

# SAFETY DATA SHEET



SureSelect XT Automated Hybridization Kit - 480 Reactions - Box 1, Part Number 5190-3733

## Section 1. Identification

**Product identifier** : SureSelect XT Automated Hybridization Kit - 480 Reactions - Box 1, Part Number 5190-3733

**Part No. (Chemical Kit)** : 5190-3733

**Part No.** :

SureSelect Hyb 1	5972-3701
SureSelect Hyb 2	5972-3702
SureSelect Hyb 4	5972-3703
SureSelect Binding Buffer	5972-3704
SureSelect Wash Buffer 1	5972-3705
SureSelect Wash Buffer 2	5972-3706
SureSelect Elution Buffer	5972-3722
SureSelect Neutralization Buffer	5972-3708

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

Analytical reagent.

SureSelect Hyb 1	5 ml
SureSelect Hyb 2	0.2 ml
SureSelect Hyb 4	2.5 ml
SureSelect Binding Buffer	0.5 ml
SureSelect Wash Buffer 1	100 ml
SureSelect Wash Buffer 2	725 ml
SureSelect Elution Buffer	40 ml
SureSelect Neutralization Buffer	40 ml

**Supplier/Manufacturer** : Agilent Technologies Australia Pty Ltd  
679 Springvale Road  
Mulgrave  
Victoria 3170, Australia  
1800 802 402

**Emergency telephone number (with hours of operation)** : CHEMTREC®: (61)-290372994

## Section 2. Hazard(s) identification

### Classification of the substance or mixture

<b>SureSelect Hyb 1</b> H319	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
<b>SureSelect Hyb 4</b> H402	ACUTE AQUATIC HAZARD - Category 3
<b>SureSelect Elution Buffer</b> H314 H318	SKIN CORROSION/IRRITATION - Category 1 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1
<b>SureSelect Neutralization Buffer</b> H315 H319	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A

## Section 2. Hazard(s) identification

☑ 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.
SureSelect Elution Buffer	Not applicable.
SureSelect Neutralization Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 12%
☑ 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.
SureSelect Elution Buffer	Not applicable.
SureSelect Neutralization Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 12%

### GHS label elements

#### Hazard pictograms



#### Signal word

☑ SureSelect Hyb 1	WARNING
SureSelect Hyb 2	No signal word.
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.
SureSelect Elution Buffer	DANGER
SureSelect Neutralization Buffer	WARNING

#### Hazard statements

☑ SureSelect Hyb 1	H319 - Causes serious eye irritation.
SureSelect Hyb 2	No known significant effects or critical hazards.
SureSelect Hyb 4	H402 - Harmful to aquatic life.
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.
SureSelect Elution Buffer	H314 - Causes severe skin burns and eye damage.
SureSelect Neutralization Buffer	H319 - Causes serious eye irritation.
	H315 - Causes skin irritation.

### Precautionary statements

#### Prevention

☑ SureSelect Hyb 1	P280 - Wear eye or face protection.
	P264 - Wash hands thoroughly after handling.
SureSelect Hyb 2	Not applicable.
SureSelect Hyb 4	P273 - Avoid release to the environment.
SureSelect Binding Buffer	Not applicable.
SureSelect Wash Buffer 1	Not applicable.
SureSelect Wash Buffer 2	Not applicable.
SureSelect Elution Buffer	P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
	P264 - Wash hands thoroughly after handling.
SureSelect Neutralization Buffer	P280 - Wear protective gloves. Wear eye or face protection.
	P264 - Wash hands thoroughly after handling.

