No known significant effects or critical hazards. |
| **SureSelect Hyb 2** | No known significant effects or critical hazards. |
| **SureSelect Hyb 4** | No known significant effects or critical hazards. |
| **SureSelect Binding Buffer** | No known significant effects or critical hazards. |
| **SureSelect Wash Buffer 1** | No known significant effects or critical hazards. |
| **SureSelect Wash Buffer** | No known significant effects or critical hazards. |
| **SureSelect Elution Buffer** | No known significant effects or critical hazards. |
| **SureSelect Neutralization Buffer** | No known significant effects or critical hazards. |

| **Skin contact** | **SureSelect Hyb 1** | No known significant effects or critical hazards. |
| **SureSelect Hyb 2** | No known significant effects or critical hazards. |
| **SureSelect Hyb 4** | No known significant effects or critical hazards. |
| **SureSelect Binding Buffer** | No known significant effects or critical hazards. |
| **SureSelect Wash Buffer 1** | No known significant effects or critical hazards. |
| **SureSelect Wash Buffer** | No known significant effects or critical hazards. |
| **SureSelect Elution Buffer** | No known significant effects or critical hazards. |
| **SureSelect Neutralization Buffer** | Causes skin irritation. |
**Section 4. First aid measures**

<table>
<thead>
<tr>
<th>Ingestion</th>
<th>SureSelect Hyb 1</th>
<th>No known significant effects or critical hazards.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SureSelect Hyb 2</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Hyb 4</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
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<tr>
<td></td>
<td>SureSelect Wash Buffer 1</td>
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<td>SureSelect Wash Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Neutralization Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

**Over-exposure signs/symptoms**

<table>
<thead>
<tr>
<th>Eye contact</th>
<th>SureSelect Hyb 1</th>
<th>Adverse symptoms may include the following: pain or irritation watering redness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SureSelect Hyb 2</td>
<td>Adverse symptoms may include the following: pain or irritation watering redness</td>
</tr>
<tr>
<td></td>
<td>SureSelect Hyb 4</td>
<td>No specific data.</td>
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<tr>
<td></td>
<td>SureSelect Binding Buffer</td>
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<td>SureSelect Wash Buffer 1</td>
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<tr>
<td></td>
<td>SureSelect Wash Buffer</td>
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<tr>
<td></td>
<td>SureSelect Elution Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Neutralization Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Inhalation</th>
<th>SureSelect Hyb 1</th>
<th>No specific data.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SureSelect Hyb 2</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Hyb 4</td>
<td>No specific data.</td>
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<tr>
<td></td>
<td>SureSelect Binding Buffer</td>
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<tr>
<td></td>
<td>SureSelect Wash Buffer 1</td>
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<tr>
<td></td>
<td>SureSelect Wash Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Elution Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Neutralization Buffer</td>
<td>No specific data.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Skin contact</th>
<th>SureSelect Hyb 1</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>SureSelect Hyb 2</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Hyb 4</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Wash Buffer 1</td>
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<td></td>
<td>SureSelect Wash Buffer</td>
<td>No specific data.</td>
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<tr>
<td></td>
<td>SureSelect Elution Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td></td>
<td>SureSelect Neutralization Buffer</td>
<td>No specific data.</td>
</tr>
</tbody>
</table>

**Indication of immediate medical attention and special treatment needed, if necessary**
Section 4. First aid measures

Notes to physician:
- **SureSelect Hyb 1**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **SureSelect Hyb 2**: 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.
- **SureSelect Hyb 4**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **SureSelect Binding Buffer**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **SureSelect Wash Buffer 1**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **SureSelect Wash Buffer**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **SureSelect Elution Buffer**: Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- **SureSelect Neutralization 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.

Specific treatments:
- **SureSelect Hyb 1**: No specific treatment.
- **SureSelect Hyb 2**: No specific treatment.
- **SureSelect Hyb 4**: No specific treatment.
- **SureSelect Binding Buffer**: No specific treatment.
- **SureSelect Wash Buffer 1**: No specific treatment.
- **SureSelect Wash Buffer**: No specific treatment.
- **SureSelect Elution Buffer**: No specific treatment.
- **SureSelect Neutralization Buffer**: No specific treatment.

