



## Section 2. Hazards identification

|                                  |  |
|----------------------------------|--|
|                                  | 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.   |
| SureSelect Wash Buffer 1         | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
| SureSelect Wash Buffer           | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |
| SureSelect Elution Buffer        | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).  |
| SureSelect Neutralization Buffer | While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product. |

### Classification of the substance or mixture

#### **SureSelect Hyb 2**

H319 EYE IRRITATION - Category 2A  
H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

#### **SureSelect Elution Buffer**

H290 CORROSIVE TO METALS - Category 1  
H320 EYE IRRITATION - Category 2B

**SureSelect Hyb 4** Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 1%

### 2.2 GHS label elements

#### **Hazard pictograms**

: **SureSelect Hyb 2**



SureSelect Elution Buffer



#### **Signal word**

|                                  |                 |
|----------------------------------|-----------------|
| : <b>SureSelect Hyb 1</b>        | No signal word. |
| 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        | Warning         |
| SureSelect Neutralization Buffer | No signal word. |

## Section 2. Hazards identification

|  |  |   |
|--|--|---|
| <b>Hazard statements</b>               | <ul style="list-style-type: none"> <li>: SureSelect Hyb 1</li> <li>SureSelect Hyb 2</li> <br/> <li>SureSelect Hyb 4</li> <li>SureSelect Binding Buffer</li> <li>SureSelect Wash Buffer 1</li> <li>SureSelect Wash Buffer</li> <li>SureSelect Elution Buffer</li> <br/> <li>SureSelect Neutralization Buffer</li> </ul> | <p>No known significant effects or critical hazards.<br/>H319 - Causes serious eye irritation.<br/>H373 - May cause damage to organs through prolonged or repeated exposure.</p> <p>No known significant effects or critical hazards.<br/>No known significant effects or critical hazards.<br/>No known significant effects or critical hazards.<br/>No known significant effects or critical hazards.<br/>H290 - May be corrosive to metals.<br/>H320 - Causes eye irritation.</p> <p>No known significant effects or critical hazards.</p>   |
| <b><u>Precautionary statements</u></b> |  |   |
| <b>Prevention</b>                      | <ul style="list-style-type: none"> <li>: SureSelect Hyb 1</li> <li>SureSelect Hyb 2</li> <br/> <li>SureSelect Hyb 4</li> <li>SureSelect Binding Buffer</li> <li>SureSelect Wash Buffer 1</li> <li>SureSelect Wash Buffer</li> <li>SureSelect Elution Buffer</li> <li>SureSelect Neutralization Buffer</li> </ul>       | <p>Not applicable.<br/>P280 - Wear eye or face protection.<br/>P260 - Do not breathe vapor.</p> <p>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>P234 - Keep only in original packaging.<br/>Not applicable.</p>  |
| <b>Response</b>                        | <ul style="list-style-type: none"> <li>: SureSelect Hyb 1</li> <li>SureSelect Hyb 2</li> <br/> <li>SureSelect Hyb 4</li> <li>SureSelect Binding Buffer</li> <li>SureSelect Wash Buffer 1</li> <li>SureSelect Wash Buffer</li> <li>SureSelect Elution Buffer</li> <br/> <li>SureSelect Neutralization Buffer</li> </ul> | <p>Not applicable.<br/>P314 - Get medical advice or attention if you feel unwell.<br/>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br/>P337 + P313 - If eye irritation persists: Get medical advice or attention.</p> <p>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.</p> <p>P390 - Absorb spillage to prevent material damage.<br/>P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br/>P337 + P313 - If eye irritation persists: Get medical advice or attention.</p> <p>Not applicable.</p> |
| <b>Storage</b>                         | <ul style="list-style-type: none"> <li>: SureSelect Hyb 1</li> <li>SureSelect Hyb 2</li> <li>SureSelect Hyb 4</li> <li>SureSelect Binding Buffer</li> <li>SureSelect Wash Buffer 1</li> <li>SureSelect Wash Buffer</li> <li>SureSelect Elution Buffer</li> <li>SureSelect Neutralization Buffer</li> </ul>             | <p>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.</p>  |
| <b>Disposal</b>                        | <ul style="list-style-type: none"> <li>: SureSelect Hyb 1</li> <li>SureSelect Hyb 2</li> <br/> <li>SureSelect Hyb 4</li> <li>SureSelect Binding Buffer</li> <li>SureSelect Wash Buffer 1</li> <li>SureSelect Wash Buffer</li> <li>SureSelect Elution Buffer</li> </ul>   | <p>Not applicable.<br/>P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.</p> <p>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.<br/>Not applicable.</p>  |

