

SAFETY DATA SHEET



SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

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

1.1 Product identifier

Product name : SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938
Part no. (chemical kit) : 5190-3938
Part no. : SureSelect RNase Block 5190-1976
SureSelect XT2 5190-4078
Hybridization Buffer
SureSelect XT2 Blocking 5190-4079
Mix

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

Material uses : Analytical reagent.
 SureSelect RNase Block 50 µl
SureSelect XT2 Hybridization Buffer 37 µl
SureSelect XT2 Blocking Mix 9 µl

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 RNase Block Mixture
SureSelect XT2 Mixture
Hybridization Buffer
SureSelect XT2 Blocking Mixture
Mix

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

SureSelect XT2 Hybridization

Buffer

H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
H412 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

Ingredients of unknown toxicity : SureSelect RNase Block Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
SureSelect XT2 Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
Hybridization Buffer Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
Percentage of the mixture consisting of ingredient(s) of

Date of issue/Date of revision : 06/03/2018

1/20

SECTION 2: Hazards identification

unknown oral toxicity: 1 - 10%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.4%

Ingredients of unknown ecotoxicity : SureSelect XT2 Hybridization Buffer

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

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

2.2 Label elements

Hazard pictograms : SureSelect XT2 Hybridization Buffer



Signal word : SureSelect RNase Block SureSelect XT2 Hybridization Buffer No signal word. Warning

SureSelect XT2 Blocking Mix No signal word.

Hazard statements : SureSelect RNase Block SureSelect XT2 Hybridization Buffer No known significant effects or critical hazards. H319 - Causes serious eye irritation.

SureSelect XT2 Blocking Mix H412 - Harmful to aquatic life with long lasting effects.

No known significant effects or critical hazards.

Precautionary statements

Prevention : SureSelect RNase Block SureSelect XT2 Hybridization Buffer Not applicable. P280 - Wear eye or face protection.

P273 - Avoid release to the environment. P264 - Wash hands thoroughly after handling.

SureSelect XT2 Blocking Mix Not applicable.

Response : SureSelect RNase Block SureSelect XT2 Hybridization Buffer Not applicable. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

SureSelect XT2 Blocking Mix Not applicable.

Storage : SureSelect RNase Block SureSelect XT2 Hybridization Buffer Not applicable. Not applicable.

SureSelect XT2 Blocking Mix Not applicable.

Disposal : SureSelect RNase Block SureSelect XT2 Hybridization Buffer Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

SureSelect XT2 Blocking Mix Not applicable.

Hazardous ingredients : SureSelect XT2 Hybridization Buffer Not applicable.

Supplemental label elements : SureSelect RNase Block SureSelect XT2 Hybridization Buffer Not applicable. Not applicable.

SureSelect XT2 Blocking Mix Not applicable.

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 2: Hazards identification

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : SureSelect RNase Block Not applicable.
 SureSelect XT2 Not applicable.
 Hybridization Buffer
 SureSelect XT2 Blocking Not applicable.
 Mix

Special packaging requirements

Tactile warning of danger : SureSelect RNase Block Not applicable.
 SureSelect XT2 Not applicable.
 Hybridization Buffer
 SureSelect XT2 Blocking Not applicable.
 Mix

2.3 Other hazards

Other hazards which do not result in classification : SureSelect RNase Block None known.
 SureSelect XT2 None known.
 Hybridization Buffer
 SureSelect XT2 Blocking None known.
 Mix

SECTION 3: Composition/information on ingredients

3.1 Substances : SureSelect RNase Block Mixture
 SureSelect XT2 Hybridization Mixture
 Buffer
 SureSelect XT2 Blocking Mix Mixture

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
SureSelect RNase Block Glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[2]
SureSelect XT2 Hybridization Buffer Sodium chloride	EC: 231-598-3 CAS: 7647-14-5	≤10	Eye Irrit. 2, H319	[1]
Sodium dodecyl sulphate	EC: 205-788-1 CAS: 151-21-3	≤3	Flam. Sol. 2, H228 Acute Tox. 4, H302 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 2, H411	[1]
Phosphoric acid, monosodium salt, monohydrate	EC: 231-449-2 CAS: 10049-21-5	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 See Section 16 for the full text of the H statements declared above.	[1]

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

Type

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 3: Composition/information on ingredients

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: SureSelect RNase Block	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 Hybridization 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.
	SureSelect XT2 Blocking Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Inhalation	: SureSelect RNase Block	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	SureSelect XT2 Hybridization 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.
	SureSelect XT2 Blocking Mix	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.
Skin contact	: SureSelect RNase Block	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect XT2 Hybridization Buffer	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 XT2 Blocking Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: SureSelect RNase Block	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 Hybridization 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

SECTION 4: First aid measures

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 XT2 Blocking Mix
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.