## Section 2. Hazard(s) identification

<b>Response</b>	: SureSelect Hyb 1	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 attention.
	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.
	SureSelect Elution Buffer	P304 + P340 + P310 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P330 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353 + P363 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.
<b>Storage</b>	: SureSelect Hyb 1	Not applicable.
	SureSelect Hyb 2	Not applicable.
	SureSelect Hyb 4	Not applicable.
	SureSelect Binding Buffer	Not applicable.
	SureSelect Wash Buffer 1	Not applicable.
	SureSelect Wash Buffer 2	Not applicable.
	SureSelect Elution Buffer	P405 - Store locked up.
<b>Disposal</b>	: SureSelect Hyb 1	Not applicable.
	SureSelect Hyb 2	Not applicable.
	SureSelect Hyb 4	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureSelect Binding Buffer	Not applicable.
	SureSelect Wash Buffer 1	Not applicable.
	SureSelect Wash Buffer 2	Not applicable.
	SureSelect Elution Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureSelect Neutralization Buffer	Not applicable.

## Section 2. Hazard(s) identification

**Supplemental label elements** :

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.
SureSelect Elution Buffer	Not applicable.
SureSelect Neutralization Buffer	Not applicable.

**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.
SureSelect Elution Buffer	Causes digestive tract burns.
SureSelect Neutralization Buffer	None known.

## Section 3. Composition and ingredient information

**Substance/mixture** :

SureSelect Hyb 1	Mixture
SureSelect Hyb 2	Mixture
SureSelect Hyb 4	Mixture
SureSelect Binding Buffer	Mixture
SureSelect Wash Buffer 1	Mixture
SureSelect Wash Buffer 2	Mixture
SureSelect Elution Buffer	Mixture
SureSelect Neutralization Buffer	Mixture

### CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
<b>SureSelect Hyb 1</b> Sodium chloride	≥10 - <25	7647-14-5
<b>SureSelect Hyb 4</b> Sulfuric acid monododecyl ester sodium salt (1:1)	<2.5	8012-56-4
<b>SureSelect Elution Buffer</b> Sodium hydroxide	<1	1310-73-2
<b>SureSelect Neutralization Buffer</b> Trometamol	≥10 - <20	77-86-1

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

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

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** :

SureSelect Hyb 1	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get
SureSelect Hyb 2	

## Section 4. First aid measures

SureSelect Hyb 4	<p>medical attention if irritation occurs. 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 if irritation occurs.</p>
SureSelect Binding Buffer	<p>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.</p>
SureSelect Wash Buffer 1	<p>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.</p>
SureSelect Wash Buffer 2	<p>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.</p>
SureSelect Elution Buffer	<p>Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.</p>
SureSelect Neutralization Buffer	<p>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.</p>
<b>Inhalation</b>	
: SureSelect Hyb 1	<p>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.</p>
SureSelect Hyb 2	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.</p>
SureSelect Hyb 4	<p>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.</p>
SureSelect Binding Buffer	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>
SureSelect Wash Buffer 1	<p>Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.</p>

## Section 4. First aid measures

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.
SureSelect Elution Buffer	Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
SureSelect Neutralization Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
<b>Skin contact</b>	
: SureSelect Hyb 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.
SureSelect Hyb 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SureSelect Hyb 4	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 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.
SureSelect Elution Buffer	Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.
SureSelect Neutralization Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention.

## Section 4. First aid measures

### Ingestion

: SureSelect Hyb 1

Wash clothing before reuse. Clean shoes thoroughly before reuse.

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

SureSelect Hyb 2

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

SureSelect Hyb 4

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

SureSelect Binding Buffer

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

SureSelect Wash Buffer 1

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

SureSelect Wash Buffer 2

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

SureSelect Elution Buffer

Get medical attention immediately. Call a poison

## Section 4. First aid measures

SureSelect Neutralization Buffer

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

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

#### Potential acute health effects

##### Eye contact

: <input checked="" type="checkbox"/> SureSelect Hyb 1	Causes serious eye irritation.
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.
SureSelect Elution Buffer	Causes serious eye damage.
SureSelect Neutralization Buffer	Causes serious eye irritation.

##### Inhalation

: <input checked="" type="checkbox"/> 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.
SureSelect Elution Buffer	No known significant effects or critical hazards.
SureSelect Neutralization Buffer	No known significant effects or critical hazards.

