

# SAFETY DATA SHEET



SureSelect XT2 Pre-Capture Box 1 - 60 Reactions, Part Number 5190-7337

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

### 1.1 Product identifier

**Product name** : SureSelect XT2 Pre-Capture Box 1 - 60 Reactions, Part Number 5190-7337  
**Part No. (Kit)** : 5190-7337  
**Part No.** : SureSelect XT2 Binding Buffer 5190-4091  
SureSelect XT2 Wash 1 5190-4092  
SureSelect XT2 Wash 2 5190-4093  
SureSelect XT2 Elution Buffer 5190-4208  
SureSelect XT2 Neutralization Buffer 5190-4209

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

Identified uses	
Analytical reagent.	
SureSelect XT2 Binding Buffer	48 ml
SureSelect XT2 Wash 1	12 ml
SureSelect XT2 Wash 2	72 ml
SureSelect XT2 Elution Buffer	3.6 ml
SureSelect XT2 Neutralization Buffer	3.6 ml

### 1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany  
0800 603 1000

**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

### 1.4 Emergency telephone number

**Emergency telephone number (with hours of operation)** : CHEMTREC®: +(44)-870-8200418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : SureSelect XT2 Binding Buffer Mixture  
SureSelect XT2 Wash 1 Mixture  
SureSelect XT2 Wash 2 Mixture  
SureSelect XT2 Elution Buffer Mixture  
SureSelect XT2 Neutralization Buffer Mixture

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

## SECTION 2: Hazards identification

### SureSelect XT2 Elution Buffer

H314 SKIN CORROSION/IRRITATION - Category 1

### SureSelect XT2 Neutralization Buffer

H315 SKIN CORROSION/IRRITATION - Category 2  
 H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

<b>Ingredients of unknown toxicity</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 15.8%
<b>Ingredients of unknown ecotoxicity</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 15.8%

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

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

## 2.2 Label elements

### Hazard pictograms

:



### Signal word

: SureSelect XT2 Binding Buffer	No signal word.
SureSelect XT2 Wash 1	No signal word.
SureSelect XT2 Wash 2	No signal word.
SureSelect XT2 Elution Buffer	Danger
SureSelect XT2 Neutralization Buffer	Warning

### Hazard statements

: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
SureSelect XT2 Wash 1	No known significant effects or critical hazards.
SureSelect XT2 Wash 2	No known significant effects or critical hazards.
SureSelect XT2 Elution Buffer	<b>GHS05</b> - Causes severe skin burns and eye damage.
SureSelect XT2 Neutralization Buffer	<b>GHS07</b> - Causes skin irritation. Causes serious eye irritation.

### Precautionary statements

#### Prevention

: SureSelect XT2 Binding Buffer	Not applicable.
SureSelect XT2 Wash 1	Not applicable.
SureSelect XT2 Wash 2	Not applicable.
SureSelect XT2 Elution Buffer	P280 - Wear protective gloves. Wear eye or face protection. Wear protective clothing.
SureSelect XT2 Neutralization Buffer	P280 - Wear protective gloves. Wear eye or face protection.

**SECTION 2: Hazards identification**

		P264 - Wash hands thoroughly after handling.
<b>Response</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	P304 + P340 + P310 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER or physician. P301 + P310 + P331 - IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. P303 + P361 + P353 + P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a POISON CENTER or physician. P305 + P310 - IF IN EYES: Immediately call a POISON CENTER or physician.
	SureSelect XT2 Neutralization Buffer	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Storage</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	P405 - Store locked up.
	SureSelect XT2 Neutralization Buffer	Not applicable.
<b>Disposal</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureSelect XT2 Neutralization Buffer	Not applicable.
<b>Hazardous ingredients</b>	: <b>SureSelect XT2 Elution Buffer</b> Sodium hydroxide	
<b>Supplemental label elements</b>	: SureSelect XT2 Binding Buffer	Safety data sheet available on request.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Not applicable.
<b>Special packaging requirements</b>		
<b>Tactile warning of danger</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Not applicable.