Protection of first-aiders:
- **SureSelect Hyb 1**: 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 Hyb 2**: 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 Hyb 4**: 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 Binding Buffer**: No action shall be taken involving any personal risk or without suitable training.
- **SureSelect Wash Buffer 1**: No action shall be taken involving any personal risk or without suitable training.
- **SureSelect Wash Buffer**: No action shall be taken involving any personal risk or without suitable training.
- **SureSelect Elution Buffer**: No action shall be taken involving any personal risk or without suitable training.
- **SureSelect Neutralization 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.

See toxicological information (Section 11)
Section 5. Firefighting measures

**Extinguishing media**

**Suitable extinguishing media**

- SureSelect Hyb 1: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Hyb 2: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Hyb 4: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Binding Buffer: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Wash Buffer 1: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Wash Buffer: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Elution Buffer: Use an extinguishing agent suitable for the surrounding fire.
- SureSelect Neutralization Buffer: Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**

- SureSelect Hyb 1: None known.
- SureSelect Hyb 2: None known.
- SureSelect Hyb 4: None known.
- SureSelect Binding Buffer: None known.
- SureSelect Wash Buffer 1: None known.
- SureSelect Wash Buffer: None known.
- SureSelect Elution Buffer: None known.
- SureSelect Neutralization Buffer: None known.

**Specific hazards arising from the chemical**

- SureSelect Hyb 1: In a fire or if heated, a pressure increase will occur and the container may burst.
- SureSelect Hyb 2: In a fire or if heated, a pressure increase will occur and the container may burst.
- SureSelect Hyb 4: In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- SureSelect Binding Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.
- SureSelect Wash Buffer 1: In a fire or if heated, a pressure increase will occur and the container may burst.
- SureSelect Wash Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.
- SureSelect Elution Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.
- SureSelect Neutralization Buffer: In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products**

- SureSelect Hyb 1: Decomposition products may include the following materials:
  - phosphorus oxides
  - halogenated compounds
  - metal oxide/oxides
- SureSelect Hyb 2: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
  - nitrogen oxides
  - metal oxide/oxides
- SureSelect Hyb 4: Decomposition products may include the following materials:
  - carbon dioxide
  - carbon monoxide
### Section 5. Firefighting measures

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>sulfur oxides</td>
<td>Decomposition products may include the following materials: halogenated compounds metal oxide/oxides</td>
</tr>
<tr>
<td>metal oxide/oxides</td>
<td>No specific data.</td>
</tr>
<tr>
<td>Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds</td>
<td></td>
</tr>
</tbody>
</table>

#### Special protective actions for fire-fighters:

<table>
<thead>
<tr>
<th>Material</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>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.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus</td>
</tr>
</tbody>
</table>

#### Special protective equipment for fire-fighters:

<table>
<thead>
<tr>
<th>Material</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus</td>
</tr>
</tbody>
</table>

**Date of issue/Date of revision**: 25/10/2017 **Date of previous issue**: 05/02/2016 **Version**: 4 12/31
Section 5. Firefighting measures

SureSelect Wash Buffer 1
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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

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

SureSelect Neutralization Buffer
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:

SureSelect Hyb 1
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 Hyb 2
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 Hyb 4
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 Binding 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. Put on appropriate personal protective equipment.

SureSelect Wash Buffer 1
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 Wash 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. Put on appropriate personal protective equipment.
Section 6. Accidental release measures

Environmental precautions

SureSelect Hyb 1
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 Hyb 2
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 Hyb 4
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

For emergency responders

SureSelect Hyb 1
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 Hyb 2
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 Hyb 4
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 Binding 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".

SureSelect Wash Buffer 1
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 Wash 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".

SureSelect Elution 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".

SureSelect Neutralization 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".

SureSelect Elution 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. Put on appropriate personal protective equipment.

SureSelect Neutralization 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.

SureSelect Hyb 1
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 Hyb 2
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 Hyb 4
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.
## Section 6. Accidental release measures

<table>
<thead>
<tr>
<th>Product</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Binding Buffer</td>
<td>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).</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>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).</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>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).</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>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).</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>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).</td>
</tr>
</tbody>
</table>

**Methods and material for containment and cleaning up**

**Methods for cleaning up**: SureSelect Hyb 1

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 Hyb 2**

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 Hyb 4**

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 Binding 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.

