

SAFETY DATA SHEET

SureSelect XT Target Enrichment Box 1 - S5500

Section 1. Identification

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| Product identifier | : SureSelect XT Target Enrichment Box 1 - S5500 |
| Part no. (chemical kit) | : 5190-5931, 5190-5932 |
| Part no. | : SureSelect Hyb 1 5190-4396 / 5190-4404 SureSelect Hyb 2 5190-4397 / 5190-4405 SureSelect Hyb 4 5190-4406 SureSelect Binding Buffer 5190-4399 / 5190-4407 SureSelect Wash Buffer 1 5190-4400 / 5190-4408 SureSelect Wash Buffer 2 5190-4401 / 5190-4409 |
| Material uses | : Analytical reagent. SureSelect Hyb 1 0.4 ml - 2.4 ml SureSelect Hyb 2 0.096 ml - 1.25 ml SureSelect Hyb 4 1.25 ml SureSelect Binding Buffer 13.2 ml - 80 ml SureSelect Wash Buffer 1 8 ml - 48 ml SureSelect Wash Buffer 2 24 ml - 144 ml |
| Supplier/Manufacturer | : Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770 |
| Emergency telephone number (with hours of operation) | : CHEMTREC®: 1-800-424-9300 |

Section 2. Hazard identification

Classification of the substance or mixture

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| SureSelect Hyb 1 H319 | EYE IRRITATION - Category 2A |
| SureSelect Hyb 2 H319 H373 | EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 |

GHS label elements

Hazard pictograms : SureSelect Hyb 1



SureSelect Hyb 2



Section 2. Hazard identification

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| Signal word | : SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | Warning Warning No signal word. No signal word. No signal word. No signal word. |
| Hazard statements | : <input checked="" type="checkbox"/> SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | H319 - Causes serious eye irritation. H319 - Causes serious eye irritation. H373 - May cause damage to organs through prolonged or repeated exposure. (respiratory tract) No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. |
| <u>Precautionary statements</u> | | |
| Prevention | : <input checked="" type="checkbox"/> SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | P280 - Wear eye or face protection. P280 - Wear eye or face protection. P260 - Do not breathe vapor. Not applicable. Not applicable. Not applicable. Not applicable. |
| Response | : <input checked="" type="checkbox"/> SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. P314 - Get medical advice or attention if you feel unwell. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention. Not applicable. Not applicable. Not applicable. Not applicable. |
| Storage | : SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable. |
| Disposal | : <input checked="" type="checkbox"/> SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable. Not applicable. Not applicable. Not applicable. |

Section 2. Hazard identification

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| Supplemental label elements | : 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 2 | None known. |
| | ☑ SureSelect Hyb 4 | Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1% |
| Other hazards which do not result in classification | : SureSelect Hyb 1 | None known. |
| | SureSelect Hyb 2 | None known. |
| | SureSelect Hyb 4 | None known. |
| | SureSelect Binding Buffer | None known. |
| | SureSelect Wash Buffer 1 | None known. |
| | SureSelect Wash Buffer 2 | None known. |

Section 3. Composition/information on ingredients

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| Substance/mixture | : SureSelect Hyb 1 | Mixture |
| | SureSelect Hyb 2 | Mixture |
| | SureSelect Hyb 4 | Mixture |
| | SureSelect Binding Buffer | Mixture |
| | SureSelect Wash Buffer 1 | Mixture |
| | SureSelect Wash Buffer 2 | Mixture |

| Ingredient name | % (w/w) | CAS number |
|---|---------|------------|
| ☑ SureSelect Hyb 1 | | |
| Sodium chloride | 10 - 30 | 7647-14-5 |
| Sodium dihydrogenorthophosphate | 1 - 5 | 7558-80-7 |
| SureSelect Hyb 2 | | |
| Disodium dihydrogen ethylenediaminetetraacetate | 10 - 30 | 139-33-3 |
| SureSelect Hyb 4 | | |
| Sulfuric acid monododecyl ester sodium salt (1:1) | 0.1 - 1 | 8012-56-4 |
| SureSelect Binding Buffer | | |
| Sodium chloride | 3 - 7 | 7647-14-5 |
| SureSelect Wash Buffer 1 | | |
| Sodium dodecyl sulphate | <0.1 | 151-21-3 |
| SureSelect Wash Buffer 2 | | |
| Sodium dodecyl sulphate | <0.1 | 151-21-3 |

