

SAFETY DATA SHEET



SureSelect XT Fast Target Enrichment Kit ILM Hyb Module Box 1, Part Number 5190-8840

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

1.1 Product identifier

Product name : SureSelect XT Fast Target Enrichment Kit ILM Hyb Module Box 1, Part Number 5190-8840

Part no. (chemical kit) : 5190-8840

Part no. : SureSelect Binding Buffer 5190-4399 / 5190-4407

SureSelect Wash Buffer 1 5190-4400 / 5190-4408

SureSelect Wash Buffer 2 5190-4401 / 5190-4409

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

Material uses : Analytical reagent.

SureSelect Binding Buffer	13.2 ml - 80 ml
SureSelect Wash Buffer 1	8 ml - 48 ml
SureSelect Wash Buffer 2	24 ml - 144 ml

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
 5500 Lakeside Cheadle Royal Business Park,
 Cheadle, Cheshire, SK8 3GR
 United Kingdom
 Tel: +44 (0) 345 712 5292

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 Binding Buffer Mixture

SureSelect Wash Buffer 1 Mixture

SureSelect Wash Buffer 2 Mixture

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

Not classified.

Ingredients of unknown toxicity : 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

SECTION 2: Hazards identification

Signal word	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	No signal word. No signal word. No signal word.
Hazard statements	: 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.
<u>Precautionary statements</u>		
Prevention	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Not applicable.
Response	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Not applicable.
Storage	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Not applicable.
Disposal	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Not applicable.
Hazardous ingredients	: SureSelect Binding Buffer	Not applicable.
Supplemental label elements	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Safety data sheet available on request. Not applicable. Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Not applicable.
<u>Special packaging requirements</u>		
Tactile warning of danger	: SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	Not applicable. Not applicable. Not applicable.

2.3 Other hazards

SECTION 2: Hazards identification

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII	: 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 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 Binding Buffer	Mixture
	SureSelect Wash Buffer 1	Mixture
	SureSelect Wash Buffer 2	Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
SureSelect Binding Buffer Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	<10	Eye Irrit. 2, H319 See Section 16 for the full text of the H statements declared above.	[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.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern
- [6] Additional disclosure due to company policy

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: 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 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.

SECTION 4: First aid measures

Skin contact	: SureSelect Binding Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect Wash Buffer 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect Wash Buffer 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: SureSelect 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 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

Eye contact	: SureSelect Binding Buffer	No known significant effects or critical hazards.
	SureSelect Wash Buffer 1	No known significant effects or critical hazards.
	SureSelect Wash Buffer 2	No known significant effects or critical hazards.
Inhalation	: SureSelect Binding Buffer	No known significant effects or critical hazards.
	SureSelect Wash Buffer 1	No known significant effects or critical hazards.
	SureSelect Wash Buffer 2	No known significant effects or critical hazards.
Skin contact	: SureSelect Binding Buffer	No known significant effects or critical hazards.
	SureSelect Wash Buffer 1	No known significant effects or critical hazards.
	SureSelect Wash Buffer 2	No known significant effects or critical hazards.
Ingestion	: SureSelect 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.

Over-exposure signs/symptoms

SECTION 4: First aid measures

Eye contact	: SureSelect Binding	No specific data.
	Buffer	
	SureSelect Wash Buffer 1	No specific data.
Inhalation	: SureSelect Binding	No specific data.
	Buffer	
	SureSelect Wash Buffer 1	No specific data.
Skin contact	: SureSelect Binding	No specific data.
	Buffer	
	SureSelect Wash Buffer 1	No specific data.
Ingestion	: SureSelect Binding	No specific data.
	Buffer	
	SureSelect Wash Buffer 1	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: 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 Binding	No specific treatment.
	Buffer	
	SureSelect Wash Buffer 1	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: 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 Binding	None known.
	Buffer	
	SureSelect Wash Buffer 1	None known.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures

Hazards from the substance or mixture	: 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 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 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 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 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 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 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 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 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 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 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 Binding Buffer	Industrial applications, Professional applications.
SureSelect Wash Buffer 1	Industrial applications, Professional applications.
SureSelect Wash Buffer 2	Industrial applications, Professional applications.