**SureSelect Wash Buffer 1**

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 Wash 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.
Section 6. Accidental release measures

**SureSelect Elution Buffer**
Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.

**SureSelect Neutralization 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.

Section 7. Handling and storage

**Precautions for safe handling**

<table>
<thead>
<tr>
<th>Protective measures</th>
<th>SureSelect Hyb 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>

| SureSelect Hyb 2 |
| Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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 Hyb 4 |
| Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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 Binding Buffer |
| Put on appropriate personal protective equipment (see Section 8). |

| SureSelect Wash Buffer 1 |
| Put on appropriate personal protective equipment (see Section 8). |

| SureSelect Wash Buffer |
| Put on appropriate personal protective equipment (see Section 8). |

| SureSelect Elution Buffer |
| Put on appropriate personal protective equipment (see Section 8). Keep away from acids. |

<p>| SureSelect Neutralization 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. |</p>
<table>
<thead>
<tr>
<th>Advice on general occupational hygiene</th>
<th>SureSelect Hyb 1</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 2</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
## Section 7. Handling and storage

<table>
<thead>
<tr>
<th>Conditions for safe storage, including any incompatibilities</th>
<th>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.</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>SureSelect Hyb 2</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>SureSelect Binding Buffer</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>SureSelect Wash Buffer</td>
</tr>
<tr>
<td>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.</td>
<td></td>
</tr>
</tbody>
</table>
Section 7. Handling and storage

SureSelect Elution Buffer

Containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Separate from acids. 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 Neutralization Buffer

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

None.

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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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.
Section 8. Exposure controls and personal protection

**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**
- SureSelect Hyb 1: Liquid.
- SureSelect Hyb 2: Liquid.
- SureSelect Hyb 4: Liquid.
- SureSelect Binding Buffer: Liquid.
- SureSelect Wash Buffer 1: Liquid.
- SureSelect Wash Buffer: Liquid.
- SureSelect Elution Buffer: Liquid.
- SureSelect Neutralization Buffer: Liquid.

**Colour**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.

**Odour**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.

**Odour threshold**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.

**pH**
- SureSelect Hyb 1: 7.4
- SureSelect Hyb 2: 8
- SureSelect Hyb 4: 5.2 to 6.2
- SureSelect Binding Buffer: 7.1 to 8.1
- SureSelect Wash Buffer 1: 6.5 to 7.5
- SureSelect Wash Buffer: 6.8 to 7.8
- SureSelect Elution Buffer: 12.2 to 13.4
- SureSelect Neutralization Buffer: 7.5
## Section 9. Physical and chemical properties

**Melting point**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: 0°C (32°F)
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: 0°C (32°F)
- SureSelect Wash Buffer: 0°C (32°F)
- SureSelect Elution Buffer: 0°C (32°F)
- SureSelect Neutralization Buffer: Not available.

**Boiling point**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: 100°C (212°F)
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: 100°C (212°F)
- SureSelect Wash Buffer: 100°C (212°F)
- SureSelect Elution Buffer: 100°C (212°F)
- SureSelect Neutralization Buffer: Not available.

**Flash point**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.

**Evaporation rate**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.

**Flammability (solid, gas)**
- SureSelect Hyb 1: Not applicable.
- SureSelect Hyb 2: Not applicable.
- SureSelect Hyb 4: Not applicable.
- SureSelect Binding Buffer: Not applicable.
- SureSelect Wash Buffer 1: Not applicable.
- SureSelect Wash Buffer: Not applicable.
- SureSelect Elution Buffer: Not applicable.
- SureSelect Neutralization Buffer: Not applicable.

**Lower and upper explosive (flammable) limits**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.

**Vapour pressure**
- SureSelect Hyb 1: Not available.
- SureSelect Hyb 2: Not available.
- SureSelect Hyb 4: Not available.
- SureSelect Binding Buffer: Not available.
- SureSelect Wash Buffer 1: Not available.
- SureSelect Wash Buffer: Not available.
- SureSelect Elution Buffer: Not available.
- SureSelect Neutralization Buffer: Not available.
## Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>SureSelect Hyb 1</th>
<th>SureSelect Hyb 2</th>
<th>SureSelect Hyb 4</th>
<th>SureSelect Binding Buffer</th>
<th>SureSelect Wash Buffer 1</th>
<th>SureSelect Wash Buffer</th>
<th>SureSelect Elution Buffer</th>
<th>SureSelect Neutralization Buffer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Solubility</strong></td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
<td>Easily soluble in the following materials: cold water and hot water.</td>
</tr>
</tbody>
</table>