## SECTION 2: Hazards identification

### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	:	SureSelect XT2 Binding Buffer	None known.
		SureSelect XT2 Wash 1	None known.
		SureSelect XT2 Wash 2	None known.
		SureSelect XT2 Elution Buffer	Causes digestive tract burns.
		SureSelect XT2 Neutralization Buffer	None known.

## SECTION 3: Composition/information on ingredients

<b>3.2 Mixtures</b>	:	SureSelect XT2 Binding Buffer	Mixture
		SureSelect XT2 Wash 1	Mixture
		SureSelect XT2 Wash 2	Mixture
		SureSelect XT2 Elution Buffer	Mixture
		SureSelect XT2 Neutralization Buffer	Mixture

Product/ingredient name	Identifiers	%	Classification	Type
<b>SureSelect XT2 Binding Buffer</b> Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	<10	Eye Irrit. 2, H319	[1]
<b>SureSelect XT2 Elution Buffer</b> Sodium hydroxide	EC: 215-185-5 CAS: 1310-73-2	≤1	Skin Corr. 1A, H314	[1] [2]
<b>SureSelect XT2 Neutralization Buffer</b> 2-Amino-2-(hydroxymethyl) propane-1,3-diol hydrochloride	EC: 214-684-5 CAS: 1185-53-1	≥10 - <20	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 <b>See Section 16 for the full text of the H statements declared above.</b>	[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.

#### 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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	:	SureSelect XT2 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 XT2 Wash 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 XT2 Wash 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.
		SureSelect XT2 Elution Buffer	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

**SECTION 4: First aid measures**

		and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
	SureSelect XT2 Neutralization Buffer	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.
<b>Inhalation</b>	: SureSelect XT2 Binding Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureSelect XT2 Wash 1	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureSelect XT2 Wash 2	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureSelect XT2 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 XT2 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 XT2 Binding Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect XT2 Wash 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect XT2 Wash 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect XT2 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 XT2 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. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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<b>Ingestion</b>	: SureSelect XT2 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 XT2 Wash 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 XT2 Wash 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 XT2 Elution Buffer	Get medical attention immediately. Call a poison 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.
	SureSelect XT2 Neutralization Buffer	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.
<b>Protection of first-aiders</b>	: SureSelect XT2 Binding Buffer	No action shall be taken involving any personal risk or without suitable training.
	SureSelect XT2 Wash 1	No action shall be taken involving any personal risk or without suitable training.
	SureSelect XT2 Wash 2	No action shall be taken involving any personal risk or without suitable training.
	SureSelect XT2 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 XT2 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 resuscitation.

## SECTION 4: First aid measures

### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

<b>Eye contact</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	Causes serious eye damage.
	SureSelect XT2 Neutralization Buffer	Causes serious eye irritation.
<b>Inhalation</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.
<b>Skin contact</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	Causes severe burns.
	SureSelect XT2 Neutralization Buffer	Causes skin irritation.
<b>Ingestion</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	Corrosive to the digestive tract. Causes burns.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

<b>Eye contact</b>	: SureSelect XT2 Binding Buffer	No specific data.
	SureSelect XT2 Wash 1	No specific data.
	SureSelect XT2 Wash 2	No specific data.
	SureSelect XT2 Elution Buffer	Adverse symptoms may include the following: pain watering redness
	SureSelect XT2 Neutralization Buffer	Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: SureSelect XT2 Binding Buffer	No specific data.
	SureSelect XT2 Wash 1	No specific data.
	SureSelect XT2 Wash 2	No specific data.
	SureSelect XT2 Elution Buffer	No specific data.
	SureSelect XT2 Neutralization Buffer	No specific data.