SECTION 7: Handling and storage

Industrial sector specific solutions	Industrial sector specific solutions :	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.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. 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 Binding Buffer Sodium chloride	DNEL	Short term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Oral	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	126.65 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	295.52 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	443.28 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	443.28 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	2068.62 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	2068.62 mg/m ³	Workers	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

SECTION 8: Exposure controls/personal protection

- 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 Binding Buffer	Liquid.
	: SureSelect Wash Buffer 1	Liquid.
	: SureSelect Wash Buffer 2	Liquid.
Colour	: SureSelect Binding Buffer	Not available.
	: SureSelect Wash Buffer 1	Not available.
	: SureSelect Wash Buffer 2	Not available.
Odour	: SureSelect Binding Buffer	Not available.
	: SureSelect Wash Buffer 1	Not available.
	: SureSelect Wash Buffer 2	Not available.
Odour threshold	: SureSelect Binding Buffer	Not available.
	: SureSelect Wash Buffer 1	Not available.
	: SureSelect Wash Buffer 2	Not available.

SECTION 9: Physical and chemical properties

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

Initial boiling point and boiling range : SureSelect Binding Not available.
 Buffer
 SureSelect Wash Buffer 100°C (212°F)
 1
 SureSelect Wash Buffer 100°C (212°F)
 2

Flammability (solid, gas) : SureSelect Binding Not applicable.
 Buffer
 SureSelect Wash Buffer Not applicable.
 1
 SureSelect Wash Buffer Not applicable.
 2

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

Flash point :

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
SureSelect Binding Buffer Edetic acid	>100	>212	DIN 51758			
SureSelect Wash Buffer 1 Citric acid, trisodium salt, dihydrate	>100	>212				
SureSelect Wash Buffer 2 Citric acid, trisodium salt, dihydrate	>100	>212				

Auto-ignition temperature :

Ingredient name	°C	°F	Method
SureSelect Binding Buffer Edetic acid	>400	>752	VDI 2263
SureSelect Wash Buffer 1 Sodium dodecyl sulphate	310.5	590.9	VDI 2263
SureSelect Wash Buffer 2 Sodium dodecyl sulphate	310.5	590.9	VDI 2263

Decomposition temperature : SureSelect Binding Not available.
 Buffer
 SureSelect Wash Buffer Not available.
 1
 SureSelect Wash Buffer Not available.
 2

SECTION 9: Physical and chemical properties

- pH** : SureSelect Binding Buffer 7.5
 SureSelect Wash Buffer 1 7
 SureSelect Wash Buffer 2 7
- Viscosity** : SureSelect Binding Buffer Not available.
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.
- Solubility(ies)** : SureSelect Binding Buffer Easily soluble in the following materials: cold water and hot water.
 SureSelect Wash Buffer 1 Easily soluble in the following materials: cold water and hot water.
 SureSelect Wash Buffer 2 Easily soluble in the following materials: cold water and hot water.
- Partition coefficient: n-octanol/water** : SureSelect 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 Binding Buffer						
water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	
SureSelect Wash Buffer 1						
water	23.8	3.2		92.258	12.3	
Sodium dodecyl sulphate	≤0.0013501	≤0.00018				
SureSelect Wash Buffer 2						
water	23.8	3.2		92.258	12.3	
Sodium dodecyl sulphate	≤0.0013501	≤0.00018				

- Evaporation rate** : SureSelect Binding Buffer Not available.
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.
- Relative density** : SureSelect Binding Buffer Not available.
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.