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Section 9. Physical and chemical properties

Viscosity

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>Not available.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

Reactivity

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>No specific test data related to reactivity available for this product or its ingredients.</td>
</tr>
</tbody>
</table>

Chemical stability

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>The product is stable.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>The product is stable.</td>
</tr>
</tbody>
</table>

Possibility of hazardous reactions

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Under normal conditions of storage and use, hazardous reactions will not occur.</td>
</tr>
</tbody>
</table>
Section 10. Stability and reactivity

Conditions to avoid:
- SureSelect Hyb 1: No specific data.
- SureSelect Hyb 2: No specific data.
- SureSelect Hyb 4: No specific data.
- SureSelect Binding Buffer: No specific data.
- SureSelect Wash Buffer 1: No specific data.
- SureSelect Wash Buffer: No specific data.
- SureSelect Elution Buffer: No specific data.
- SureSelect Neutralization Buffer: No specific data.

Incompatible materials:
- SureSelect Hyb 1: May react or be incompatible with oxidising materials.
- SureSelect Hyb 2: May react or be incompatible with oxidising materials.
- SureSelect Hyb 4: May react or be incompatible with oxidising materials.
- SureSelect Binding Buffer: May react or be incompatible with oxidising materials.
- SureSelect Wash Buffer 1: May react or be incompatible with oxidising materials.
- SureSelect Wash Buffer: May react or be incompatible with oxidising materials.
- SureSelect Elution Buffer: Reactive or incompatible with the following materials: acids.
- SureSelect Neutralization Buffer: May react or be incompatible with oxidising materials.

Hazardous decomposition products:
- SureSelect Hyb 1: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Hyb 2: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Hyb 4: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Binding Buffer: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Wash Buffer 1: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Wash Buffer: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Elution Buffer: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- SureSelect Neutralization Buffer: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1 Sodium chloride</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3000 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>SureSelect Hyb 2 Disodium dihydrogen ethylenediaminetetraacetate</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>2 g/kg</td>
<td>-</td>
</tr>
<tr>
<td>SureSelect Hyb 4 Sulfuric acid monododecyl ester sodium salt (1:1)</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>1288 mg/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

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Section 11. Toxicological information

Irritation/Corrosion

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Score</th>
<th>Exposure</th>
<th>Observation</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1 Sodium chloride</td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 100 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Eyes - Moderate irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>10 milligrams</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Skin - Mild irritant</td>
<td>Rabbit</td>
<td>-</td>
<td>24 hours 500 milligrams</td>
<td>-</td>
</tr>
</tbody>
</table>

Sensitisation
Not available.

Mutagenicity
Not available.

Carcinogenicity
Not available.

Reproductive toxicity
Not available.

Teratogenicity
Not available.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 4</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>Sulfuric acid monododecyl ester sodium salt (1:1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
<tr>
<td>2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 2</td>
<td>Category 2</td>
<td>Inhalation</td>
<td>respiratory tract</td>
</tr>
<tr>
<td>Disodium dihydrogen ethylenediaminetetraacetate</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Aspiration hazard
Not available.

Information on likely routes of exposure

- SureSelect Hyb 1
- SureSelect Hyb 2
- SureSelect Hyb 4
- SureSelect Binding Buffer
- SureSelect Wash Buffer 1
- SureSelect Wash Buffer
- SureSelect Elution Buffer
- SureSelect Neutralization Buffer

Routes of entry anticipated: Oral, Dermal, Inhalation.
Not available.

Potential acute health effects
### Section 11. Toxicological information

#### Inhalation

<table>
<thead>
<tr>
<th>Product</th>
<th>Toxicological Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Causes serious eye irritation.</td>
</tr>
</tbody>
</table>

#### Skin contact

<table>
<thead>
<tr>
<th>Product</th>
<th>Toxicological Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Causes skin irritation.</td>
</tr>
</tbody>
</table>

#### Ingestion

<table>
<thead>
<tr>
<th>Product</th>
<th>Toxicological Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>No known significant effects or critical hazards.</td>
</tr>
</tbody>
</table>