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

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

Section 4. First-aid measures

Description of necessary first aid measures

Section 4. First-aid measures

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| Eye contact | : SureSelect Hyb 1 | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. |
| | SureSelect Hyb 2 | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. |
| | SureSelect Hyb 4 | Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. 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 2 | 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. |
| | Inhalation | : SureSelect Hyb 1 |
| 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. |
| 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 2 | | Remove victim to fresh air and keep at rest in a |

Section 4. First-aid measures

Skin contact

: SureSelect Hyb 1

position comfortable for breathing. Get medical attention if symptoms occur.

SureSelect Hyb 2

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SureSelect Hyb 4

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 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 2

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

Ingestion

: SureSelect Hyb 1

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

SureSelect Hyb 2

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

Section 4. First-aid measures

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| | 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureSelect Wash Buffer 1 | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |
| SureSelect Wash Buffer 2 | Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur. |

Most important symptoms/effects, acute and delayed

Potential acute health effects

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| Eye contact | : SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | Causes serious eye irritation. Causes serious eye irritation. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Inhalation | : SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Skin contact | : SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. |
| Ingestion | : SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. |

Over-exposure signs/symptoms

Section 4. First-aid measures

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| Eye contact | : SureSelect Hyb 1 | Adverse symptoms may include the following: pain or irritation watering redness |
| | SureSelect Hyb 2 | Adverse symptoms may include the following: pain or irritation watering redness |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No specific data. No specific data. |
| Inhalation | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No specific data. No specific data. |
| Skin contact | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No specific data. No specific data. |
| Ingestion | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No specific data. No specific data. |

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

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| Notes to physician | : SureSelect Hyb 1 | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureSelect Hyb 2 | In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. |
| | SureSelect Hyb 4 | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureSelect Binding Buffer | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureSelect Wash Buffer 1 | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| | SureSelect Wash Buffer 2 | Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. |
| Specific treatments | : SureSelect Hyb 1 | No specific treatment. |
| | SureSelect Hyb 2 | No specific treatment. |
| | SureSelect Hyb 4 | No specific treatment. |
| | SureSelect Binding Buffer | No specific treatment. |
| | SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No specific treatment. No specific treatment. |

Section 4. First-aid measures

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| Protection of first-aiders | : SureSelect Hyb 1 | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| | SureSelect Hyb 2 | No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. |
| | SureSelect Hyb 4 | No action shall be taken involving any personal risk or without suitable training. |
| | 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 2 | No action shall be taken involving any personal risk or without suitable training. |

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

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| Suitable extinguishing media | : SureSelect Hyb 1 | Use an extinguishing agent suitable for the surrounding fire. |
| | SureSelect Hyb 2 | Use an extinguishing agent suitable for the surrounding fire. |
| | SureSelect Hyb 4 | Use an extinguishing agent suitable for the surrounding fire. |
| | SureSelect Binding Buffer | Use an extinguishing agent suitable for the surrounding fire. |
| | SureSelect Wash Buffer 1 | Use an extinguishing agent suitable for the surrounding fire. |
| | SureSelect Wash Buffer 2 | Use an extinguishing agent suitable for the surrounding fire. |

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| Unsuitable extinguishing media | : SureSelect Hyb 1 | None known. |
| | SureSelect Hyb 2 | None known. |
| | SureSelect Hyb 4 | None known. |
| | SureSelect Binding Buffer | None known. |
| | SureSelect Wash Buffer 1 | None known. |
| | SureSelect Wash Buffer 2 | None known. |

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| Specific hazards arising from the chemical | : SureSelect Hyb 1 | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | SureSelect Hyb 2 | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | SureSelect Hyb 4 | In a fire or if heated, a pressure increase will occur and the container may burst. |
| | 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 2 | In a fire or if heated, a pressure increase will occur and the container may burst. |