##### Skin contact

: <input checked="" type="checkbox"/> 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.
SureSelect Elution Buffer	Causes severe burns.
SureSelect Neutralization Buffer	Causes skin irritation.



## Section 4. First aid measures

**Ingestion** : SureSelect Hyb 1 No known significant effects or critical hazards.  
 SureSelect Hyb 2 No known significant effects or critical hazards.  
 SureSelect Hyb 4 No known significant effects or critical hazards.  
 SureSelect Binding Buffer No known significant effects or critical hazards.  
 SureSelect Wash Buffer 1 No known significant effects or critical hazards.  
 SureSelect Wash Buffer 2 No known significant effects or critical hazards.  
 SureSelect Elution Buffer Corrosive to the digestive tract. Causes burns.  
 SureSelect Neutralization Buffer No known significant effects or critical hazards.

### Over-exposure signs/symptoms

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

**Inhalation** : SureSelect Hyb 1 No specific data.  
 SureSelect Hyb 2 No specific data.  
 SureSelect Hyb 4 No specific data.  
 SureSelect Binding Buffer No specific data.  
 SureSelect Wash Buffer 1 No specific data.  
 SureSelect Wash Buffer 2 No specific data.  
 SureSelect Elution Buffer No specific data.  
 SureSelect Neutralization Buffer No specific data.

**Skin contact** : SureSelect Hyb 1 No specific data.  
 SureSelect Hyb 2 No specific data.  
 SureSelect Hyb 4 No specific data.  
 SureSelect Binding Buffer No specific data.  
 SureSelect Wash Buffer 1 No specific data.  
 SureSelect Wash Buffer 2 No specific data.  
 SureSelect Elution Buffer Adverse symptoms may include the following:  
 pain or irritation  
 redness  
 blistering may occur  
 SureSelect Neutralization Buffer Adverse symptoms may include the following:  
 irritation  
 redness

**Ingestion** : SureSelect Hyb 1 No specific data.  
 SureSelect Hyb 2 No specific data.  
 SureSelect Hyb 4 No specific data.  
 SureSelect Binding Buffer No specific data.  
 SureSelect Wash Buffer 1 No specific data.  
 SureSelect Wash Buffer 2 No specific data.  
 SureSelect Elution Buffer Adverse symptoms may include the following:  
 stomach pains  
 SureSelect Neutralization Buffer No specific data.

## Section 4. First aid measures

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

<b>Notes to physician</b>	: SureSelect Hyb 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect Hyb 2	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	SureSelect Hyb 4	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect Binding Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect Wash Buffer 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect Wash Buffer 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect Elution Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect Neutralization Buffer	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
<b>Specific treatments</b>	: SureSelect Hyb 1	No specific treatment.
	SureSelect Hyb 2	No specific treatment.
	SureSelect Hyb 4	No specific treatment.
	SureSelect Binding Buffer	No specific treatment.
	SureSelect Wash Buffer 1	No specific treatment.
	SureSelect Wash Buffer 2	No specific treatment.
	SureSelect Elution Buffer	No specific treatment.
	SureSelect Neutralization Buffer	No specific treatment.
<b>Protection of first-aiders</b>	: SureSelect Hyb 1	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	SureSelect Hyb 2	No action shall be taken involving any personal risk or without suitable training.
	SureSelect Hyb 4	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 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.
	SureSelect Elution Buffer	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.
	SureSelect Neutralization Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth

## Section 4. First aid measures

resuscitation.

See toxicological information (Section 11)

## Section 5. Firefighting measures

### 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 Buffer	Use an extinguishing agent suitable for the surrounding fire.
SureSelect Wash Buffer 1	Use an extinguishing agent suitable for the surrounding fire.
SureSelect Wash Buffer 2	Use an extinguishing agent suitable for the surrounding fire.
SureSelect Elution Buffer	Use an extinguishing agent suitable for the surrounding fire.
SureSelect Neutralization Buffer	Use an extinguishing agent suitable for the surrounding fire.