#### Symptoms related to the physical, chemical and toxicological characteristics

##### Eye contact

<table>
<thead>
<tr>
<th>Product</th>
<th>Toxicological Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td>pain or irritation</td>
</tr>
<tr>
<td></td>
<td>watering</td>
</tr>
<tr>
<td></td>
<td>redness</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td>pain or irritation</td>
</tr>
<tr>
<td></td>
<td>watering</td>
</tr>
<tr>
<td></td>
<td>redness</td>
</tr>
<tr>
<td>SureSelect Hyb 4</td>
<td>No specific data.</td>
</tr>
<tr>
<td>SureSelect Binding Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer 1</td>
<td>No specific data.</td>
</tr>
<tr>
<td>SureSelect Wash Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>SureSelect Elution Buffer</td>
<td>No specific data.</td>
</tr>
<tr>
<td>SureSelect Neutralization Buffer</td>
<td>Adverse symptoms may include the following:</td>
</tr>
<tr>
<td></td>
<td>pain or irritation</td>
</tr>
<tr>
<td></td>
<td>watering</td>
</tr>
<tr>
<td></td>
<td>redness</td>
</tr>
</tbody>
</table>
### Section 11. Toxicological information

#### Inhalation
- SureSelect Hyb 1: No specific data.
- SureSelect Hyb 2: No specific data.
- SureSelect Hyb 4: No specific data.
- SureSelect Binding Buffer: No specific data.
- SureSelect Wash Buffer 1: No specific data.
- SureSelect Wash Buffer: No specific data.
- SureSelect Elution Buffer: No specific data.
- SureSelect Neutralization Buffer: No specific data.

#### Skin contact
- SureSelect Hyb 1: No specific data.
- SureSelect Hyb 2: No specific data.
- SureSelect Hyb 4: No specific data.
- SureSelect Binding Buffer: No specific data.
- SureSelect Wash Buffer 1: No specific data.
- SureSelect Wash Buffer: No specific data.
- SureSelect Elution Buffer: No specific data.
- SureSelect Neutralization Buffer: No specific data.

#### Ingestion
- SureSelect Hyb 1: No specific data.
- SureSelect Hyb 2: No specific data.
- SureSelect Hyb 4: No specific data.
- SureSelect Binding Buffer: No specific data.
- SureSelect Wash Buffer 1: No specific data.
- SureSelect Wash Buffer: No specific data.
- SureSelect Elution Buffer: No specific data.
- SureSelect Neutralization Buffer: No specific data.

#### General
- SureSelect Hyb 1: No known significant effects or critical hazards.
- SureSelect Hyb 2: May cause damage to organs through prolonged or repeated exposure.
- SureSelect Hyb 4: No known significant effects or critical hazards.
- SureSelect Binding Buffer: No known significant effects or critical hazards.
- SureSelect Wash Buffer 1: No known significant effects or critical hazards.
- SureSelect Wash Buffer: No known significant effects or critical hazards.
- SureSelect Elution Buffer: No known significant effects or critical hazards.
- SureSelect Neutralization Buffer: No known significant effects or critical hazards.

#### Carcinogenicity
- SureSelect Hyb 1: No known significant effects or critical hazards.
- SureSelect Hyb 2: No known significant effects or critical hazards.
- SureSelect Hyb 4: No known significant effects or critical hazards.
- SureSelect Binding Buffer: No known significant effects or critical hazards.
- SureSelect Wash Buffer 1: No known significant effects or critical hazards.
- SureSelect Wash Buffer: No known significant effects or critical hazards.
- SureSelect Elution Buffer: No known significant effects or critical hazards.

Adverse symptoms may include the following:
- irritation
- redness

### 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.

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Section 11. Toxicological information

| Mutagenicity                  | SureSelect Hyb 1             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 2             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 4             | No known significant effects or critical hazards. |
|                              | SureSelect Binding Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer 1     | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer       | No known significant effects or critical hazards. |
|                              | SureSelect Elution Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Neutralization Buffer | No known significant effects or critical hazards. |

| Teratogenicity                | SureSelect Hyb 1             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 2             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 4             | No known significant effects or critical hazards. |
|                              | SureSelect Binding Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer 1     | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer       | No known significant effects or critical hazards. |
|                              | SureSelect Elution Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Neutralization Buffer | No known significant effects or critical hazards. |

| Developmental effects         | SureSelect Hyb 1             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 2             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 4             | No known significant effects or critical hazards. |
|                              | SureSelect Binding Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer 1     | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer       | No known significant effects or critical hazards. |
|                              | SureSelect Elution Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Neutralization Buffer | No known significant effects or critical hazards. |

| Fertility effects             | SureSelect Hyb 1             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 2             | No known significant effects or critical hazards. |
|                              | SureSelect Hyb 4             | No known significant effects or critical hazards. |
|                              | SureSelect Binding Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer 1     | No known significant effects or critical hazards. |
|                              | SureSelect Wash Buffer       | No known significant effects or critical hazards. |
|                              | SureSelect Elution Buffer    | No known significant effects or critical hazards. |
|                              | SureSelect Neutralization Buffer | No known significant effects or critical hazards. |

