

SAFETY DATA SHEET

Early Access OneSeq Phased Exome Target Enrichment Box 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name	: Early Access OneSeq Phased Exome Target Enrichment Box 1	
Part no. (chemical kit)	: 5190-9543	
Part no.	SureSelect Hyb 1	5190-4396
	SureSelect Hyb 2	5190-4397
	SureSelect Hyb 4	5190-4406
	SureSelect Binding Buffer	5190-4399
	SureSelect Wash Buffer 1	5190-4400
	SureSelect Wash Buffer 2	5190-4401

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

Identified uses	: Analytical reagent.	
	SureSelect Hyb 1	0.4 ml
	SureSelect Hyb 2	1.25 ml
	SureSelect Hyb 4	1.25 ml
	SureSelect Binding Buffer	13.2 ml
	SureSelect Wash Buffer 1	8 ml
	SureSelect Wash Buffer 2	24 ml
Uses advised against	: None known.	

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Deutschland GmbH
Hewlett-Packard-Str. 8
76337 Waldbronn
Germany
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation) : CHEMTREC®: +353 1 901 4670

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	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

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

SureSelect Hyb 2		
H319	SERIOUS EYE DAMAGE/EYE IRRITATION	Category 2
H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Category 2

SECTION 2: Hazards identification

SureSelect Hyb 1	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
SureSelect Hyb 2	The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.
SureSelect Hyb 4	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
SureSelect Binding Buffer	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
SureSelect Wash Buffer 1	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.
SureSelect Wash Buffer 2	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

Ingredients of unknown toxicity	: SureSelect Hyb 1	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
	SureSelect Hyb 2	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 10 - 30%
	SureSelect Binding Buffer	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms : SureSelect Hyb 2



Signal word	: SureSelect Hyb 1	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 2	No signal word.

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

Precautionary statements

Prevention	: SureSelect Hyb 1	Not applicable.
	SureSelect Hyb 2	P280 - Wear eye or face protection. P260 - Do not breathe vapour.
	SureSelect Hyb 4	Not applicable.
	SureSelect Binding Buffer	Not applicable.
	SureSelect Wash Buffer 1	Not applicable.
	SureSelect Wash Buffer 2	Not applicable.

SECTION 2: Hazards identification

Response	: SureSelect Hyb 1 SureSelect Hyb 2	Not applicable. P314 - Get medical advice/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.
	SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	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	: 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.
Hazardous ingredients	: SureSelect Hyb 2	edetic acid
Supplemental label elements	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Safety data sheet available on request. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: 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.
<u>Special packaging requirements</u>		
Tactile warning of danger	: 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.

SECTION 2: Hazards identification

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: SureSelect Hyb 1	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SureSelect Hyb 2	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SureSelect Hyb 4	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SureSelect Binding Buffer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SureSelect Wash Buffer 1	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SureSelect Wash Buffer 2	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
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

3.1 Substances	: 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

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
SureSelect Hyb 1 sodium dihydrogenorthophosphate	EC: 231-449-2 CAS: 7558-80-7	≤3	Eye Irrit. 2, H319	-	[1]
SureSelect Hyb 2 edetic acid	EC: 200-449-4 CAS: 60-00-4	≥10 - ≤25	Acute Tox. 4, H332 Eye Irrit. 2, H319 STOT RE 2, H373 (respiratory tract) (inhalation) See Section 16 for the full text of the H statements declared above.	ATE [Inhalation (dusts and mists)] = 1.5 mg/l	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

<u>Type</u>	
SureSelect Hyb 1	[1] Substance classified with a health or environmental hazard
SureSelect Hyb 2	[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: SureSelect Hyb 1	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. 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 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	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.
	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 position comfortable for breathing. Get medical attention if symptoms occur.
Skin contact	: 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	Flush contaminated skin with plenty of water. Remove

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	1	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. 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 2	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.
Protection of first-aiders	: 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 2	No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both 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	No known significant effects or critical hazards. 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. 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. 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. 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. No known significant effects or critical hazards.