## SECTION 4: First aid measures

<b>Skin contact</b>	: SureSelect XT2 Binding Buffer	No specific data.
	SureSelect XT2 Wash 1	No specific data.
	SureSelect XT2 Wash 2	No specific data.
	SureSelect XT2 Elution Buffer	Adverse symptoms may include the following:  pain or irritation redness blistering may occur
	SureSelect XT2 Neutralization Buffer	Adverse symptoms may include the following:  irritation redness
<b>Ingestion</b>	: SureSelect XT2 Binding Buffer	No specific data.
	SureSelect XT2 Wash 1	No specific data.
	SureSelect XT2 Wash 2	No specific data.
	SureSelect XT2 Elution Buffer	Adverse symptoms may include the following:  stomach pains
	SureSelect XT2 Neutralization Buffer	No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

<b>Notes to physician</b>	: SureSelect XT2 Binding Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect XT2 Wash 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect XT2 Wash 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect XT2 Elution Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect XT2 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 XT2 Binding Buffer	No specific treatment.
	SureSelect XT2 Wash 1	No specific treatment.
	SureSelect XT2 Wash 2	No specific treatment.
	SureSelect XT2 Elution Buffer	No specific treatment.
	SureSelect XT2 Neutralization Buffer	No specific treatment.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

<b>Suitable extinguishing media</b>	: SureSelect XT2 Binding Buffer	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2 Wash 1	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2 Wash 2	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2 Elution Buffer	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2 Neutralization Buffer	Use an extinguishing agent suitable for the surrounding fire.
<b>Unsuitable extinguishing media</b>	: SureSelect XT2 Binding Buffer	None known.
	SureSelect XT2 Wash 1	None known.
	SureSelect XT2 Wash 2	None known.
	SureSelect XT2 Elution Buffer	None known.
	SureSelect XT2 Neutralization Buffer	None known.



## SECTION 5: Firefighting measures

### 5.2 Special hazards arising from the substance or mixture

<b>Hazards from the substance or mixture</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1  SureSelect XT2 Wash 2  SureSelect XT2 Elution Buffer SureSelect XT2 Neutralization Buffer	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.
<b>Hazardous combustion products</b>	: SureSelect XT2 Binding Buffer  SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer SureSelect XT2 Neutralization Buffer	Decomposition products may include the following materials:  halogenated compounds metal oxide/oxides No specific data. No specific data. No specific data.  Decomposition products may include the following materials:  carbon dioxide carbon monoxide nitrogen oxides halogenated compounds

### 5.3 Advice for firefighters

<b>Special precautions for fire-fighters</b>	: SureSelect XT2 Binding Buffer  SureSelect XT2 Wash 1  SureSelect XT2 Wash 2  SureSelect XT2 Elution Buffer SureSelect XT2 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. 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. 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. 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. 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.
<b>Special protective equipment for fire-fighters</b>	: SureSelect XT2 Binding Buffer  SureSelect XT2 Wash 1  SureSelect XT2 Wash 2  SureSelect XT2 Elution	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. 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. 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. Fire-fighters should wear appropriate protective equipment

## SECTION 5: Firefighting measures

Buffer	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 XT2 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. 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 XT2 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 XT2 Wash 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 XT2 Wash 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 XT2 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 XT2 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 XT2 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 XT2 Wash 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 XT2 Wash 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 XT2 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 XT2 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>6.2 Environmental precautions</b>	: SureSelect XT2 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 XT2 Wash 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 XT2 Wash 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 XT2 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 XT2 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).

**6.3 Methods and material for containment and cleaning up**

<b>Methods for cleaning up</b>	: SureSelect XT2 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 XT2 Wash 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 XT2 Wash 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 XT2 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 XT2 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.

<b>6.4 Reference to other sections</b>	: 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.
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**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

## SECTION 7: Handling and storage

<b>Protective measures</b>	: SureSelect XT2 Binding Buffer	Put on appropriate personal protective equipment (see Section 8).
	SureSelect XT2 Wash 1	Put on appropriate personal protective equipment (see Section 8).
	SureSelect XT2 Wash 2	Put on appropriate personal protective equipment (see Section 8).
	SureSelect XT2 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 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 XT2 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.
<b>Advice on general occupational hygiene</b>	: SureSelect XT2 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 XT2 Wash 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 XT2 Wash 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 XT2 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 XT2 Neutralization 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.
<b>7.2 Conditions for safe storage, including any incompatibilities</b>	: SureSelect XT2 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 XT2 Wash 1	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and

## SECTION 7: Handling and storage

	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 XT2 Wash 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 XT2 Elution 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. 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 XT2 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.