#### Unsuitable extinguishing media

: SureSelect Hyb 1	None known.
SureSelect Hyb 2	None known.
SureSelect Hyb 4	None known.
SureSelect Binding Buffer	None known.
SureSelect Wash Buffer 1	None known.
SureSelect Wash Buffer 2	None known.
SureSelect Elution Buffer	None known.
SureSelect Neutralization Buffer	None known.

#### Specific hazards arising from the chemical

: SureSelect Hyb 1	In a fire or if heated, a pressure increase will occur and the container may burst.
SureSelect Hyb 2	In a fire or if heated, a pressure increase will occur and the container may burst.
SureSelect Hyb 4	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
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.
SureSelect Elution Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
SureSelect Neutralization Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.

#### Hazardous thermal decomposition products

: SureSelect Hyb 1	Decomposition products may include the following materials: phosphorus oxides halogenated compounds metal oxide/oxides
SureSelect Hyb 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

## Section 5. Firefighting measures

SureSelect Hyb 4	metal oxide/oxides 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.
SureSelect Elution Buffer	No specific data.
SureSelect Neutralization Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides

### Special protective actions for fire-fighters

: SureSelect Hyb 1	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Hyb 2	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Hyb 4	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Binding Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Wash Buffer 1	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Wash Buffer 2	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Elution Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Neutralization Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

### Special protective equipment for fire-fighters

: SureSelect Hyb 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureSelect Hyb 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureSelect Hyb 4	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

## Section 5. Firefighting measures

	SureSelect Binding Buffer	pressure mode. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	SureSelect Wash Buffer 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	SureSelect Wash Buffer 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	SureSelect Elution Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
	SureSelect Neutralization Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
<b>Hazchem code</b>	: SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	2X
	SureSelect Neutralization Buffer	Not available.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

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

## Section 6. Accidental release measures

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.

SureSelect Elution Buffer

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

SureSelect Neutralization Buffer

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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".

SureSelect Elution 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 Neutralization 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".

## Section 6. Accidental release measures

<b>Environmental precautions</b> :	SureSelect Hyb 1	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SureSelect Hyb 2	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
	SureSelect Hyb 4	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.
	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).
	SureSelect Elution 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 Neutralization 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).

### Methods and material for containment and cleaning up

<b>Methods for cleaning up</b> :	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.

## Section 6. Accidental release measures

	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.
SureSelect Elution Buffer	Stop leak if without risk. Move containers from spill area. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor.
SureSelect Neutralization 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.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

: SureSelect Hyb 1	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing 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 2	Put on appropriate personal protective equipment (see Section 8).
SureSelect Hyb 4	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. 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 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).
SureSelect Elution Buffer	Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a



## Section 7. Handling and storage

compatible material, kept tightly closed when not in use. Keep away from acids. Empty containers retain product residue and can be hazardous. Do not reuse container.

SureSelect Neutralization Buffer

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.

### 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.

SureSelect Elution Buffer

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

SureSelect Neutralization Buffer

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : SureSelect Hyb 1

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

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.

SureSelect Hyb 4

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

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.

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.

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.

## Section 7. Handling and storage

### SureSelect Elution Buffer

prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from acids. 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.

### SureSelect Neutralization 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.

## Section 8. Exposure controls and personal protection

### Control parameters

#### Occupational exposure limits

Ingredient name	Exposure limits
SureSelect Elution Buffer Sodium hydroxide	<b>Safe Work Australia (Australia, 1/2014).</b> TWA: 2 mg/m <sup>3</sup> 8 hours.

### Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Environmental exposure controls

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

### Individual protection measures

#### Hygiene measures

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

#### Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

#### Skin protection

## Section 8. Exposure controls and personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

## Section 9. Physical and chemical properties

### Appearance

- Physical state** : SureSelect Hyb 1 Liquid.  
SureSelect Hyb 2 Liquid.  
SureSelect Hyb 4 Liquid.  
SureSelect Binding Buffer Liquid.  
SureSelect Wash Buffer 1 Liquid.  
SureSelect Wash Buffer 2 Liquid.  
SureSelect Elution Buffer Liquid.  
SureSelect Neutralization Buffer 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.  
SureSelect Elution Buffer Not available.  
SureSelect Neutralization Buffer 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.  
SureSelect Elution Buffer Not available.  
SureSelect Neutralization Buffer 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.  
SureSelect Elution Buffer Not available.  
SureSelect Neutralization Buffer Not available.
- pH** :

## Section 9. Physical and chemical properties

	☑ SureSelect Hyb 1	7.4
	SureSelect Hyb 2	8
	SureSelect Hyb 4	5.2 to 6.2
	SureSelect Binding Buffer	7.1 to 8.1
	SureSelect Wash Buffer 1	6.5 to 7.5
	SureSelect Wash Buffer 2	6.8 to 7.8
	SureSelect Elution Buffer	12.2 to 13.4
	SureSelect Neutralization Buffer	7.5
<b>Melting point</b>	: ☑ SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	0°C (32°F)
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	0°C (32°F)
	SureSelect Wash Buffer 2	0°C (32°F)
	SureSelect Elution Buffer	0°C (32°F)
	SureSelect Neutralization Buffer	Not available.
<b>Boiling point</b>	: ☑ SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	100°C (212°F)
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	100°C (212°F)
	SureSelect Wash Buffer 2	100°C (212°F)
	SureSelect Elution Buffer	100°C (212°F)
	SureSelect Neutralization Buffer	Not available.
<b>Flash point</b>	: ☑ SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Evaporation rate</b>	: ☑ SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Flammability (solid, gas)</b>	: ☑ SureSelect Hyb 1	Not applicable.
	SureSelect Hyb 2	Not applicable.
	SureSelect Hyb 4	Not applicable.
	SureSelect Binding Buffer	Not applicable.
	SureSelect Wash Buffer 1	Not applicable.
	SureSelect Wash Buffer 2	Not applicable.
	SureSelect Elution Buffer	Not applicable.
	SureSelect Neutralization Buffer	Not applicable.
<b>Lower and upper explosive (flammable) limits</b>	: ☑ SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.

## Section 9. Physical and chemical properties

	Buffer	
<b>Vapour pressure</b>	: SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Vapour density</b>	: SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Relative density</b>	: SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Solubility</b>	: SureSelect Hyb 1	Easily soluble in the following materials: cold water and hot water.
	SureSelect Hyb 2	Easily soluble in the following materials: cold water and hot water.
	SureSelect Hyb 4	Easily soluble in the following materials: cold water and hot water.
	SureSelect Binding Buffer	Easily soluble in the following materials: cold water and hot water.
	SureSelect Wash Buffer 1	Easily soluble in the following materials: cold water and hot water.
	SureSelect Wash Buffer 2	Easily soluble in the following materials: cold water and hot water.
	SureSelect Elution Buffer	Easily soluble in the following materials: cold water and hot water.
	SureSelect Neutralization Buffer	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Auto-ignition temperature</b>	: SureSelect Hyb 1	Not available.
	SureSelect Hyb 2	Not available.
	SureSelect Hyb 4	Not available.
	SureSelect Binding Buffer	Not available.
	SureSelect Wash Buffer 1	Not available.
	SureSelect Wash Buffer 2	Not available.
	SureSelect Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.

## Section 9. Physical and chemical properties

<b>Decomposition temperature</b>	: <input checked="" type="checkbox"/> 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 Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.
<b>Viscosity</b>	: <input checked="" type="checkbox"/> 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 Elution Buffer	Not available.
	SureSelect Neutralization Buffer	Not available.

## Section 10. Stability and reactivity

<b>Reactivity</b>	: <input checked="" type="checkbox"/> 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.
	SureSelect Elution Buffer	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect Neutralization Buffer	No specific test data related to reactivity available for this product or its ingredients.
<b>Chemical stability</b>	: <input checked="" type="checkbox"/> 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.
	SureSelect Elution Buffer	The product is stable.
	SureSelect Neutralization Buffer	The product is stable.
<b>Possibility of hazardous reactions</b>	: <input checked="" type="checkbox"/> 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 Elution Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.