Over-exposure signs/symptoms

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

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

4.3 Indication of any immediate medical attention and special treatment needed

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	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Buffer	
	SureSelect Wash Buffer 1	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	No specific treatment.
	Buffer	
	SureSelect Wash Buffer 1	No specific treatment.
	SureSelect Wash Buffer 2	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: SureSelect Hyb 1	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect Hyb 2	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect Hyb 4	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect Binding	Use an extinguishing agent suitable for the surrounding fire.
	Buffer	
	SureSelect Wash Buffer 1	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: SureSelect Hyb 1	None known.
	SureSelect Hyb 2	None known.
	SureSelect Hyb 4	None known.
	SureSelect Binding	None known.
	Buffer	
	SureSelect Wash Buffer 1	None known.

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SureSelect Wash Buffer 2 None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : 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.

Hazardous combustion 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
 SureSelect Hyb 4 No specific data.
 SureSelect Binding Buffer Decomposition products may include the following materials:
 halogenated compounds
 metal oxide/oxides
 SureSelect Wash Buffer 1 No specific data.
 SureSelect Wash Buffer 2 No specific data.

5.3 Advice for firefighters

Special precautions 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.

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
 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. Clothing for

SECTION 5: Firefighting measures

SureSelect Hyb 4	fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

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 spilt 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 spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	SureSelect Hyb 4	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	SureSelect Binding Buffer	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	SureSelect Wash Buffer 1	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	SureSelect Wash Buffer 2	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

SECTION 6: Accidental release measures

For emergency responders

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

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Methods for cleaning up

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

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SureSelect Binding Buffer	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. 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.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

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 vapour or mist. Do not ingest. Avoid contact with eyes, skin and clothing. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureSelect Hyb 4	Put on appropriate personal protective equipment (see Section 8).
	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 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.

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SureSelect Wash Buffer 1	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.
SureSelect Wash Buffer 2	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.

7.2 Conditions for safe storage, including any incompatibilities

Storage

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

SECTION 7: Handling and storage

SureSelect Wash Buffer 2	<p>been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.</p>
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7.3 Specific end use(s)

Recommendations	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not available. Not available. Not available. Not available. Not available. Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures	: Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
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DNELs/DMELs

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Type	Exposure	Value	Population	Effects
SureSelect Hyb 1 Sodium dihydrogenorthophosphate	DNEL	Long term Inhalation	3.04 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	4.07 mg/m ³	Workers	Systemic
SureSelect Hyb 2 EDTA	DNEL	Long term Inhalation	0.6 mg/m ³	General population	Local
	DNEL	Short term Inhalation	1.2 mg/m ³	General population	Local
	DNEL	Long term Inhalation	1.5 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	1.5 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	3 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	3 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	25 mg/kg bw/day	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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.

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.

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

SECTION 9: Physical and chemical properties

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

9.1 Information on basic 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.	
	Colour	: SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
SureSelect Hyb 4		Not available.	
SureSelect Binding Buffer		Not available.	
SureSelect Wash Buffer 1		Not available.	
SureSelect Wash Buffer 2		Not available.	
Odour		: SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.	
	SureSelect Binding Buffer	Not available.	
	SureSelect Wash Buffer 1	Not available.	
	SureSelect Wash Buffer 2	Not available.	
	Odour threshold	: SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
SureSelect Hyb 4		Not available.	
SureSelect Binding Buffer		Not available.	
SureSelect Wash Buffer 1		Not available.	
SureSelect Wash Buffer 2		Not available.	
Melting point/freezing point		: SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	0°C	
	SureSelect Binding Buffer	Not available.	
	SureSelect Wash Buffer 1	0°C	
	SureSelect Wash Buffer 2	0°C	
	Initial boiling point and boiling range	: SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
SureSelect Hyb 4		100°C	
SureSelect Binding Buffer		Not available.	
SureSelect Wash Buffer 1		100°C	
SureSelect Wash Buffer 2		100°C	

SECTION 9: Physical and chemical properties

Flammability : SureSelect Hyb 1 Not applicable.
 SureSelect Hyb 2 Not applicable.
 SureSelect Hyb 4 Not applicable.
 SureSelect Binding Not applicable.
 Buffer
 SureSelect Wash Buffer 1 Not applicable.
 SureSelect Wash Buffer 2 Not applicable.

Upper/lower flammability or explosive limits : SureSelect Hyb 1 Not available.
 SureSelect Hyb 2 Not available.
 SureSelect Hyb 4 Not available.
 SureSelect Binding Not available.
 Buffer
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.