### 7.3 Specific end use(s)

<b>Recommendations</b>	: SureSelect XT2 Binding Buffer	Industrial applications, Professional applications.
	SureSelect XT2 Wash 1	Industrial applications, Professional applications.
	SureSelect XT2 Wash 2	Industrial applications, Professional applications.
	SureSelect XT2 Elution Buffer	Industrial applications, Professional applications.
	SureSelect XT2 Neutralization Buffer	Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: SureSelect XT2 Binding Buffer	Not applicable.
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Not applicable.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
SureSelect XT2 Elution Buffer Sodium hydroxide	<b>EH40/2005 WELs (United Kingdom (UK), 12/2011).</b> STEL: 2 mg/m <sup>3</sup> 15 minutes.

**SECTION 8: Exposure controls/personal protection**

**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**

No DNELs/DMELs available.

**PNECs**

No PNECs available

**8.2 Exposure controls**

**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.

**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**

**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.

**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****9.1 Information on basic physical and chemical properties****Appearance**

<b>Physical state</b>	: SureSelect XT2	Liquid.
	Binding Buffer	
	SureSelect XT2 Wash 1	Liquid.
	SureSelect XT2 Wash 2	Liquid.
	SureSelect XT2 Elution Buffer	Liquid.
	SureSelect XT2 Neutralization Buffer	Liquid.
<b>Colour</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Odour</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Odour threshold</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>pH</b>	: SureSelect XT2	7.5
	Binding Buffer	
	SureSelect XT2 Wash 1	7
	SureSelect XT2 Wash 2	7
	SureSelect XT2 Elution Buffer	12.2 to 13.4
	SureSelect XT2 Neutralization Buffer	7.5
<b>Melting point/freezing point</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	0°C
	SureSelect XT2 Wash 2	0°C
	SureSelect XT2 Elution Buffer	0°C
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Initial boiling point and boiling range</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	100°C
	SureSelect XT2 Wash 2	100°C
	SureSelect XT2 Elution Buffer	100°C
	SureSelect XT2 Neutralization Buffer	Not available.

**SECTION 9: Physical and chemical properties**

<b>Flash point</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Evaporation rate</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Flammability (solid, gas)</b>	: SureSelect XT2	Not applicable.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not applicable.
	SureSelect XT2 Wash 2	Not applicable.
	SureSelect XT2 Elution Buffer	Not applicable.
	SureSelect XT2 Neutralization Buffer	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Vapour pressure</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Vapour density</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.
<b>Relative density</b>	: SureSelect XT2	Not available.
	Binding Buffer	
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
	SureSelect XT2 Neutralization Buffer	Not available.



**SECTION 9: Physical and chemical properties**

<b>Solubility(ies)</b>	: SureSelect XT2	Easily soluble in the following materials: cold water and hot water.
	Binding Buffer	Easily soluble in the following materials: cold water and hot water.
	SureSelect XT2 Wash 1	Easily soluble in the following materials: cold water and hot water.
	SureSelect XT2 Wash 2	Easily soluble in the following materials: cold water and hot water.
	SureSelect XT2 Elution Buffer	Easily soluble in the following materials: cold water and hot water.
<b>Partition coefficient: n-octanol/water</b>	: SureSelect XT2	Not available.
	Binding Buffer	Not available.
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
<b>Auto-ignition temperature</b>	: SureSelect XT2	Not available.
	Binding Buffer	Not available.
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
<b>Decomposition temperature</b>	: SureSelect XT2	Not available.
	Binding Buffer	Not available.
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
<b>Viscosity</b>	: SureSelect XT2	Not available.
	Binding Buffer	Not available.
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
<b>Explosive properties</b>	: SureSelect XT2	Not available.
	Binding Buffer	Not available.
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.
<b>Oxidising properties</b>	: SureSelect XT2	Not available.
	Binding Buffer	Not available.
	SureSelect XT2 Wash 1	Not available.
	SureSelect XT2 Wash 2	Not available.
	SureSelect XT2 Elution Buffer	Not available.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