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

SureSelect XT2 Hybridization 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.

SureSelect XT2 Blocking Mix
No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : SureSelect RNase Block SureSelect XT2 Hybridization Buffer
No known significant effects or critical hazards. Causes serious eye irritation.

SureSelect XT2 Blocking Mix
No known significant effects or critical hazards.

Inhalation : SureSelect RNase Block SureSelect XT2 Hybridization Buffer
No known significant effects or critical hazards.

SureSelect XT2 Blocking Mix
No known significant effects or critical hazards.

Skin contact : SureSelect RNase Block SureSelect XT2 Hybridization Buffer
No known significant effects or critical hazards.

SureSelect XT2 Blocking Mix
No known significant effects or critical hazards.

Ingestion : SureSelect RNase Block SureSelect XT2 Hybridization Buffer
No known significant effects or critical hazards.

SureSelect XT2 Blocking Mix
No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : SureSelect RNase Block SureSelect XT2 Hybridization Buffer
No specific data. Adverse symptoms may include the following:
pain or irritation
watering
redness

SureSelect XT2 Blocking Mix
No specific data.

Inhalation : SureSelect RNase Block SureSelect XT2 Hybridization Buffer
No specific data.

SureSelect XT2 Blocking Mix
No specific data.

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 4: First aid measures

Skin contact	: SureSelect RNase Block	No specific data.
	SureSelect XT2	No specific data.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	No specific data.
Ingestion	: SureSelect RNase Block	No specific data.
	SureSelect XT2	No specific data.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: SureSelect RNase Block	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect XT2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	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.
Specific treatments	: SureSelect RNase Block	No specific treatment.
	SureSelect XT2	No specific treatment.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	: SureSelect RNase Block	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2	Use an extinguishing agent suitable for the surrounding fire.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: SureSelect RNase Block	None known.
	SureSelect XT2	None known.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: SureSelect RNase Block	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureSelect XT2	In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
	Hybridization Buffer	
Hazardous combustion products	: SureSelect RNase Block	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureSelect XT2	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Hybridization Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides halogenated compounds

SECTION 5: Firefighting measures

SureSelect XT2 Blocking Mix	metal oxide/oxides Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
--------------------------------	--

5.3 Advice for firefighters

Special precautions for fire-fighters

: SureSelect RNase Block	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 XT2 Hybridization 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 XT2 Blocking Mix	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 RNase Block	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
SureSelect XT2 Hybridization Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
SureSelect XT2 Blocking Mix	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 RNase Block	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 Hybridization 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.
SureSelect XT2 Blocking Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

SECTION 6: Accidental release measures

For emergency responders	: SureSelect RNase Block	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 Hybridization 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 Blocking Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: SureSelect RNase Block	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 Hybridization 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). Water polluting material. May be harmful to the environment if released in large quantities.
SureSelect XT2 Blocking Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: SureSelect RNase Block	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 Hybridization 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 Blocking Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: SureSelect RNase Block	Put on appropriate personal protective equipment (see Section 8).
	SureSelect XT2 Hybridization 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. 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

SECTION 7: Handling and storage

Advice on general occupational hygiene

		product residue and can be hazardous. Do not reuse container.
	SureSelect XT2 Blocking Mix	Put on appropriate personal protective equipment (see Section 8).
:	SureSelect RNase Block	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 Hybridization 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 Blocking Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage

:	SureSelect RNase Block	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SureSelect XT2 Hybridization Buffer	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SureSelect XT2 Blocking Mix	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 7: Handling and storage

Recommendations	:	SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	:	SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not applicable. Not applicable. Not applicable.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
SureSelect RNase Block Glycerol	EH40/2005 WELs (United Kingdom (UK), 12/2011). TWA: 10 mg/m ³ 8 hours. Form: Mist

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

Individual protection measures

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

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

SECTION 8: Exposure controls/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.
- 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

Physical state	: SureSelect RNase Block	Liquid.
	SureSelect XT2 Hybridization Buffer	Liquid.
	SureSelect XT2 Blocking Mix	Liquid.
Colour	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Odour	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Odour threshold	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
pH	: SureSelect RNase Block	7.6
	SureSelect XT2 Hybridization Buffer	7.4
	SureSelect XT2 Blocking Mix	7.5