## Section 2. Hazards identification

|                                    |                                  |                 |
|------------------------------------|----------------------------------|-----------------|
| <b>Supplemental label elements</b> | SureSelect Neutralization Buffer | Not applicable. |
|                                    | 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.     |

### 2.3 Other hazards

|   |                                  |             |
|---|----------------------------------|-------------|
| <b>Hazards not otherwise classified</b> | 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/information on ingredients

|                          |                                  |         |
|--------------------------|----------------------------------|---------|
| <b>Substance/mixture</b> | 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 |

| Ingredient name  | %         | CAS number |
|--|-----------|------------|
| <b>SureSelect Hyb 1</b><br>Sodium dihydrogenorthophosphate                   | ≤3        | 7558-80-7  |
| <b>SureSelect Hyb 2</b><br>Edetic acid                                       | ≥10 - <25 | 60-00-4    |
| <b>SureSelect Hyb 4</b><br>Sulfuric acid monododecyl ester sodium salt (1:1) | ≤3        | 8012-56-4  |
| <b>SureSelect Elution Buffer</b><br>Sodium hydroxide                         | <1        | 1310-73-2  |

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

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

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

## Section 4. First aid measures

### 4.1 Description of necessary first aid measures

|                    |                                  |  |
|--------------------|----------------------------------|--|
| <b>Eye contact</b> | : SureSelect Hyb 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 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. 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. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention.  |
|                    | SureSelect Neutralization 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.  |
| <b>Inhalation</b>  | : SureSelect Hyb 1               | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  |
|                    | 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. Get medical attention if symptoms occur.  |
|                    | SureSelect Binding Buffer        | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.  |

## Section 4. First aid measures

|                     |                                  |  |
|---------------------|----------------------------------|--|
|                     | 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. 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 Neutralization Buffer | Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.  |
| <b>Skin contact</b> | : SureSelect Hyb 1               | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.   |
|                     | 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.   |
|                     | SureSelect Binding Buffer        | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.   |
|                     | SureSelect Wash Buffer 1         | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.   |
|                     | SureSelect Wash Buffer           | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.   |
|                     | SureSelect Elution Buffer        | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.  |
|                     | SureSelect Neutralization Buffer | Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.   |

## Section 4. First aid measures

### Ingestion

: SureSelect Hyb 1

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 Hyb 2

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 following exposure or if feeling unwell. 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. 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 Binding Buffer

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 Wash Buffer 1

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 Wash Buffer

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 Elution Buffer

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.

Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

SureSelect Neutralization Buffer

Wash out mouth with water. If material has been swallowed and the exposed person is conscious,

## Section 4. First aid measures

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.

### 4.2 Most important symptoms/effects, acute and delayed

#### Potential acute health effects

|                     |  |  |
|---------------------|--|--|
| <b>Eye contact</b>  | : SureSelect Hyb 1<br>SureSelect Hyb 2<br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br>SureSelect Neutralization Buffer | No known significant effects or critical hazards.<br>Causes serious eye irritation.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>Causes eye irritation.<br>No known significant effects or critical hazards.   |
| <b>Inhalation</b>   | : SureSelect Hyb 1<br>SureSelect Hyb 2<br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br>SureSelect Neutralization Buffer | No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards. |
| <b>Skin contact</b> | : SureSelect Hyb 1<br>SureSelect Hyb 2<br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br>SureSelect Neutralization Buffer | No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards. |
| <b>Ingestion</b>    | : SureSelect Hyb 1<br>SureSelect Hyb 2<br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br>SureSelect Neutralization Buffer | No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards.<br>No known significant effects or critical hazards. |

#### Over-exposure signs/symptoms

|                    |  |  |
|--------------------|--|--|
| <b>Eye contact</b> | : SureSelect Hyb 1<br>SureSelect Hyb 2<br><br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br><br>SureSelect Neutralization Buffer | No specific data.<br>Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness<br>No specific data.<br>No specific data.<br>No specific data.<br>No specific data.<br>Adverse symptoms may include the following:<br>irritation<br>watering<br>redness<br>No specific data. |
|--------------------|--|--|