<b>10.1 Reactivity</b>	: SureSelect XT2 Binding Buffer	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect XT2 Wash 1	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect XT2 Wash 2	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect XT2 Elution Buffer	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect XT2 Neutralization Buffer	No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: SureSelect XT2 Binding Buffer	The product is stable.
	SureSelect XT2 Wash 1	The product is stable.
	SureSelect XT2 Wash 2	The product is stable.
	SureSelect XT2 Elution Buffer	The product is stable.
	SureSelect XT2 Neutralization Buffer	The product is stable.
<b>10.3 Possibility of hazardous reactions</b>	: SureSelect XT2 Binding Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect XT2 Wash 1	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect XT2 Wash 2	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect XT2 Elution Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect XT2 Neutralization Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: SureSelect XT2 Binding Buffer	No specific data.
	SureSelect XT2 Wash 1	No specific data.
	SureSelect XT2 Wash 2	No specific data.
	SureSelect XT2 Elution Buffer	No specific data.
	SureSelect XT2 Neutralization Buffer	No specific data.
<b>10.5 Incompatible materials</b>	: SureSelect XT2 Binding Buffer	May react or be incompatible with oxidising materials.
	SureSelect XT2 Wash 1	May react or be incompatible with oxidising materials.
	SureSelect XT2 Wash 2	May react or be incompatible with oxidising materials.
	SureSelect XT2 Elution Buffer	Reactive or incompatible with the following materials:  acids
	SureSelect XT2 Neutralization Buffer	May react or be incompatible with oxidising materials.
<b>10.6 Hazardous decomposition products</b>	: SureSelect XT2 Binding Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect XT2 Wash 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect XT2 Wash 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect XT2 Elution Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect XT2 Neutralization Buffer	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
<b>SureSelect XT2 Binding Buffer</b> Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-

#### Acute toxicity estimates

Route	ATE value
<b>SureSelect XT2 Wash 1</b> Dermal	582436 mg/kg
<b>SureSelect XT2 Wash 2</b> Dermal	580000 mg/kg

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>SureSelect XT2 Binding Buffer</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 XT2 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 1 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 500 milligrams	-

#### Sensitiser

**Conclusion/Summary** : Not available.

#### Chronic toxicity / Carcinogenicity / Mutagenicity / Teratogenicity / Reproductive toxicity

Not available.

#### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>SureSelect XT2 Neutralization Buffer</b> 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

#### Specific target organ toxicity (repeated exposure)

Not available.

#### Aspiration hazard

Not available.

#### Information on likely routes of exposure

SureSelect XT2 Binding Buffer	Not available.
SureSelect XT2 Wash 1	Not available.
SureSelect XT2 Wash 2	Not available.
SureSelect XT2 Elution Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
SureSelect XT2 Neutralization Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential acute health effects

## SECTION 11: Toxicological information

<b>Inhalation</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer SureSelect XT2 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.
<b>Ingestion</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer SureSelect XT2 Neutralization Buffer	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.
<b>Skin contact</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer SureSelect XT2 Neutralization Buffer	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.
<b>Eye contact</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer SureSelect XT2 Neutralization Buffer	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.

### Symptoms related to the physical, chemical and toxicological characteristics

<b>Inhalation</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer SureSelect XT2 Neutralization Buffer	No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Ingestion</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer  SureSelect XT2 Neutralization Buffer	No specific data. No specific data. No specific data. Adverse symptoms may include the following:  stomach pains No specific data.
<b>Skin contact</b>	: SureSelect XT2 Binding Buffer SureSelect XT2 Wash 1 SureSelect XT2 Wash 2 SureSelect XT2 Elution Buffer  SureSelect XT2 Neutralization Buffer	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

## SECTION 11: Toxicological information

<b>Eye contact</b>	: SureSelect XT2 Binding Buffer	redness No specific data.
	SureSelect XT2 Wash 1	No specific data.
	SureSelect XT2 Wash 2	No specific data.
	SureSelect XT2 Elution Buffer	Adverse symptoms may include the following:  pain watering redness
	SureSelect XT2 Neutralization Buffer	Adverse symptoms may include the following:  pain or irritation watering redness

### 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

<b>General</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.
<b>Teratogenicity</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.