Section 5. Fire-fighting measures

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| Hazardous thermal decomposition products | : SureSelect Hyb 1 | Decomposition products may include the following materials: phosphorus oxides halogenated compounds metal oxide/oxides |
| | SureSelect Hyb 2 | Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides |
| | SureSelect Hyb 4 | Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides metal oxide/oxides |
| | SureSelect Binding Buffer | Decomposition products may include the following materials: halogenated compounds metal oxide/oxides |
| | SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 | No specific data. No specific data. |
| Special protective actions for fire-fighters | : 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 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 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. |
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| 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 |

Section 5. Fire-fighting measures

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| | (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 2 | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. |

Section 6. Accidental release measures


Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

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| : 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. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment. |
| SureSelect Hyb 2 | No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through 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 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. Put on appropriate personal protective equipment. |

Section 6. Accidental release measures

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| For emergency responders : | SureSelect Hyb 1 | 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". |
| | SureSelect Hyb 2 | 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". |
| | SureSelect Hyb 4 | 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". |
| | SureSelect Binding Buffer | If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". |
| | SureSelect Wash Buffer 1 | 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". |
| | SureSelect Wash Buffer 2 | 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". |

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| Environmental precautions : |  SureSelect Hyb 1 | 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 Hyb 2 | 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 Hyb 4 | 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 Binding 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). |
| | SureSelect Wash Buffer 1 | 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 Wash Buffer 2 | Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). |

Methods and materials for containment and cleaning up

Section 6. Accidental release measures

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| Methods for cleaning up | : SureSelect Hyb 1 | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| | SureSelect Hyb 2 | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| | SureSelect Hyb 4 | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| | SureSelect Binding Buffer | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| | SureSelect Wash Buffer 1 | Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor. |
| | SureSelect Wash Buffer 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. |

Section 7. Handling and storage

Precautions for safe handling

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| Protective measures | : SureSelect Hyb 1 | Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| | 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 |

Section 7. Handling and storage

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| | SureSelect Wash Buffer 1 | (see Section 8). Put on appropriate personal protective equipment (see Section 8). |
| | SureSelect Wash Buffer 2 | 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 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 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 Wash Buffer 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. |
| | Conditions for safe storage, including any incompatibilities | : SureSelect Hyb 1 |

Section 7. Handling and storage

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|---------------------------|--|
| SureSelect Hyb 2 | <p>incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p> |
| SureSelect Hyb 4 | <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 Binding 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 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 2 | <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> |

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None.

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.

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

Individual protection measures

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

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

Skin protection

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

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

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

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

Section 9. Physical and chemical properties

Appearance

| | | |
|-----------------------|---------------------------|---------|
| Physical state | : SureSelect Hyb 1 | Liquid. |
| | SureSelect Hyb 2 | Liquid. |
| | SureSelect Hyb 4 | Liquid. |
| | SureSelect Binding Buffer | Liquid. |
| | SureSelect Wash Buffer 1 | Liquid. |
| | SureSelect Wash Buffer 2 | Liquid. |