## Section 4. First aid measures

|                     |                                  |                   |
|---------------------|----------------------------------|-------------------|
| <b>Inhalation</b>   | : 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. |
| <b>Skin contact</b> | : 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. |
| <b>Ingestion</b>    | : 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. |

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

|                           |                                  |   |
|---------------------------|----------------------------------|---|
| <b>Notes to physician</b> | : 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. |

## Section 4. First aid measures

|                                   |  |  |
|-----------------------------------|--|--|
| <b>Specific treatments</b>        | : 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.   |
| <b>Protection of first-aiders</b> | : SureSelect Neutralization Buffer   | No specific treatment.   |
|                                   | SureSelect Hyb 1   | No action shall be taken involving any personal risk or without suitable training.   |
|                                   | 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.   |
|                                   | 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| SureSelect Neutralization Buffer  | No action shall be taken involving any personal risk or without suitable training. |  |

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### 5.1 Extinguishing media

|                                       |                                  |   |
|---------------------------------------|----------------------------------|---|
| <b>Suitable extinguishing media</b>   | : 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. |
| <b>Unsuitable extinguishing media</b> | : 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 5. Fire-fighting measures

### 5.2 Special hazards arising from the substance or mixture

|   |                                  |  |
|---|----------------------------------|--|
| <b>Specific hazards arising from the chemical</b> | : 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.  |
|   | 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.  |
| <b>Hazardous thermal decomposition products</b>   | : SureSelect Hyb 1               | Decomposition products may include the following materials:<br>phosphorus oxides<br>halogenated compounds<br>metal oxide/oxides              |
|   | SureSelect Hyb 2                 | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides                          |
|   | SureSelect Hyb 4                 | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>sulfur oxides<br>metal oxide/oxides      |
|   | SureSelect Binding Buffer        | Decomposition products may include the following materials:<br>halogenated compounds<br>metal oxide/oxides                                   |
|   | SureSelect Wash Buffer 1         | No specific data.  |
|   | SureSelect Wash Buffer           | No specific data.  |
|   | SureSelect Elution Buffer        | No specific data.  |
|   | SureSelect Neutralization Buffer | Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>nitrogen oxides<br>halogenated compounds |

### 5.3 Advice for firefighters

|   |                    |   |
|---|--------------------|---|
| <b>Special protective actions for fire-fighters</b> | : SureSelect Hyb 1 | 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 Hyb 2   | 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 Hyb 4   | Promptly isolate the scene by removing all persons  |

## Section 5. Fire-fighting measures

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 Binding 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.

SureSelect Wash Buffer 1

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 Wash 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.

SureSelect Elution 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.

SureSelect Neutralization 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.

### Special protective equipment for fire-fighters

: SureSelect Hyb 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 Hyb 2

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

SureSelect Hyb 4

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

SureSelect Binding 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 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

### 6.1 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 spilled material. 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 spilled material. Avoid breathing vapor 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 spilled material. 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 spilled 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 spilled 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 spilled material. Put on appropriate personal protective equipment.

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

## Section 6. Accidental release measures

|   |   |  |
|---|---|--|
| <p><b>For emergency responders</b> :</p>      | <p>SureSelect Hyb 1</p> <p>SureSelect Hyb 2</p> <p>SureSelect Hyb 4</p> <p>SureSelect Binding Buffer</p> <p>SureSelect Wash Buffer 1</p> <p>SureSelect Wash Buffer</p> <p>SureSelect Elution Buffer</p> <p>SureSelect Neutralization Buffer</p> | <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> <p>If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".</p> |
| <p><b>6.2 Environmental precautions</b> :</p> | <p>SureSelect Hyb 1</p> <p>SureSelect Hyb 2</p> <p>SureSelect Hyb 4</p> <p>SureSelect Binding Buffer</p> <p>SureSelect Wash Buffer 1</p> <p>SureSelect Wash Buffer</p>  | <p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p> <p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p> <p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p> <p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p> <p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).</p> <p>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.</p>  |

## Section 6. Accidental release measures

|                                  |  |
|----------------------------------|--|
| SureSelect Elution Buffer        | Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).<br>Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |
| SureSelect Neutralization Buffer | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).  |

### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : SureSelect Hyb 1

|                                  |  |
|----------------------------------|--|
| 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.  |
| 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. Absorb spillage to prevent material damage. Dispose of via a licensed waste disposal contractor. |
| SureSelect Neutralization Buffer | Stop leak if without risk. Move containers from spill  |

## Section 6. Accidental release measures

area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

#### Protective measures

: SureSelect Hyb 1

Put on appropriate personal protective equipment (see Section 8).