## Section 10. Stability and reactivity

SureSelect Neutralization Buffer Under normal conditions of storage and use, hazardous reactions will not occur.

### Conditions to avoid

:  SureSelect Hyb 1 No specific data.  
 SureSelect Hyb 2 No specific data.  
 SureSelect Hyb 4 No specific data.  
 SureSelect Binding Buffer No specific data.  
 SureSelect Wash Buffer 1 No specific data.  
 SureSelect Wash Buffer 2 No specific data.  
 SureSelect Elution Buffer No specific data.  
 SureSelect Neutralization Buffer No specific data.

### Incompatible materials

:  SureSelect Hyb 1 May react or be incompatible with oxidising materials.  
 SureSelect Hyb 2 May react or be incompatible with oxidising materials.  
 SureSelect Hyb 4 May react or be incompatible with oxidising materials.  
 SureSelect Binding Buffer May react or be incompatible with oxidising materials.  
 SureSelect Wash Buffer 1 May react or be incompatible with oxidising materials.  
 SureSelect Wash Buffer 2 May react or be incompatible with oxidising materials.  
 SureSelect Elution Buffer Reactive or incompatible with the following materials: acids  
 SureSelect Neutralization Buffer May react or be incompatible with oxidising materials.

### Hazardous decomposition products

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

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity



## Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
<b>SureSelect Hyb 1</b> Sodium chloride	LC50 Inhalation Dusts and mists LD50 Oral	Rat Rat	>42 g/m <sup>3</sup> 3000 mg/kg	1 hours -
<b>SureSelect Hyb 4</b> Sulfuric acid monododecyl ester sodium salt (1:1)	LD50 Oral	Rat	1288 mg/kg	-

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>SureSelect Hyb 1</b> Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
<b>SureSelect Elution Buffer</b> Sodium hydroxide	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	1 Percent	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes	-
	Skin - Severe irritant	Rabbit	-	1 milligrams 24 hours 500 milligrams	-
<b>SureSelect Neutralization Buffer</b> Trometamol	Skin - Moderate irritant	Rabbit	-	25 Percent	-
	Skin - Severe irritant	Rabbit	-	500 milligrams	-

### Sensitisation

Not available.

### Mutagenicity

Not available.

### Carcinogenicity

Not available.

### Reproductive toxicity

Not available.

### Teratogenicity

Not available.

### Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
<b>SureSelect Hyb 4</b> Sulfuric acid monododecyl ester sodium salt (1:1)	Category 3	Not applicable.	Respiratory tract irritation
<b>SureSelect Neutralization Buffer</b> Trometamol	Category 3	Not applicable.	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

## Section 11. Toxicological information

### Aspiration hazard

Not available.

<b>Information on likely routes of exposure</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer SureSelect Neutralization Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation. Routes of entry anticipated: Oral, Dermal, Inhalation. Not available. Not available. Not available. Routes of entry anticipated: Oral, Dermal, Inhalation.
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### Potential acute health effects

<b>Eye contact</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer SureSelect Neutralization Buffer	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. Causes serious eye damage. Causes serious eye irritation.
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<b>Inhalation</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.
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<b>Skin contact</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer SureSelect Neutralization Buffer	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. Causes severe burns. Causes skin irritation.
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<b>Ingestion</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer SureSelect Neutralization Buffer	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. Corrosive to the digestive tract. Causes burns. No known significant effects or critical hazards.
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### Symptoms related to the physical, chemical and toxicological characteristics

<b>Eye contact</b>	: SureSelect Hyb 1  SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2	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.
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## Section 11. Toxicological information

	SureSelect Elution Buffer	Adverse symptoms may include the following: pain watering redness
	SureSelect Neutralization Buffer	Adverse symptoms may include the following:  pain or irritation watering redness
<b>Inhalation</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer SureSelect Neutralization Buffer	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Skin contact</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer  SureSelect Neutralization Buffer	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. Adverse symptoms may include the following: pain or irritation redness blistering may occur Adverse symptoms may include the following:  irritation redness
<b>Ingestion</b>	: SureSelect Hyb 1 SureSelect Hyb 2 SureSelect Hyb 4 SureSelect Binding Buffer SureSelect Wash Buffer 1 SureSelect Wash Buffer 2 SureSelect Elution Buffer  SureSelect Neutralization Buffer	No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. Adverse symptoms may include the following: stomach pains 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

Not available.