Section 9. Physical and chemical properties

| | | |
|----------------------------------|---------------------------|-----------------|
| Color | : 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 2 | Not available. |
| 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 2 | 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 2 | Not available. |
| pH | : SureSelect Hyb 1 | 7.4 |
| | SureSelect Hyb 2 | 8 |
| | SureSelect Hyb 4 | 5.2 to 6.2 |
| | SureSelect Binding Buffer | 7.5 |
| | SureSelect Wash Buffer 1 | 7 |
| | SureSelect Wash Buffer 2 | 7 |
| Melting point | : SureSelect Hyb 1 | Not available. |
| | SureSelect Hyb 2 | Not available. |
| | SureSelect Hyb 4 | 0°C (32°F) |
| | SureSelect Binding Buffer | Not available. |
| | SureSelect Wash Buffer 1 | 0°C (32°F) |
| | SureSelect Wash Buffer 2 | 0°C (32°F) |
| Boiling point | : SureSelect Hyb 1 | Not available. |
| | SureSelect Hyb 2 | Not available. |
| | SureSelect Hyb 4 | 100°C (212°F) |
| | SureSelect Binding Buffer | Not available. |
| | SureSelect Wash Buffer 1 | 100°C (212°F) |
| | SureSelect Wash Buffer 2 | 100°C (212°F) |
| Flash point | : SureSelect Hyb 1 | Not available. |
| | SureSelect Hyb 2 | Not available. |
| | SureSelect Hyb 4 | Not available. |
| | SureSelect Binding Buffer | Not available. |
| | SureSelect Wash Buffer 1 | Not available. |
| | SureSelect Wash Buffer 2 | Not available. |
| Evaporation rate | : SureSelect Hyb 1 | Not available. |
| | SureSelect Hyb 2 | Not available. |
| | SureSelect Hyb 4 | Not available. |
| | SureSelect Binding Buffer | Not available. |
| | SureSelect Wash Buffer 1 | Not available. |
| | SureSelect Wash Buffer 2 | Not available. |
| Flammability (solid, gas) | : SureSelect Hyb 1 | Not applicable. |
| | SureSelect Hyb 2 | Not applicable. |
| | SureSelect Hyb 4 | Not applicable. |
| | SureSelect Binding Buffer | Not applicable. |
| | SureSelect Wash Buffer 1 | Not applicable. |
| | SureSelect Wash Buffer 2 | Not applicable. |

Section 9. Physical and chemical properties

| | | |
|---|--|--|
| Lower and upper explosive (flammable) limits | : SureSelect Hyb 1 | Not available. |
| | SureSelect Hyb 2 | Not available. |
| | SureSelect Hyb 4 | Not available. |
| | SureSelect Binding Buffer | Not available. |
| | SureSelect Wash Buffer 1 | Not available. |
| | SureSelect Wash Buffer 2 | Not available. |
| Vapor pressure | : SureSelect Hyb 1 | Not available. |
| | SureSelect Hyb 2 | Not available. |
| | SureSelect Hyb 4 | Not available. |
| | SureSelect Binding Buffer | Not available. |
| | SureSelect Wash Buffer 1 | Not available. |
| | SureSelect Wash Buffer 2 | Not available. |
| 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 2 | 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 2 | Not available. |
| Solubility | : <input checked="" type="checkbox"/> SureSelect Hyb 1 | Soluble in the following materials: cold water and hot water. |
| | SureSelect Hyb 2 | Easily soluble in the following materials: cold water and hot water. |
| | SureSelect Hyb 4 | Easily soluble in the following materials: cold water and hot water. |
| | SureSelect Binding Buffer | Easily soluble in the following materials: cold water and hot water. |
| | SureSelect Wash Buffer 1 | Easily soluble in the following materials: cold water and hot water. |
| | SureSelect Wash Buffer 2 | Easily soluble in the following materials: cold water and hot water. |
| Partition coefficient: n-octanol/water | : 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 2 | Not available. |
| Auto-ignition temperature | : 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 2 | Not available. |
| Decomposition temperature | : 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 2 | Not available. |

Section 9. Physical and chemical properties

| | | |
|------------------|---------------------------|----------------|
| Viscosity | : 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 2 | Not available. |

Section 10. Stability and reactivity

| | | |
|---|---------------------------|--|
| Reactivity | : 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 2 | No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : 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 2 | The product is stable. |
| Possibility of hazardous reactions | : 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 2 | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 | No specific data. |
| | SureSelect Wash Buffer 2 | No specific data. |
| Incompatible materials | : 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 2 | May react or be incompatible with oxidizing materials. |