SureSelect Hyb 2

Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor 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).

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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container. Absorb spillage to prevent material damage.

SureSelect Neutralization Buffer

Put on appropriate personal protective equipment (see Section 8).

#### Advice on general occupational hygiene

: SureSelect Hyb 1

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 Hyb 2

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 Hyb 4

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 Binding Buffer

Eating, drinking and smoking should be prohibited

## Section 7. Handling and storage

SureSelect Wash Buffer 1

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

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

SureSelect Wash 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.

SureSelect Elution 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.

SureSelect Neutralization 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.

### 7.2 Conditions for safe storage, including any incompatibilities

: SureSelect Hyb 1

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

SureSelect Hyb 2

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

SureSelect Hyb 4

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from

## Section 7. Handling and storage

|                                  |   |
|----------------------------------|---|
| SureSelect Binding Buffer        | <p>incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p> <p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p> |
| SureSelect Wash Buffer 1         | <p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>   |
| SureSelect Wash Buffer           | <p>Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>   |
| SureSelect Elution Buffer        | <p>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 in a corrosion resistant container with a resistant inner liner. Separate from acids. Keep away from metals. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>  |
| SureSelect Neutralization Buffer | <p>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</p>   |

## Section 7. Handling and storage

until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

### 7.3 Specific end use(s)

|   |  |  |
|---|--|--|
| <b>Recommendations</b>                      | : SureSelect Hyb 1<br>SureSelect Hyb 2<br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br>SureSelect Neutralization Buffer | Industrial applications, Professional applications.<br>Industrial applications, Professional applications.<br>Industrial applications, Professional applications.<br>Industrial applications, Professional applications.<br>Industrial applications, Professional applications.<br>Industrial applications, Professional applications.<br>Industrial applications, Professional applications.<br>Industrial applications, Professional applications. |
| <b>Industrial sector specific solutions</b> | : SureSelect Hyb 1<br>SureSelect Hyb 2<br>SureSelect Hyb 4<br>SureSelect Binding Buffer<br>SureSelect Wash Buffer 1<br>SureSelect Wash Buffer<br>SureSelect Elution Buffer<br>SureSelect Neutralization Buffer | Not available.<br>Not available.<br>Not available.<br>Not available.<br>Not available.<br>Not available.<br>Not available.<br>Not available.   |

## Section 8. Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

| Ingredient name   | Exposure limits   |
|---|---|
| SureSelect Hyb 1<br>Sodium dihydrogenorthophosphate                   | None.   |
| SureSelect Hyb 2<br>Edetic acid                                       | None.   |
| SureSelect Hyb 4<br>Sulfuric acid monododecyl ester sodium salt (1:1) | None.   |
| SureSelect Elution Buffer<br>Sodium hydroxide                         | <b>ACGIH TLV (United States, 1/2022).</b><br>C: 2 mg/m <sup>3</sup><br><b>OSHA PEL 1989 (United States, 3/1989).</b><br>CEIL: 2 mg/m <sup>3</sup><br><b>NIOSH REL (United States, 10/2020).</b><br>CEIL: 2 mg/m <sup>3</sup><br><b>OSHA PEL (United States, 5/2018).</b><br>TWA: 2 mg/m <sup>3</sup> 8 hours. |

#### Biological exposure indices

No exposure indices known.

### 8.2 Exposure controls

**Appropriate engineering controls** : If user operations generate dust, fumes, gas, vapor 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.

## Section 8. Exposure controls/personal protection

**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: safety glasses with side-shields.

### 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

|                       |                                  |                |
|-----------------------|----------------------------------|----------------|
| <b>Physical state</b> | : 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.        |
| <b>Color</b>          | : 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 and safety characteristics

**Odor** : 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.

**Odor 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

**Melting point/freezing 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, initial boiling point, and boiling range** : 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** :

| Ingredient name  | Closed cup |      |           | Open cup |    |        |
|------------------|------------|------|-----------|----------|----|--------|
|                  | °C         | °F   | Method    | °C       | °F | Method |
| SureSelect Hyb 2 |            |      |           |          |    |        |
| Edetic acid      | >100       | >212 | DIN 51758 |          |    |        |

**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.

## Section 9. Physical and chemical properties and safety characteristics

**Flammability** :  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 explosion limit/flammability limit** :  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.