## Section 11. Toxicological information

<b>General</b>	: <input checked="" type="checkbox"/> SureSelect Hyb 1 <input checked="" type="checkbox"/> SureSelect Hyb 2 <input checked="" type="checkbox"/> SureSelect Hyb 4 <input checked="" type="checkbox"/> SureSelect Binding Buffer <input checked="" type="checkbox"/> SureSelect Wash Buffer 1 <input checked="" type="checkbox"/> SureSelect Wash Buffer 2 <input checked="" type="checkbox"/> SureSelect Elution Buffer <input checked="" type="checkbox"/> SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: <input checked="" type="checkbox"/> SureSelect Hyb 1 <input checked="" type="checkbox"/> SureSelect Hyb 2 <input checked="" type="checkbox"/> SureSelect Hyb 4 <input checked="" type="checkbox"/> SureSelect Binding Buffer <input checked="" type="checkbox"/> SureSelect Wash Buffer 1 <input checked="" type="checkbox"/> SureSelect Wash Buffer 2 <input checked="" type="checkbox"/> SureSelect Elution Buffer <input checked="" type="checkbox"/> SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.
<b>Mutagenicity</b>	: <input checked="" type="checkbox"/> SureSelect Hyb 1 <input checked="" type="checkbox"/> SureSelect Hyb 2 <input checked="" type="checkbox"/> SureSelect Hyb 4 <input checked="" type="checkbox"/> SureSelect Binding Buffer <input checked="" type="checkbox"/> SureSelect Wash Buffer 1 <input checked="" type="checkbox"/> SureSelect Wash Buffer 2 <input checked="" type="checkbox"/> SureSelect Elution Buffer <input checked="" type="checkbox"/> SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.
<b>Teratogenicity</b>	: <input checked="" type="checkbox"/> SureSelect Hyb 1 <input checked="" type="checkbox"/> SureSelect Hyb 2 <input checked="" type="checkbox"/> SureSelect Hyb 4 <input checked="" type="checkbox"/> SureSelect Binding Buffer <input checked="" type="checkbox"/> SureSelect Wash Buffer 1 <input checked="" type="checkbox"/> SureSelect Wash Buffer 2 <input checked="" type="checkbox"/> SureSelect Elution Buffer <input checked="" type="checkbox"/> SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.
<b>Developmental effects</b>	: <input checked="" type="checkbox"/> SureSelect Hyb 1 <input checked="" type="checkbox"/> SureSelect Hyb 2 <input checked="" type="checkbox"/> SureSelect Hyb 4 <input checked="" type="checkbox"/> SureSelect Binding Buffer <input checked="" type="checkbox"/> SureSelect Wash Buffer 1 <input checked="" type="checkbox"/> SureSelect Wash Buffer 2 <input checked="" type="checkbox"/> SureSelect Elution Buffer <input checked="" type="checkbox"/> SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.
<b>Fertility effects</b>	: <input checked="" type="checkbox"/> SureSelect Hyb 1 <input checked="" type="checkbox"/> SureSelect Hyb 2 <input checked="" type="checkbox"/> SureSelect Hyb 4 <input checked="" type="checkbox"/> SureSelect Binding Buffer <input checked="" type="checkbox"/> SureSelect Wash Buffer 1 <input checked="" type="checkbox"/> SureSelect Wash Buffer 2 <input checked="" type="checkbox"/> SureSelect Elution Buffer <input checked="" type="checkbox"/> SureSelect Neutralization Buffer	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. No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Route	ATE value
<b>SureSelect Hyb 2</b> Oral	13698.6 mg/kg
<b>SureSelect Hyb 4</b> Oral Inhalation (dusts and mists)	128800 mg/kg 150 mg/l