Flash point : SureSelect Hyb 1 Not available.
 SureSelect Hyb 2 Not available.
 SureSelect Hyb 4 Not available.
 SureSelect Binding Not available.
 Buffer
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.

Auto-ignition temperature :

Ingredient name	°C	Method
SureSelect Hyb 2		
edetic acid	>400	VDI 2263

Decomposition temperature : SureSelect Hyb 1 Not available.
 SureSelect Hyb 2 Not available.
 SureSelect Hyb 4 Not available.
 SureSelect Binding Not available.
 Buffer
 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 Not available.
 SureSelect Binding 7.5
 Buffer
 SureSelect Wash Buffer 1 7.5
 SureSelect Wash Buffer 2 7

Viscosity : SureSelect Hyb 1 Not available.
 SureSelect Hyb 2 Not available.
 SureSelect Hyb 4 Not available.
 SureSelect Binding Not available.
 Buffer
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.

SECTION 9: Physical and chemical properties

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 2 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 2	Not applicable.

Vapour pressure	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
		mm Hg	kPa	Method	mm Hg	kPa	Method
	SureSelect Hyb 1 water	17.5	2.3	-	92.258	12.3	-
	SureSelect Hyb 2 water	17.5	2.3	-	92.258	12.3	-
	edetic acid	0	0	-	-	-	-
	SureSelect Hyb 4 water	17.5	2.3	-	92.258	12.3	-
	SureSelect Binding Buffer water	17.5	2.3	-	92.258	12.3	-
	SureSelect Wash Buffer 1 water	17.5	2.3	-	92.258	12.3	-
	SureSelect Wash Buffer 2 water	17.5	2.3	-	92.258	12.3	-

SECTION 9: Physical and chemical properties

Evaporation rate	:	SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
		SureSelect Hyb 4	Not available.
		SureSelect Binding	Not available.
		Buffer	
		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	Not available.
		Buffer	
		SureSelect Wash Buffer 1	Not available.
		SureSelect Wash Buffer 2	Not available.
Vapour density	:	SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
		SureSelect Hyb 4	Not available.
		SureSelect Binding	Not available.
		Buffer	
		SureSelect Wash Buffer 1	Not available.
		SureSelect Wash Buffer 2	Not available.
Explosive properties	:	SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
		SureSelect Hyb 4	Not available.
		SureSelect Binding	Not available.
		Buffer	
		SureSelect Wash Buffer 1	Not available.
		SureSelect Wash Buffer 2	Not available.
Oxidising properties	:	SureSelect Hyb 1	Not available.
		SureSelect Hyb 2	Not available.
		SureSelect Hyb 4	Not available.
		SureSelect Binding	Not available.
		Buffer	
		SureSelect Wash Buffer 1	Not available.
		SureSelect Wash Buffer 2	Not available.
<u>Particle characteristics</u>			
Median particle size	:	SureSelect Hyb 1	Not applicable.
		SureSelect Hyb 2	Not applicable.
		SureSelect Hyb 4	Not applicable.
		SureSelect Binding	Not applicable.
		Buffer	
		SureSelect Wash Buffer 1	Not applicable.
		SureSelect Wash Buffer 2	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 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.
10.2 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.
10.3 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.
10.4 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.
10.5 Incompatible materials	: SureSelect Hyb 1	May react or be incompatible with oxidising materials.
	SureSelect Hyb 2	May react or be incompatible with oxidising materials.
	SureSelect Hyb 4	May react or be incompatible with oxidising materials.
	SureSelect Binding Buffer	May react or be incompatible with oxidising materials.
	SureSelect Wash Buffer 1	May react or be incompatible with oxidising materials.
	SureSelect Wash Buffer 2	May react or be incompatible with oxidising materials.

SECTION 10: Stability and reactivity

10.6 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

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
SureSelect Hyb 1 Sodium dihydrogenorthophosphate	LD50 Dermal	Rabbit	>7940 mg/kg	-
	LD50 Oral	Rat	8290 mg/kg	-
SureSelect Hyb 2 EDTA	LD50 Oral	Rat	4500 mg/kg	-

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
SureSelect Hyb 1 Sodium dihydrogenorthophosphate	8290	N/A	N/A	N/A	N/A
SureSelect Hyb 2 SureSelect Hyb 2 EDTA	N/A 4500	N/A N/A	N/A N/A	N/A N/A	10.3 1.5

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
SureSelect Hyb 1 Sodium dihydrogenorthophosphate	Eyes - Mild irritant	Rabbit	-	150 mg	-

Sensitiser

Conclusion/Summary : 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)

Not available.