**Vapor pressure** :

| Ingredient name   | Vapor Pressure at 20°C |     |        | Vapor pressure at 50°C |      |        |
|---|------------------------|-----|--------|------------------------|------|--------|
|   | mm Hg                  | kPa | Method | mm Hg                  | kPa  | Method |
| <input checked="" type="checkbox"/> <b>SureSelect Hyb 1</b> |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |
| <b>SureSelect Hyb 2</b>                                     |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |
| Edetic acid   | 0                      | 0   |        |                        |      |        |
| <b>SureSelect Hyb 4</b>                                     |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |
| <b>SureSelect Binding Buffer</b>                            |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |
| <b>SureSelect Wash Buffer 1</b>                             |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |
| <b>SureSelect Wash Buffer</b>                               |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |
| <b>SureSelect Elution Buffer</b>                            |                        |     |        |                        |      |        |
| water   | 23.8                   | 3.2 |        | 92.258                 | 12.3 |        |

## Section 9. Physical and chemical properties and safety characteristics

|  |      |     |  |  |             |          |
|--|------|-----|--|--|-------------|----------|
| <b>SureSelect Neutralization Buffer</b>                  |      |     |  |  |             |          |
| water  | 23.8 | 3.2 |  |  | 92.258      | 12.3     |
| 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride | 0    | 0   |  |  | 0.000007501 | 0.000001 |

**Relative vapor density** : 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.

**Relative density** : 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.





**Solubility(ies)** :

| Media                            | Result  |
|----------------------------------|---------|
| SureSelect Hyb 1                 |         |
| water                            | Soluble |
| SureSelect Hyb 2                 |         |
| water                            | Soluble |
| SureSelect Hyb 4                 |         |
| water                            | Soluble |
| SureSelect Binding Buffer        |         |
| water                            | Soluble |
| SureSelect Wash Buffer 1         |         |
| water                            | Soluble |
| SureSelect Wash Buffer           |         |
| water                            | Soluble |
| SureSelect Elution Buffer        |         |
| water                            | Soluble |
| SureSelect Neutralization Buffer |         |
| water                            | Soluble |



**Partition coefficient: n-octanol/water** : 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.

**Auto-ignition temperature** :

## Section 9. Physical and chemical properties and safety characteristics

|                                  | Ingredient name  | °C   | °F              | Method   |
|----------------------------------|--|------|-----------------|----------|
|                                  |  SureSelect Hyb 2   |      |                 |          |
|                                  | Edetic acid  | >400 | >752            | VDI 2263 |
| <b>Decomposition temperature</b> | :  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.  |          |
| <b>Viscosity</b>                 | :  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.  |          |
| <b>Particle characteristics</b>  |  |      |                 |          |
| <b>Median particle size</b>      | :  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. |          |

## Section 10. Stability and reactivity

|                                |  |  |
|--------------------------------|--|--|
| <b>10.1 Reactivity</b>         | :  SureSelect Hyb 1 | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Hyb 2   | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Hyb 4   | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Binding Buffer  | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Wash Buffer 1   | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Wash Buffer   | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Elution Buffer  | No specific test data related to reactivity available for this product or its ingredients. |
|                                | SureSelect Neutralization Buffer   | No specific test data related to reactivity available for this product or its ingredients. |
| <b>10.2 Chemical stability</b> | :  SureSelect Hyb 1 | The product is stable.   |
|                                | SureSelect Hyb 2   | The product is stable.   |
|                                | SureSelect Hyb 4   | The product is stable.   |
|                                | SureSelect Binding Buffer  | The product is stable.   |
|                                | SureSelect Wash Buffer 1   | The product is stable.   |
|                                | SureSelect Wash Buffer   | The product is stable.   |
|                                | SureSelect Elution Buffer  | The product is stable.   |
|                                | SureSelect Neutralization Buffer   | The product is stable.   |