Section 10. Stability and reactivity

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|---|---------------------|---------|------------|----------|
| SureSelect Hyb 1 Sodium chloride | LD50 Oral | Rat | 3000 mg/kg | - |
| | Sodium LD50 Oral | Rat | 8290 mg/kg | - |
| SureSelect Hyb 2 Disodium dihydrogen ethylenediaminetetraacetate | LD50 Oral | Rat | 2 g/kg | - |
| SureSelect Binding Buffer Sodium chloride | LD50 Oral | Rat | 3000 mg/kg | - |
| SureSelect Wash Buffer 1 Sodium dodecyl sulphate | LD50 Oral | Rat | 1288 mg/kg | - |
| SureSelect Wash Buffer 2 Sodium dodecyl sulphate | LD50 Oral | Rat | 1288 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|--|---|--------------------------|--------|-----------------|-----------------|
| SureSelect Hyb 1 Sodium chloride | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| Sodium dihydrogenorthophosphate | Eyes - Mild irritant | Rabbit | - | 150 mg | - |
| | SureSelect Binding Buffer Sodium chloride | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg |
| | Eyes - Moderate irritant | Rabbit | - | 10 mg | - |

Section 11. Toxicological information

| | | | | | |
|--|--------------------------|------------|----------------|-----------------|---|
| SureSelect Wash Buffer 1 Sodium dodecyl sulphate | Skin - Mild irritant | Rabbit | - | 24 hours 500 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 250 ug | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 mg | - |
| | Skin - Mild irritant | Guinea pig | - | 24 hours 25 mg | - |
| | Skin - Moderate irritant | Mouse | - | 24 hours 25 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 50 mg | - |
| SureSelect Wash Buffer 2 Sodium dodecyl sulphate | Skin - Moderate irritant | Rabbit | - | 24 hours 25 mg | - |
| | Eyes - Mild irritant | Rabbit | - | 250 ug | - |
| | Eyes - Moderate irritant | Rabbit | - | 24 hours 100 mg | - |
| | Eyes - Moderate irritant | Rabbit | - | 10 mg | - |
| | Skin - Mild irritant | Guinea pig | - | 24 hours 25 mg | - |
| | Skin - Moderate irritant | Mouse | - | 24 hours 25 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 50 mg | - |
| Skin - Moderate irritant | Rabbit | - | 24 hours 25 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 Wash Buffer 1 Sodium dodecyl sulphate | Category 3 | - | Respiratory tract irritation |
| SureSelect Wash Buffer 2 Sodium dodecyl sulphate | Category 3 | - | Respiratory tract irritation |

Specific target organ toxicity (repeated exposure)

Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|--|------------|-------------------|-------------------|
| SureSelect Hyb 2 Disodium dihydrogen ethylenediaminetetraacetate | Category 2 | inhalation | respiratory tract |

Aspiration hazard

Not available.

Information on the likely routes of exposure

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

Potential acute health effects

Eye contact

| | |
|---------------------------|---|
| SureSelect Hyb 1 | Causes serious eye irritation. |
| SureSelect Hyb 2 | Causes serious eye irritation. |
| SureSelect Hyb 4 | No known significant effects or critical hazards. |
| SureSelect Binding Buffer | No known significant effects or critical hazards. |
| SureSelect Wash Buffer 1 | No known significant effects or critical hazards. |
| SureSelect Wash Buffer 2 | 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 2 | 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 2 | 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 2 | No known significant effects or critical hazards. |

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

| | |
|---------------------------|--|
| SureSelect Hyb 1 | Adverse symptoms may include the following: pain or irritation watering redness |
| SureSelect Hyb 2 | Adverse symptoms may include the following: pain or irritation watering redness |
| SureSelect Hyb 4 | No specific data. |
| SureSelect Binding Buffer | No specific data. |
| SureSelect Wash Buffer 1 | No specific data. |
| SureSelect Wash Buffer 2 | No specific data. |

Section 11. Toxicological information

| | | |
|---------------------|---------------------------|-------------------|
| Inhalation | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 | No specific data. |
| | SureSelect Wash Buffer 2 | No specific data. |
| Skin contact | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 | No specific data. |
| | SureSelect Wash Buffer 2 | No specific data. |
| Ingestion | : SureSelect Hyb 1 | No specific data. |
| | SureSelect Hyb 2 | No specific data. |
| | SureSelect Hyb 4 | No specific data. |
| | SureSelect Binding Buffer | No specific data. |
| | SureSelect Wash Buffer 1 | No specific data. |
| | SureSelect Wash Buffer 2 | 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