Specific target organ toxicity (repeated exposure)

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
SureSelect Hyb 2 EDTA	Category 2	inhalation	respiratory tract

Aspiration hazard

Not available.

Information on 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 Not available.
- Buffer
- SureSelect Wash Buffer 1 Not available.
- SureSelect Wash Buffer 2 Not available.

Potential acute health effects

- 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 No known significant effects or critical hazards.
- Buffer
- 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 No known significant effects or critical hazards.
- Buffer
- 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 No known significant effects or critical hazards.
- Buffer
- SureSelect Wash Buffer 1 No known significant effects or critical hazards.
- SureSelect Wash Buffer 2 No known significant effects or critical hazards.
- 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 No known significant effects or critical hazards.
- Buffer
- 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

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

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Conclusion/Summary : Not available.

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	No known significant effects or critical hazards.
		Buffer	
		SureSelect Wash Buffer 1	No known significant effects or critical hazards.

SECTION 11: Toxicological information

	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.
Reproductive toxicity	: 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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
SureSelect Hyb 1 Sodium dihydrogenorthophosphate	Acute LC50 720 ppm Fresh water	Fish - <i>Gambusia affinis</i> - Adult	96 hours
SureSelect Hyb 2 EDTA	Acute EC50 >60 mg/l Fresh water	Algae - <i>Raphidocelis subcapitata</i>	72 hours
	Acute EC50 113000 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	48 hours
	Acute LC50 129000 µg/l Fresh water	Fish - <i>Ictalurus punctatus</i> - Fingerling	96 hours

12.2 Persistence and degradability

Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
SureSelect Hyb 2 EDTA	-	-	Not readily

SECTION 12: Ecological information

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
SureSelect Hyb 2 EDTA	-	1.8	Low

12.4 Mobility in soil

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

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-

SECTION 14: Transport information

14.5 Environmental hazards	No.	No.	No.
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Additional information

14.6 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.

14.7 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
EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Product / Ingredient name	Identifiers	Designation [Usage]
SureSelect Hyb 2 SureSelect Hyb 2	-	3

Label : 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.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

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)

Early Access OneSeq Phased Exome Target Enrichment Box 1

SECTION 15: Regulatory information

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

[Inventory list](#)

- Australia** : All components are listed or exempted.
- Canada** : All components are listed or exempted.
- China** : All components are listed or exempted.
- Eurasian Economic Union** : **Russian Federation inventory**: All components are listed or exempted.
- Japan** : **Japan inventory (CSCL)**: All components are listed or exempted.
Japan inventory (ISHL): All components are listed or exempted.
- New Zealand** : All components are listed or exempted.
- Philippines** : All components are listed or exempted.
- Republic of Korea** : All components are listed or exempted.
- Taiwan** : All components are listed or exempted.
- Thailand** : Not determined.
- Turkey** : Not determined.
- United States** : All components are active or exempted.
- Viet Nam** : All components are listed or exempted.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments might still be required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

- Abbreviations and acronyms** :
- ATE = Acute Toxicity Estimate
 - CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 - DMEL = Derived Minimal Effect Level
 - DNEL = Derived No Effect Level
 - EUH statement = CLP-specific Hazard statement
 - N/A = Not available
 - PBT = Persistent, Bioaccumulative and Toxic
 - PNEC = Predicted No Effect Concentration
 - RRN = REACH Registration Number
 - vPvB = Very Persistent and Very Bioaccumulative

[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

Classification	Justification
SureSelect Hyb 2 Eye Irrit. 2, H319 STOT RE 2, H373	Calculation method Calculation method

[Full text of abbreviated H statements](#)

SureSelect Hyb 1 H319	Causes serious eye irritation.
SureSelect Hyb 2 H319 H332 H373	Causes serious eye irritation. Harmful if inhaled. May cause damage to organs through prolonged or repeated exposure.

[Full text of classifications \[CLP/GHS\]](#)

SECTION 16: Other information

SureSelect Hyb 1 Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
SureSelect Hyb 2 Acute Tox. 4 Eye Irrit. 2 STOT RE 2	ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Date of issue/ Date of revision : 18/10/2024

Date of previous issue : No previous validation

Version : 1

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