## Section 10. Stability and reactivity

|  |                                  |  |
|--|----------------------------------|--|
| <b>10.3 Possibility of hazardous reactions</b> | : SureSelect Hyb 1               | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Hyb 2                 | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Hyb 4                 | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Binding Buffer        | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Wash Buffer 1         | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Wash Buffer           | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Elution Buffer        | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
|  | SureSelect Neutralization Buffer | Under normal conditions of storage and use, hazardous reactions will not occur.                      |
| <b>10.4 Conditions to avoid</b>                | : 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.  |
| <b>10.5 Incompatible materials</b>             | : SureSelect Hyb 1               | May react or be incompatible with oxidizing materials.   |
|  | SureSelect Hyb 2                 | May react or be incompatible with oxidizing materials.   |
|  | SureSelect Hyb 4                 | May react or be incompatible with oxidizing materials.   |
|  | SureSelect Binding Buffer        | May react or be incompatible with oxidizing materials.   |
|  | SureSelect Wash Buffer 1         | May react or be incompatible with oxidizing materials.   |
|  | SureSelect Wash Buffer           | May react or be incompatible with oxidizing materials.   |
|  | SureSelect Elution Buffer        | Reactive or incompatible with the following materials:<br>acids<br>metals                            |
|  | SureSelect Neutralization Buffer | May react or be incompatible with oxidizing materials.   |
| <b>10.6 Hazardous decomposition products</b>   | : 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. |

## Section 10. Stability and reactivity

|                                  |   |
|----------------------------------|---|
| SureSelect Wash Buffer           | produced.<br>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

### 11.1 Information on toxicological effects

#### Acute toxicity

| Product/ingredient name                             | Result      | Species | Dose        | Exposure |
|---|-------------|---------|-------------|----------|
| SureSelect Hyb 1<br>Sodium dihydrogenorthophosphate | LD50 Dermal | Rabbit  | >7940 mg/kg | -        |
|   | LD50 Oral   | Rat     | 8290 mg/kg  | -        |

#### Irritation/Corrosion

| Product/ingredient name                             | Result  | Species | Score | Exposure         | Observation |
|---|---|---------|-------|------------------|-------------|
| SureSelect Hyb 1<br>Sodium dihydrogenorthophosphate | Eyes - Mild irritant                          | Rabbit  | -     | 150 mg           | -           |
|   | SureSelect Elution Buffer<br>Sodium hydroxide | Rabbit  | -     | 1 %              | -           |
|   | Eyes - Severe irritant                        | Rabbit  | -     | 0.5 minutes 1 mg | -           |
|   | Eyes - Severe irritant                        | Rabbit  | -     | 24 hours 50 ug   | -           |
|   | Skin - Severe irritant                        | Rabbit  | -     | 24 hours 500 mg  | -           |

#### Sensitization

Not available.

#### Mutagenicity

Conclusion/Summary : Not available.

#### Carcinogenicity

Conclusion/Summary : Not available.

#### Reproductive toxicity

Conclusion/Summary : Not available.

#### Teratogenicity

Conclusion/Summary : Not available.

#### Specific target organ toxicity (single exposure)

| Name  | Category   | Route of exposure | Target organs                |
|---|------------|-------------------|------------------------------|
| SureSelect Elution Buffer<br>Sodium hydroxide | Category 3 | -                 | Respiratory tract irritation |

#### Specific target organ toxicity (repeated exposure)

## Section 11. Toxicological information

| Name                                   | Category   | Route of exposure | Target organs |
|--|------------|-------------------|---------------|
| <b>SureSelect Hyb 2</b><br>Edetic acid | Category 2 | -                 | kidneys       |

### Aspiration hazard

Not available.

### Information on the likely routes of exposure

|                                  |  |
|----------------------------------|--|
| SureSelect Hyb 1                 | Not available.   |
| SureSelect Hyb 2                 | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| SureSelect Hyb 4                 | Not available.   |
| SureSelect Binding Buffer        | Not available.   |
| SureSelect Wash Buffer 1         | Not available.   |
| SureSelect Wash Buffer           | Not available.   |
| SureSelect Elution Buffer        | Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. |
| SureSelect Neutralization Buffer | Not available.   |

### Potential acute health effects

#### Eye contact

|                                  |   |
|----------------------------------|---|
| SureSelect Hyb 1                 | No known significant effects or critical hazards. |
| 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        | Causes eye irritation.                            |
| SureSelect Neutralization Buffer | No known significant effects or critical hazards. |