## SECTION 11: Toxicological information

<b>Developmental effects</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.
<b>Fertility effects</b>	: SureSelect XT2 Binding Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Wash 1	No known significant effects or critical hazards.
	SureSelect XT2 Wash 2	No known significant effects or critical hazards.
	SureSelect XT2 Elution Buffer	No known significant effects or critical hazards.
	SureSelect XT2 Neutralization Buffer	No known significant effects or critical hazards.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>SureSelect XT2 Binding Buffer</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 XT2 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

### 12.2 Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>SureSelect XT2 Elution Buffer</b> Sodium hydroxide	-	-	Readily

### 12.3 Bioaccumulative potential

Not available.

### 12.4 Mobility in soil

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

**Mobility** : Not available.

## SECTION 12: Ecological information

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.  
**vPvB** : Not applicable.

**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** : The classification of the product may meet the criteria for a hazardous waste.




#### 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. 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

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	Not regulated.	UN3316	UN3316
<b>14.2 UN proper shipping name</b>	CHEMICAL KIT	CHEMICAL KIT	Chemical kit
<b>14.3 Transport hazard class(es)</b>	- 	- 	9 
<b>14.4 Packing group</b>	II	II	II
<b>14.5 Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	<p><b>Hazard identification number</b> 90</p> <p><b>Limited quantity</b> See SP 251</p> <p><b>Special provisions</b> 251, 340</p> <p><b>Tunnel code</b> (E)</p>	<p><b>Emergency schedules (EmS)</b> F-A, S-P</p> <p><b>Special provisions</b> 251, 340</p>	<p><b>Passenger and Cargo Aircraft</b> Quantity limitation: 10 kg Packaging instructions: 960</p> <p><b>Cargo Aircraft Only</b> Quantity limitation: 10 kg Packaging instructions: 960</p> <p><b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 kg Packaging instructions:</p>

## SECTION 14: Transport information

			Y960 <b>Special provisions</b> A44, A163
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**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code** : 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** :

SureSelect XT2	Not applicable.
Binding Buffer	
SureSelect XT2 Wash 1	Not applicable.
SureSelect XT2 Wash 2	Not applicable.
SureSelect XT2 Elution Buffer	Not applicable.
SureSelect XT2 Neutralization Buffer	Not applicable.

#### Other EU regulations

**Europe inventory** : All components are listed or exempted.

##### Seveso Directive

This product is not controlled under the Seveso Directive.

#### National regulations

##### 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

**Australia** : All components are listed or exempted.  
**Canada** : All components are listed or exempted.  
**China** : All components are listed or exempted.



## SECTION 15: Regulatory information

<b>Japan</b>	: <b>Japan inventory (ENCS):</b> All components are listed or exempted. <b>Japan inventory (ISHL):</b> Not determined.
<b>Malaysia</b>	: Not determined.
<b>New Zealand</b>	: All components are listed or exempted.
<b>Philippines</b>	: All components are listed or exempted.
<b>Republic of Korea</b>	: All components are listed or exempted.
<b>Taiwan</b>	: All components are listed or exempted.
<b>Turkey</b>	: Not determined.
<b>United States</b>	: 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]  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

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

Classification	Justification
<b>SureSelect XT2 Elution Buffer</b> Skin Corr. 1, H314	On basis of test data
<b>SureSelect XT2 Neutralization Buffer</b> Skin Irrit. 2, H315 Eye Irrit. 2, H319	Calculation method Calculation method

**Full text of abbreviated H statements** : **SureSelect XT2 Binding Buffer**  
H319 Causes serious eye irritation.

**SureSelect XT2 Elution Buffer**  
H314 Causes severe skin burns and eye damage.

**SureSelect XT2 Neutralization Buffer**  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.

**Full text of classifications [CLP/GHS]** : **SureSelect XT2 Binding Buffer**  
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

**SureSelect XT2 Elution Buffer**  
Skin Corr. 1, H314 SKIN CORROSION/IRRITATION - Category 1  
Skin Corr. 1A, H314 SKIN CORROSION/IRRITATION - Category 1A

**SureSelect XT2 Neutralization Buffer**  
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3

## SECTION 16: Other information

**Date of issue/ Date of revision** : 05/02/2016  
**Date of previous issue** : No previous validation.  
**Version** : 1

### Notice to reader

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