SECTION 9: Physical and chemical properties

Vapour density	: SureSelect Binding	Not available.
	Buffer	
	SureSelect Wash Buffer	Not available.
Explosive properties	1	
	SureSelect Wash Buffer	Not available.
	2	
Oxidising properties	: SureSelect Binding	Not available.
	Buffer	
	SureSelect Wash Buffer	Not available.
Particle characteristics	1	
	SureSelect Wash Buffer	Not available.
	2	
Median particle size	: SureSelect Binding	Not applicable.
	Buffer	
	SureSelect Wash Buffer	Not applicable.
	1	
	SureSelect Wash Buffer	Not applicable.
	2	

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: SureSelect Binding	No specific test data related to reactivity available for this product or its ingredients.
	Buffer	
	SureSelect Wash Buffer	No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	1	
	SureSelect Wash Buffer	No specific test data related to reactivity available for this product or its ingredients.
	2	
10.3 Possibility of hazardous reactions	: SureSelect Binding	The product is stable.
	Buffer	
	SureSelect Wash Buffer	The product is stable.
10.4 Conditions to avoid	1	
	SureSelect Wash Buffer	The product is stable.
	2	
10.3 Possibility of hazardous reactions	: SureSelect Binding	Under normal conditions of storage and use, hazardous reactions will not occur.
	Buffer	
	SureSelect Wash Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	1	
	SureSelect Wash Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	2	
10.4 Conditions to avoid	: SureSelect Binding	No specific data.
	Buffer	
	SureSelect Wash Buffer	No specific data.
	1	
	SureSelect Wash Buffer	No specific data.
	2	

SECTION 10: Stability and reactivity

10.5 Incompatible 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.

10.6 Hazardous decomposition products	: 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 Binding Buffer Sodium chloride	LD50 Oral	Rat	3000 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 Binding Buffer Sodium chloride	3000	N/A	N/A	N/A	N/A

Irritation/Corrosion

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

Not available.

Aspiration hazard

Not available.

SECTION 11: Toxicological information

Information on likely routes of exposure : SureSelect Binding Buffer Not available.
 SureSelect Wash Buffer 1 Not available.
 SureSelect Wash Buffer 2 Not available.

Potential acute health effects

Inhalation : SureSelect Binding Buffer No known significant effects or critical hazards.
 SureSelect Wash Buffer 1 No known significant effects or critical hazards.
 SureSelect Wash Buffer 2 No known significant effects or critical hazards.

Ingestion : SureSelect Binding Buffer No known significant effects or critical hazards.
 SureSelect Wash Buffer 1 No known significant effects or critical hazards.
 SureSelect Wash Buffer 2 No known significant effects or critical hazards.

Skin contact : SureSelect 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.

Eye contact : SureSelect Binding Buffer No known significant effects or critical hazards.
 SureSelect Wash Buffer 1 No known significant effects or critical hazards.
 SureSelect Wash Buffer 2 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : SureSelect Binding Buffer No specific data.
 SureSelect Wash Buffer 1 No specific data.
 SureSelect Wash Buffer 2 No specific data.

Ingestion : SureSelect Binding Buffer No specific data.
 SureSelect Wash Buffer 1 No specific data.
 SureSelect Wash Buffer 2 No specific data.

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

Eye contact : SureSelect Binding Buffer No specific data.
 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.

SECTION 11: Toxicological information

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	:	SureSelect Binding Buffer	No known significant effects or critical hazards.
		SureSelect Wash Buffer 1	No known significant effects or critical hazards.
		SureSelect Wash Buffer 2	No known significant effects or critical hazards.
Carcinogenicity	:	SureSelect 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 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 Binding Buffer	No known significant effects or critical hazards.
		SureSelect Wash Buffer 1	No known significant effects or critical hazards.
		SureSelect Wash Buffer 2	No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
SureSelect Binding Buffer Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Not available.

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 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	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

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.

SECTION 14: Transport information

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

Label	: 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	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: 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.

SECTION 15: Regulatory information

Thailand	: Not determined.
Turkey	: Not determined.
United States	: <input checked="" type="checkbox"/> All components are active or exempted.
Viet Nam	: <input checked="" type="checkbox"/> 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
Not classified.	

Full text of abbreviated H statements

SureSelect Binding Buffer H319	Causes serious eye irritation.
--	--------------------------------

Full text of classifications [CLP/GHS]

<input checked="" type="checkbox"/> SureSelect Binding Buffer Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
--	--

Date of issue/ Date of revision	: 02/06/2022
Date of previous issue	: 27/09/2019
Version	: 3

Notice to reader

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