#### 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 | No known significant effects or critical hazards. |

#### Ingestion

|                                  |   |
|----------------------------------|---|
| 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. |

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

## Section 11. Toxicological information

|                     |                                  |  |
|---------------------|----------------------------------|--|
| <b>Eye contact</b>  | : SureSelect Hyb 1               | No specific data.  |
|                     | SureSelect Hyb 2                 | Adverse symptoms may include the following:<br>pain or irritation<br>watering<br>redness |
|                     | 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.  |
| <b>Inhalation</b>   | SureSelect Elution Buffer        | Adverse symptoms may include the following:<br>irritation<br>watering<br>redness         |
|                     | SureSelect Neutralization Buffer | No specific data.  |
|                     | : SureSelect Hyb 1               | No specific data.  |
|                     | SureSelect Hyb 2                 | No specific data.  |
|                     | SureSelect Hyb 4                 | No specific data.  |
|                     | SureSelect Binding Buffer        | No specific data.  |
| <b>Skin contact</b> | 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.  |
|                     | : SureSelect Hyb 1               | No specific data.  |
|                     | SureSelect Hyb 2                 | No specific data.  |
| <b>Ingestion</b>    | 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.  |

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Potential chronic health effects

|                |                           |  |
|----------------|---------------------------|--|
| <b>General</b> | : 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.                  |

## Section 11. Toxicological information

|                              |                                  |   |
|------------------------------|----------------------------------|---|
|                              | SureSelect Elution Buffer        | No known significant effects or critical hazards. |
|                              | SureSelect Neutralization Buffer | No known significant effects or critical hazards. |
| <b>Carcinogenicity</b>       | : 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. |
| <b>Mutagenicity</b>          | : 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. |
| <b>Reproductive toxicity</b> | : 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

| Product/ingredient name  | Oral (mg/kg)     | Dermal (mg/kg) | Inhalation (gases) (ppm) | Inhalation (vapors) (mg/l) | Inhalation (dusts and mists) (mg/l) |
|--|------------------|----------------|--------------------------|----------------------------|-------------------------------------|
| <b>SureSelect Hyb 1</b><br>SureSelect Hyb 1<br>Sodium dihydrogenorthophosphate                   | 17142.9<br>8290  | N/A<br>N/A     | N/A<br>N/A               | N/A<br>N/A                 | N/A<br>N/A                          |
| <b>SureSelect Hyb 4</b><br>SureSelect Hyb 4<br>Sulfuric acid monododecyl ester sodium salt (1:1) | 128800.0<br>1288 | N/A<br>N/A     | N/A<br>N/A               | N/A<br>N/A                 | N/A<br>N/A                          |
| <b>SureSelect Binding Buffer</b><br>SureSelect Binding Buffer                                    | 51770.7          | N/A            | N/A                      | N/A                        | N/A                                 |

|                          |                                  |                |
|--------------------------|----------------------------------|----------------|
| <b>Other information</b> | : 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 12. Ecological information

### 12.1 Toxicity

| Product/ingredient name                                    | Result                             | Species                           | Exposure |
|--|------------------------------------|-----------------------------------|----------|
| <b>SureSelect Hyb 1</b><br>Sodium dihydrogenorthophosphate | Acute LC50 720 ppm Fresh water     | Fish - Gambusia affinis - Adult   | 96 hours |
| <b>SureSelect Hyb 2</b><br>Edetic acid                     | Acute EC50 113000 µg/l Fresh water | Daphnia - Daphnia magna - Neonate | 48 hours |
|  | Acute LC50 41000 µg/l Fresh water  | Fish - Lepomis macrochirus        | 96 hours |
| <b>SureSelect Elution Buffer</b><br>Sodium hydroxide       | Acute LC50 125 ppm Fresh water     | Fish - Gambusia affinis - Adult   | 96 hours |

### 12.2 Persistence and degradability

| Product/ingredient name                              | Aquatic half-life | Photolysis | Biodegradability |
|--|-------------------|------------|------------------|
| <b>SureSelect Hyb 2</b><br>Edetic acid               | -                 | -          | Not readily      |
| <b>SureSelect Elution Buffer</b><br>Sodium hydroxide | -                 | -          | Readily          |

### 12.3 Bioaccumulative potential

| Product/ingredient name                | LogP <sub>ow</sub> | BCF | Potential |
|--|--------------------|-----|-----------|
| <b>SureSelect Hyb 2</b><br>Edetic acid | -3.86              | 1.8 | low       |

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

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

## Section 13. Disposal considerations

### 13.1 Waste treatment methods

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

## Section 13. Disposal considerations

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

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

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

## Section 14. Transport information

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

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

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

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

**U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined  
**Clean Water Act (CWA) 311:** Edetic acid; Sodium hydroxide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

### SARA 302/304

#### Composition/information on ingredients

No products were found.