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>SureSelect Hyb 1</b> Sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 28.85 mg/dm3 Fresh water	Algae - Pseudokirchneriella subcapitata	72 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1661 mg/l Fresh water	Daphnia - Daphnia magna	48 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
<b>SureSelect Elution Buffer</b> Sodium hydroxide	Acute EC50 40.38 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute LC50 125 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>SureSelect Elution Buffer</b> Sodium hydroxide	-	-	Readily

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>SureSelect Neutralization Buffer</b> Trometamol	-1.56	-	low

### Mobility in soil

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




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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

**Additional information** : **Special provisions**  
251, 340

	ADG	IMDG	IATA
<b>UN number</b>	UN3316	UN3316	UN3316
<b>UN proper shipping name</b>	CHEMICAL KIT	CHEMICAL KIT	Chemical kit
<b>Transport hazard class(es)</b>	9 	9 	9 
<b>Packing group</b>	II	II	II
<b>Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	<b>Hazchem code</b> 2Z  <b>Special provisions</b> 251, 340	<b>Emergency schedules (EmS)</b> F-A, S-P  <b>Special provisions</b> 251, 340	<b>Passenger and Cargo Aircraft</b> Quantity limitation: 10 kg Packaging instructions: 960 <b>Cargo Aircraft Only</b> Quantity limitation: 10 kg Packaging instructions: 960 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 kg Packaging instructions: Y960  <b>Special provisions</b> A44, A163

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

**Transport in bulk according to Annex II of Marpol and the IBC Code** : Not available.

## Section 15. Regulatory information

### Standard Uniform Schedule of Medicine and Poisons



### Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

**Australia inventory (AICS)** :  All components are listed or exempted.

### International regulations

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

Not listed.

#### Montreal Protocol (Annexes A, B, C, E)

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

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

Not listed.

### International lists

#### National inventory

<b>Canada</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>China</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Europe</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Japan</b>	: <input checked="" type="checkbox"/> <b>Japan inventory (ENCS)</b> : All components are listed or exempted. <b>Japan inventory (ISHL)</b> : Not determined.
<b>Malaysia</b>	: <input checked="" type="checkbox"/> Not determined.
<b>New Zealand</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Philippines</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Republic of Korea</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Taiwan</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.
<b>Turkey</b>	: <input checked="" type="checkbox"/> Not determined.
<b>United States</b>	: <input checked="" type="checkbox"/> All components are listed or exempted.

## Section 16. Any other relevant information

### History

**Date of issue/Date of revision** : 24/12/2015

**Date of previous issue** : 11/06/2013.

**Version** : 3

**Key to abbreviations** : ADG = Australian Dangerous Goods  
ATE = Acute Toxicity Estimate  
BCF = Bioconcentration Factor  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
IATA = International Air Transport Association  
IBC = Intermediate Bulk Container  
IMDG = International Maritime Dangerous Goods  
LogPow = logarithm of the octanol/water partition coefficient  
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
NOHSC = National Occupational Health and Safety Commission  
SUSMP = Standard Uniform Schedule of Medicine and Poisons  
UN = United Nations

## Section 16. Any other relevant information

### Procedure used to derive the classification

Classification	Justification
<b>SureSelect Hyb 1</b> Eye Irrit. 2A, H319	Calculation method
<b>SureSelect Hyb 4</b> Aquatic Acute 3, H402	Calculation method
<b>SureSelect Elution Buffer</b> Skin Corr. 1, H314 Eye Dam. 1, H318	On basis of test data On basis of test data
<b>SureSelect Neutralization Buffer</b> Skin Irrit. 2, H315 Eye Irrit. 2A, H319	Calculation method Calculation method

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

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