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

Section 11. Toxicological information

| | | |
|------------------------------|---------------------------|---|
| Developmental effects | : SureSelect Hyb 1 | No known significant effects or critical hazards. |
| | SureSelect Hyb 2 | No known significant effects or critical hazards. |
| | SureSelect Hyb 4 | No known significant effects or critical hazards. |
| | SureSelect Binding Buffer | No known significant effects or critical hazards. |
| | SureSelect Wash Buffer 1 | No known significant effects or critical hazards. |
| | SureSelect Wash Buffer 2 | No known significant effects or critical hazards. |
| Fertility effects | : SureSelect Hyb 1 | No known significant effects or critical hazards. |
| | SureSelect Hyb 2 | No known significant effects or critical hazards. |
| | SureSelect Hyb 4 | No known significant effects or critical hazards. |
| | SureSelect Binding Buffer | No known significant effects or critical hazards. |
| | SureSelect Wash Buffer 1 | No known significant effects or critical hazards. |
| | SureSelect Wash Buffer 2 | 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) |
|---|--------------|----------------|--------------------------|----------------------------|-------------------------------------|
| SureSelect Hyb 1 | | | | | |
| SureSelect Hyb 1 | 17142.9 | N/A | N/A | N/A | N/A |
| Sodium chloride | 3000 | N/A | N/A | N/A | N/A |
| Sodium dihydrogenorthophosphate | 8290 | N/A | N/A | N/A | N/A |
| SureSelect Hyb 2 | | | | | |
| SureSelect Hyb 2 | 13698.6 | N/A | N/A | N/A | 10.3 |
| Disodium dihydrogen ethylenediaminetetraacetate | 2000 | N/A | N/A | N/A | 1.5 |
| SureSelect Hyb 4 | | | | | |
| SureSelect Hyb 4 | 128800 | N/A | N/A | N/A | N/A |
| Sulfuric acid monododecyl ester sodium salt (1:1) | 1288 | N/A | N/A | N/A | N/A |
| SureSelect Binding Buffer | | | | | |
| SureSelect Binding Buffer | 51369.9 | N/A | N/A | N/A | N/A |
| Sodium chloride | 3000 | N/A | N/A | N/A | N/A |
| SureSelect Wash Buffer 1 | | | | | |
| Sodium dodecyl sulphate | 1288 | N/A | N/A | N/A | 1.5 |
| SureSelect Wash Buffer 2 | | | | | |
| Sodium dodecyl sulphate | 1288 | N/A | N/A | N/A | 1.5 |