**SARA 304 RQ** : Not applicable.

### SARA 311/312

#### **Classification**

|                                  |   |
|----------------------------------|---|
| SureSelect Hyb 1                 | Not applicable.   |
| SureSelect Hyb 2                 | SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |
| SureSelect Hyb 4                 | Not applicable.   |
| SureSelect Binding Buffer        | Not applicable.   |
| SureSelect Wash Buffer 1         | Not applicable.   |
| SureSelect Wash Buffer           | Not applicable.   |
| SureSelect Elution Buffer        | CORROSIVE TO METALS - Category 1                                |
|                                  | EYE IRRITATION - Category 2B                                    |
| SureSelect Neutralization Buffer | Not applicable.   |

## Section 15. Regulatory information

### Composition/information on ingredients

| Name   | %         | Classification  |
|--|-----------|---|
| <b>SureSelect Hyb 1</b><br>Sodium dihydrogenorthophosphate                   | ≤3        | EYE IRRITATION - Category 2B  |
| <b>SureSelect Hyb 2</b><br>Edetic acid                                       | ≥10 - <25 | EYE IRRITATION - Category 2A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2   |
| <b>SureSelect Hyb 4</b><br>Sulfuric acid monododecyl ester sodium salt (1:1) | ≤3        | ACUTE TOXICITY (oral) - Category 4  |
| <b>SureSelect Elution Buffer</b><br>Sodium hydroxide                         | <1        | CORROSIVE TO METALS - Category 1<br>SKIN CORROSION - Category 1A<br>SERIOUS EYE DAMAGE - Category 1<br>SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3<br>HNO <sub>2</sub> - Corrosive to digestive tract [severe] |

### State regulations

- Massachusetts** : The following components are listed: ETHYLENEDIAMINE TETRAACETIC ACID
- New York** : The following components are listed: Ethylenediamine tetraacetic acid
- New Jersey** : The following components are listed: ETHYLENEDIAMINETETRAACETIC ACID
- Pennsylvania** : The following components are listed: GLYCINE, N,N'-1,2-ETHANEDIYLBIS[N-(CARBOXYMETHYL)-

### California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

### International regulations

#### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

### Inventory list

- Australia** : Not determined.
- Canada** : Not determined.
- China** : Not determined.
- Eurasian Economic Union** : **Russian Federation inventory**: Not determined.
- Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.  
**Japan inventory (ISHL)**: All components are listed or exempted.
- New Zealand** : Not determined.
- Philippines** : Not determined.

## Section 15. Regulatory information

|                          |                   |
|--------------------------|-------------------|
| <b>Republic of Korea</b> | : Not determined. |
| <b>Taiwan</b>            | : Not determined. |
| <b>Thailand</b>          | : Not determined. |
| <b>Turkey</b>            | : Not determined. |
| <b>United States</b>     | : Not determined. |
| <b>Viet Nam</b>          | : Not determined. |

## Section 16. Other information

### Procedure used to derive the classification

| Classification   | Justification                            |
|--|--|
| <b>SureSelect Hyb 2</b><br>EYE IRRITATION - Category 2A<br>SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method<br>Calculation method |
| <b>SureSelect Elution Buffer</b><br>CORROSIVE TO METALS - Category 1<br>EYE IRRITATION - Category 2B                       | Expert judgment<br>Expert judgment       |

### History

|                               |              |
|-------------------------------|--------------|
| <b>Date of issue</b>          | : 03/15/2023 |
| <b>Date of previous issue</b> | : 11/28/2019 |
| <b>Version</b>                | : 6          |

### Key to abbreviations

|   |
|---|
| : 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   |
| : UN = United Nations   |

✔ Indicates information that has changed from previously issued version.

### Notice to reader

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