SECTION 9: Physical and chemical properties

Melting point/freezing point	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	0°C
Initial boiling point and boiling range	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	100°C
Flash point	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Evaporation rate	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Flammability (solid, gas)	: SureSelect RNase Block	Not applicable.
	SureSelect XT2 Hybridization Buffer	Not applicable.
	SureSelect XT2 Blocking Mix	Not applicable.
Upper/lower flammability or explosive limits	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Vapour pressure	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Vapour density	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.
Relative density	: SureSelect RNase Block	Not available.
	SureSelect XT2 Hybridization Buffer	Not available.
	SureSelect XT2 Blocking Mix	Not available.

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 9: Physical and chemical properties

Solubility(ies)	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water. Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not available. Not available. Not available.
Auto-ignition temperature	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not available. Not available. Not available.
Decomposition temperature	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not available. Not available. Not available.
Viscosity	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not available. Not available. Not available.
Explosive properties	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not available. Not available. Not available.
Oxidising properties	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not available. Not available. Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
------------------------	--	--

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 10: Stability and reactivity

- 10.2 Chemical stability** : SureSelect RNase Block The product is stable.
 SureSelect XT2 The product is stable.
 Hybridization Buffer
 SureSelect XT2 Blocking Mix The product is stable.
- 10.3 Possibility of hazardous reactions** : SureSelect RNase Block Under normal conditions of storage and use, hazardous reactions will not occur.
 SureSelect XT2 Under normal conditions of storage and use, hazardous reactions will not occur.
 Hybridization Buffer Under normal conditions of storage and use, hazardous reactions will not occur.
 SureSelect XT2 Blocking Mix Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : SureSelect RNase Block No specific data.
 SureSelect XT2 No specific data.
 Hybridization Buffer
 SureSelect XT2 Blocking Mix No specific data.
- 10.5 Incompatible materials** : SureSelect RNase Block May react or be incompatible with oxidising materials.
 SureSelect XT2 May react or be incompatible with oxidising materials.
 Hybridization Buffer
 SureSelect XT2 Blocking Mix May react or be incompatible with oxidising materials.
- 10.6 Hazardous decomposition products** : SureSelect RNase Block Under normal conditions of storage and use, hazardous decomposition products should not be produced.
 SureSelect XT2 Under normal conditions of storage and use, hazardous decomposition products should not be produced.
 Hybridization Buffer Under normal conditions of storage and use, hazardous decomposition products should not be produced.
 SureSelect XT2 Blocking Mix Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
SureSelect XT2 Hybridization Buffer Sodium chloride Sodium dodecyl sulphate	LD50 Oral	Rat	3000 mg/kg	-
	LD50 Oral	Rat	1288 mg/kg	-

Acute toxicity estimates

Route	ATE value
SureSelect XT2 Hybridization Buffer Oral Inhalation (dusts and mists)	48548.8 mg/kg 50.71 mg/l

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
SureSelect XT2 Hybridization Buffer Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Sodium dodecyl sulphate	Eyes - Mild irritant	Rabbit	-	250	-

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 11: Toxicological information

	Eyes - Moderate irritant	Rabbit	-	Micrograms 24 hours 100 milligrams	-
	Eyes - Moderate irritant	Rabbit	-	10 milligrams	-
	Skin - Mild irritant	Guinea pig	-	24 hours 25 milligrams	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 milligrams	-

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
SureSelect XT2 Hybridization Buffer Sodium dodecyl sulphate	Category 3	Not applicable.	Respiratory tract irritation
Phosphoric acid, monosodium salt, monohydrate	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 RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix
Routes of entry anticipated: Oral, Dermal, Inhalation.
Routes of entry anticipated: Oral, Dermal, Inhalation.
Not available.

