

SAFETY DATA SHEET



SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646

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

1.1 Product identifier

Product name : SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646
Part no. (chemical kit) : 5190-8646
Part no. : SureSelect Hyb 1 5190-4404
SureSelect Hyb 2 5190-4397
SureSelect Hyb 4 5190-4406
SureSelect Binding 5190-4407
Buffer
SureSelect Wash Buffer 5190-4408
1
SureSelect Wash Buffer 5190-4409
2

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

Identified uses : Analytical reagent.
SureSelect Hyb 1 2.4 ml
SureSelect Hyb 2 1.25 ml
SureSelect Hyb 4 1.25 ml
SureSelect Binding Buffer 80 ml
SureSelect Wash Buffer 1 48 ml
SureSelect Wash Buffer 2 144 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®: +(44)-870-8200418

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 Mixture
Buffer
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

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

Ingredients of unknown ecotoxicity	: SureSelect Hyb 4	Contains 1% of components with unknown hazards to the aquatic environment
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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
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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.
	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.
	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. 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. 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. Not applicable. Not applicable. Not applicable. Not applicable. Not applicable.
Hazardous ingredients	: SureSelect Hyb 2 SureSelect Hyb 4	Not applicable. Not applicable.
Supplemental label elements	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Safety data sheet available on request. 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.
Special packaging requirements		
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.

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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 2 edetic acid	EC: 200-449-4 CAS: 60-00-4 Index: 607-429-00-8	≥10 - ≤25	Eye Irrit. 2, H319	-	[1]
SureSelect Hyb 4 Sulfuric acid monododecyl ester sodium salt (1:1)	CAS: 8012-56-4	≤3	Acute Tox. 4, H302 See Section 16 for the full text of the H statements declared above.	ATE [Oral] = 1288 mg/kg	[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 2	[1] Substance classified with a health or environmental hazard
SureSelect Hyb 4	[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
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 if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
SureSelect 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
	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. 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

SECTION 4: First aid measures

	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 if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	SureSelect Hyb 4	Wash out mouth with water. 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.
		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.

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.
		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	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.
		SureSelect Wash Buffer 2	Use an extinguishing agent suitable for the surrounding fire.

SECTION 5: Firefighting measures

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.

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
SureSelect Hyb 2		Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen 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		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.

SECTION 5: Firefighting measures

	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 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 4	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.

SECTION 6: Accidental release measures

		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.
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
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).

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SECTION 6: Accidental release measures

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, 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.

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

SECTION 7: Handling and storage

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.

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

SECTION 7: Handling and storage

	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 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 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.

7.3 Specific end use(s)

Recommendations

: SureSelect Hyb 1	Industrial applications, Professional applications.
SureSelect Hyb 2	Industrial applications, Professional applications.
SureSelect Hyb 4	Industrial applications, Professional applications.
SureSelect Binding Buffer	Industrial applications, Professional applications.
SureSelect Wash Buffer 1	Industrial applications, Professional applications.
SureSelect Wash Buffer 2	Industrial applications, Professional applications.

Industrial sector specific solutions

: 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 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

None 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.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
SureSelect Hyb 2 edetic acid	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.

SECTION 8: Exposure controls/personal protection

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- 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.	

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SECTION 9: Physical and chemical properties

Melting point/freezing point : SureSelect Hyb 1 Not available.
 SureSelect Hyb 2 Not available.
 SureSelect Hyb 4 0°C
 SureSelect Binding Not available.
 Buffer
 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 Not available.
 Buffer
 SureSelect Wash Buffer 1 100°C
 SureSelect Wash Buffer 2 100°C

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

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.

SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646

SECTION 9: Physical and chemical properties

pH : SureSelect Hyb 1 7.4
 SureSelect Hyb 2 8
 SureSelect Hyb 4 5.2 to 6.2
 SureSelect Binding 7.5
 Buffer
 SureSelect Wash Buffer 1 7
 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.

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 Not applicable.
 Buffer
 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						

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SECTION 9: Physical and chemical properties

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	

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.

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.

Vapour 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.

Explosive properties : 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.

SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646

SECTION 9: Physical and chemical properties

Oxidising properties	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.

Particle characteristics

Median particle size	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.

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.

SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646

SECTION 10: Stability and reactivity

10.4 Conditions to avoid	:	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.
10.5 Incompatible materials	:	SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
10.6 Hazardous decomposition products	:	SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available.

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 4					
SureSelect Hyb 4	128800.0	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

Irritation/Corrosion

Conclusion/Summary : Not available.

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

SECTION 11: Toxicological information

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

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.
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.
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.
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.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: 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.

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SECTION 11: Toxicological information

	2	
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 2 edetic acid	Acute EC50 113000 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 41000 µg/l Fresh water	Fish - Lepomis macrochirus	96 hours

12.2 Persistence and degradability

Not available.

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

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
SureSelect Hyb 2 edetic acid	-3.86	1.8	low

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SECTION 12: Ecological information

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	-	-	-
14.5 Environmental hazards	No.	No.	No.

Additional information

SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646

SECTION 14: Transport 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

Not listed.

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)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

Australia	:	Not determined.
Canada	:	Not determined.

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SECTION 15: Regulatory information

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

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

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

Full text of abbreviated H statements

SureSelect Hyb 2 H319	Causes serious eye irritation.
SureSelect Hyb 4 H302	Harmful if swallowed.

Full text of classifications [CLP/GHS]

SureSelect Hyb 2 Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
SureSelect Hyb 4 Acute Tox. 4	ACUTE TOXICITY - Category 4

Date of issue/ Date of revision : 12/06/2023

Date of previous issue : No previous validation

Version : 1

[Notice to reader](#)

SureSelect Target Enrichment Box 1-96 Reactions, Part Number 5190-8646

SECTION 16: Other information

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.