Section 12. Ecological information

Toxicity

Section 12. Ecological information

| Product/ingredient name | Result | Species | Exposure |
|--|---|---|----------|
| SureSelect Hyb 1 Sodium chloride | Acute EC50 4.74 g/L Fresh water | Algae - Chlamydomonas reinhardtii | 96 hours |
| | Acute EC50 519.6 mg/l Fresh water | Crustaceans - Cypris subglobosa | 48 hours |
| | Acute IC50 6.87 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Acute LC50 1000000 µg/l Fresh water | Fish - Morone saxatilis - Larvae | 96 hours |
| | Chronic LC10 781 mg/l Fresh water | Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling) | 3 weeks |
| Sodium dihydrogenorthophosphate | Chronic NOEC 6 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Chronic NOEC 0.314 g/L Fresh water | Daphnia - Daphnia pulex | 21 days |
| | Chronic NOEC 100 mg/l Fresh water | Fish - Gambusia holbrooki - Adult | 8 weeks |
| SureSelect Binding Buffer Sodium chloride | Acute LC50 720 ppm Fresh water | Fish - Gambusia affinis - Adult | 96 hours |
| | Acute EC50 4.74 g/L Fresh water | Algae - Chlamydomonas reinhardtii | 96 hours |
| | Acute EC50 519.6 mg/l Fresh water | Crustaceans - Cypris subglobosa | 48 hours |
| | Acute IC50 6.87 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Acute LC50 1000000 µg/l Fresh water | Fish - Morone saxatilis - Larvae | 96 hours |
| SureSelect Wash Buffer 1 Sodium dodecyl sulphate | Chronic LC10 781 mg/l Fresh water | Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling) | 3 weeks |
| | Chronic NOEC 6 g/L Fresh water | Aquatic plants - Lemna minor | 96 hours |
| | Chronic NOEC 0.314 g/L Fresh water | Daphnia - Daphnia pulex | 21 days |
| | Chronic NOEC 100 mg/l Fresh water | Fish - Gambusia holbrooki - Adult | 8 weeks |
| | Acute EC50 1200 µg/l Marine water | Algae - Skeletonema costatum | 96 hours |
| SureSelect Wash Buffer 2 Sodium dodecyl sulphate | Acute LC50 900 µg/l Marine water | Crustaceans - Artemia salina - Adult | 48 hours |
| | Acute LC50 1400 µg/l Fresh water | Daphnia - Daphnia pulex - Neonate | 48 hours |
| | Acute LC50 590 µg/l Fresh water | Fish - Cirrhinus mrigala - Larvae | 96 hours |
| | Chronic NOEC 1.25 mg/l Marine water | Algae - Ulva fasciata - Zoea | 96 hours |
| | Chronic NOEC 1 mg/l Fresh water | Crustaceans - Pseudosida ramosa - Neonate | 21 days |
| | Chronic NOEC 3.2 mg/l Fresh water | Daphnia - Daphnia magna - Neonate | 21 days |
| | Chronic NOEC >1357 µg/l Fresh water | Fish - Pimephales promelas | 42 days |
| SureSelect Wash Buffer 2 Sodium dodecyl sulphate | Acute EC50 1200 µg/l Marine water | Algae - Skeletonema costatum | 96 hours |
| | Acute LC50 900 µg/l Marine water | Crustaceans - Artemia salina - Adult | 48 hours |
| | Acute LC50 1400 µg/l Fresh water | Daphnia - Daphnia pulex - Neonate | 48 hours |
| | Acute LC50 590 µg/l Fresh water | Fish - Cirrhinus mrigala - Larvae | 96 hours |
| | Chronic NOEC 1.25 mg/l Marine water | Algae - Ulva fasciata - Zoea | 96 hours |
| Chronic NOEC 1 mg/l Fresh water | Crustaceans - Pseudosida ramosa - Neonate | 21 days | |
| Chronic NOEC 3.2 mg/l Fresh water | Daphnia - Daphnia magna - | 21 days | |

Section 12. Ecological information

| | | | |
|--|-------------------------------------|---------------------------------------|---------|
| | Chronic NOEC >1357 µg/l Fresh water | Neonate Fish - Pimephales promelas | 42 days |
|--|-------------------------------------|---------------------------------------|---------|

Persistence and degradability

Not available.

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|---|--------------------|-----|-----------|
| SureSelect Hyb 2 Disodium dihydrogen ethylenediaminetetraacetate | -4.3 | 1.8 | low |
| SureSelect Wash Buffer 1 Sodium dodecyl sulphate | -2.03 | - | low |
| SureSelect Wash Buffer 2 Sodium dodecyl sulphate | -2.03 | - | low |

Mobility in soil

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

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

Section 13. Disposal considerations

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

Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

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

Transport in bulk according to IMO instruments : Not available.

Section 15. Regulatory information

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia : Not determined.

Canada : Not determined.

China : Not determined.

Europe : Not determined.

Japan : **Japan inventory (ENCS)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.

New Zealand : Not determined.

Philippines : Not determined.

Republic of Korea : Not determined.

Taiwan : Not determined.

Thailand : Not determined.

Turkey : Not determined.

United States : Not determined.

Viet Nam : Not determined.

Section 16. Other information

History

Date of issue/Date of revision : 05/06/2020

Date of previous issue : 01/21/2018

Version : 6


Key to abbreviations

: ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
HPR = Hazardous Products Regulations
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

Section 16. Other information

N/A = Not available
UN = United Nations

Procedure used to derive the classification

| Classification | Justification |
|---|--|
|  SureSelect Hyb 1 EYE IRRITATION - Category 2A | Calculation method |
| SureSelect Hyb 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 | Calculation method Calculation method |

References : Not available.

 Indicates information that has changed from previously issued version.

Notice to reader

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.