Numerical measures of toxicity

Acute toxicity estimates

<table>
<thead>
<tr>
<th>Route</th>
<th>ATE value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SureSelect Hyb 2</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>13698.6 mg/kg</td>
</tr>
<tr>
<td>Inhalation (dusts and mists)</td>
<td>10.27 mg/l</td>
</tr>
<tr>
<td><strong>SureSelect Hyb 4</strong></td>
<td></td>
</tr>
<tr>
<td>Oral</td>
<td>128800 mg/kg</td>
</tr>
<tr>
<td>Inhalation (dusts and mists)</td>
<td>150 mg/l</td>
</tr>
</tbody>
</table>
Section 12. Ecological information

Toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 1</td>
<td>Acute EC50 4.74 g/L Fresh water</td>
<td>Algae - Chlamydomonas reinhardtii</td>
<td>96 hours</td>
</tr>
<tr>
<td>Sodium chloride</td>
<td>Acute EC50 519.6 mg/l Fresh water</td>
<td>Crustaceans - Cypris subglobosa</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute EC50 402600 μg/l Fresh water</td>
<td>Daphnia - Daphnia magna</td>
<td>48 hours</td>
</tr>
<tr>
<td></td>
<td>Acute IC50 6.87 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Acute LC50 1000000 μg/l Fresh water</td>
<td>Fish - Morone saxatilis - Larvae</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic LC10 781 mg/l Fresh water</td>
<td>Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)</td>
<td>3 weeks</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 6 g/L Fresh water</td>
<td>Aquatic plants - Lemna minor</td>
<td>96 hours</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 0.314 g/L Fresh water</td>
<td>Daphnia - Daphnia pulex</td>
<td>21 days</td>
</tr>
<tr>
<td></td>
<td>Chronic NOEC 100 mg/l Fresh water</td>
<td>Fish - Gambusia holbrooki - Adult</td>
<td>8 weeks</td>
</tr>
<tr>
<td>SureSelect Hyb 2</td>
<td>Acute LC50 320 mg/l Fresh water</td>
<td>Fish</td>
<td>96 hours</td>
</tr>
</tbody>
</table>

Persistence and degradability

Not available.

Bioaccumulative potential

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>LogPow</th>
<th>BCF</th>
<th>Potential</th>
</tr>
</thead>
<tbody>
<tr>
<td>SureSelect Hyb 2</td>
<td>-4.3</td>
<td>1.8</td>
<td>low</td>
</tr>
</tbody>
</table>

Mobility in soil

Soil/water partition coefficient (Koc): 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.

**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**

5

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

Date of issue/Date of revision: 25/10/2017
Date of previous issue: 05/02/2016
Version: 4
Section 16. Any other relevant information

### History

- **Date of issue/Date of revision**: 25/10/2017
- **Date of previous issue**: 05/02/2016.
- **Version**: 4

### 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
- NOHSC = National Occupational Health and Safety Commission
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations

### Procedure used to derive the classification

<table>
<thead>
<tr>
<th>Classification</th>
<th>Justification</th>
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<tbody>
<tr>
<td><strong>SureSelect Hyb 1</strong></td>
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<tr>
<td>Eye Irrit. 2A, H319</td>
<td>Calculation method</td>
</tr>
<tr>
<td><strong>SureSelect Hyb 2</strong></td>
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<tr>
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<td>Calculation method</td>
</tr>
<tr>
<td>STOT RE 2, H373 (respiratory tract)</td>
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<td>Skin Irrit. 2, H315</td>
<td>Calculation method</td>
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<tr>
<td>Eye Irrit. 2A, H319</td>
<td>Calculation method</td>
</tr>
</tbody>
</table>

### References

- Not available.

- Indicates information that has changed from previously issued version.

### Notice to reader

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