Potential acute health effects

Inhalation : SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Ingestion : SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix
No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

SECTION 11: Toxicological information

Skin contact	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	No known significant effects or critical hazards.
	Hybridization Buffer	
Eye contact	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	Causes serious eye irritation.
	Hybridization Buffer	
Skin contact	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	
	Hybridization Buffer	
Eye contact	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	
	Hybridization Buffer	

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation	: SureSelect RNase Block	No specific data.
	SureSelect XT2	No specific data.
	Hybridization Buffer	
Ingestion	: SureSelect RNase Block	No specific data.
	SureSelect XT2	No specific data.
	Hybridization Buffer	
Skin contact	: SureSelect RNase Block	No specific data.
	SureSelect XT2	No specific data.
	Hybridization Buffer	
Eye contact	: SureSelect RNase Block	No specific data.
	SureSelect XT2	Adverse symptoms may include the following:
	Hybridization Buffer	pain or irritation watering redness
Skin contact	: SureSelect RNase Block	No specific data.
	SureSelect XT2	No specific data.
	Hybridization Buffer	
Eye contact	: SureSelect RNase Block	No specific data.
	SureSelect XT2	
	Hybridization Buffer	

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	No known significant effects or critical hazards.
	Hybridization Buffer	
Carcinogenicity	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	No known significant effects or critical hazards.
	Hybridization Buffer	
Skin contact	: SureSelect RNase Block	No known significant effects or critical hazards.
	SureSelect XT2	
	Hybridization Buffer	

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 11: Toxicological information

Mutagenicity	:	SureSelect RNase Block SureSelect XT2 Hybridization Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
		SureSelect XT2 Blocking Mix	No known significant effects or critical hazards.
Teratogenicity	:	SureSelect RNase Block SureSelect XT2 Hybridization Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
		SureSelect XT2 Blocking Mix	No known significant effects or critical hazards.
Developmental effects	:	SureSelect RNase Block SureSelect XT2 Hybridization Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
		SureSelect XT2 Blocking Mix	No known significant effects or critical hazards.
Fertility effects	:	SureSelect RNase Block SureSelect XT2 Hybridization Buffer	No known significant effects or critical hazards. No known significant effects or critical hazards.
		SureSelect XT2 Blocking Mix	No known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
SureSelect XT2 Hybridization Buffer Sodium chloride	Acute EC50 4.74 g/L Fresh water	Algae - Chlamydomonas reinhardtii	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402600 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 µg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
	Sodium dodecyl sulphate	Acute EC50 1200 µg/l Marine water	Algae - Skeletonema costatum
Acute LC50 900 µg/l Marine water		Crustaceans - Artemia salina - Adult	48 hours
Acute LC50 1400 µg/l Fresh water		Daphnia - Daphnia pulex - Neonate	48 hours
Acute LC50 590 µg/l Fresh water		Fish - Cirrhinus mrigala - Larvae	96 hours
Chronic NOEC 1.25 mg/l Marine water		Algae - Ulva fasciata - Zoea	96 hours
Chronic NOEC 1 mg/l Fresh water		Crustaceans - Pseudosida ramosa - Neonate	21 days
Chronic NOEC 3.2 mg/l Fresh water		Daphnia - Daphnia magna - Neonate	21 days
Chronic NOEC >1357 µg/l Fresh water		Fish - Pimephales promelas	42 days

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 12: Ecological information

Product/ingredient name	LogP _{ow}	BCF	Potential
SureSelect XT2 Hybridization Buffer Sodium dodecyl sulphate	-2.03	-	low

12.4 Mobility in soil

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

12.5 Results of PBT and vPvB assessment

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

ADR/RID / IMDG / IATA : Not regulated.

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 RNase Block	Not applicable.
	SureSelect XT2	Not applicable.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Not applicable.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

Seveso Directive

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

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

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

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

SureSelect XT2 Pre-Capture Hybridization - Box 2 - 1 Reaction, Part Number 5190-3938

SECTION 15: Regulatory information

Viet Nam : Not determined.

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 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
SureSelect XT2 Hybridization Buffer Eye Irrit. 2, H319 Aquatic Chronic 3, H412	Calculation method Calculation method

Full text of abbreviated H statements

SureSelect XT2 Hybridization Buffer H228 H302 H315 H318 H319 H332 H335 H400 H411 H412	Flammable solid. Harmful if swallowed. Causes skin irritation. Causes serious eye damage. Causes serious eye irritation. Harmful if inhaled. May cause respiratory irritation. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
---	---

Full text of classifications [CLP/GHS]

SureSelect XT2 Hybridization Buffer Acute Tox. 4, H302 Acute Tox. 4, H332 Aquatic Acute 1, H400 Aquatic Chronic 2, H411 Aquatic Chronic 3, H412 Eye Dam. 1, H318 Eye Irrit. 2, H319 Flam. Sol. 2, H228 Skin Irrit. 2, H315 STOT SE 3, H335	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 FLAMMABLE SOLIDS - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3
--	---

Date of issue/ Date of revision : 06/03/2018

Date of previous issue : 29/02/2016

Version : 2

Notice to reader

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