

# SAFETY DATA SHEET

SureSelect XT2 Pre-Capture ILM Module Box 2, Part Number 5190-3940

## Section 1. Identification

<b>Product identifier</b>	: SureSelect XT2 Pre-Capture ILM Module Box 2, Part Number 5190-3940
<b>Part no. (chemical kit)</b>	: 5190-3940
<b>Part no.</b>	: SureSelect RNase Block 5190-4383 / 5190-4386 SureSelect XT2 Hybridization Buffer 5190-4078 / 5190-4082 / 5190-4086 SureSelect XT2 Blocking Mix 5190-4079 / 5190-4083 / 5190-4087
<b>Material uses</b>	: Analytical reagent. SureSelect RNase Block 16 µl - 96 µl SureSelect XT2 Hybridization Buffer 37 µl - 2220 µl SureSelect XT2 Blocking Mix 9 µl - 540 µl
<b>Supplier/Manufacturer</b>	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770
<b>Emergency telephone number (with hours of operation)</b>	: CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

### Classification of the substance or mixture

<b>SureSelect RNase Block</b> H320	EYE IRRITATION - Category 2B
<b>SureSelect XT2 Hybridization Buffer</b> H319	EYE IRRITATION - Category 2A

### GHS label elements

#### Hazard pictograms

: SureSelect XT2 Hybridization Buffer



#### Signal word

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

#### Hazard statements

: SureSelect RNase Block H320 - Causes eye irritation.  
SureSelect XT2 Hybridization Buffer H319 - Causes serious eye irritation.  
SureSelect XT2 Blocking Mix No known significant effects or critical hazards.

### Precautionary statements

#### Prevention

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

## Section 2. Hazard identification

<b>Response</b>	: SureSelect RNase Block	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.
	SureSelect XT2 Hybridization 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. P337 + P313 - If eye irritation persists: Get medical advice or attention.
<b>Storage</b>	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Not applicable. Not applicable. Not applicable.
<b>Supplemental label elements</b>	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	None known. None known. None known.
<b>Other hazards which do not result in classification</b>	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 1.4% None known. None known. None known.

## Section 3. Composition/information on ingredients

<b>Substance/mixture</b>	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Mixture Mixture Mixture
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Ingredient name	% (w/w)	CAS number
<b>SureSelect RNase Block</b> Glycerol	30 - 60	56-81-5
<b>SureSelect XT2 Hybridization Buffer</b> Sodium chloride	5 - 10	7647-14-5
Sodium dodecyl sulphate	1 - 5	151-21-3
Sodium hydroxide	0.1 - 1	1310-73-2

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

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

## Section 4. First-aid measures

### Description of necessary first aid measures

<b>Eye contact</b>	: SureSelect RNase Block	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. If irritation persists, get medical attention.
	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.
<b>Inhalation</b>	: SureSelect RNase Block	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 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.
<b>Skin contact</b>	: SureSelect RNase Block	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 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.

## Section 4. First-aid measures

<b>Ingestion</b>	: SureSelect RNase Block	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	SureSelect XT2 Hybridization Buffer	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	SureSelect XT2 Blocking Mix	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

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

#### Potential acute health effects

<b>Eye contact</b>	: SureSelect RNase Block SureSelect XT2 Hybridization Buffer SureSelect XT2 Blocking Mix	Causes eye irritation. Causes serious eye irritation. No known significant effects or critical hazards.
<b>Inhalation</b>	: 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.
<b>Skin contact</b>	: 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.
<b>Ingestion</b>	: 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.

#### Over-exposure signs/symptoms

## Section 4. First-aid measures

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

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

<b>Notes to physician</b>	: SureSelect RNase Block	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SureSelect XT2 Hybridization Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	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.
<b>Specific treatments</b>	: SureSelect RNase Block	No specific treatment.
	SureSelect XT2 Hybridization Buffer	No specific treatment.
	SureSelect XT2 Blocking Mix	No specific treatment.
<b>Protection of first-aiders</b>	: SureSelect RNase Block	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 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.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

<b>Suitable extinguishing media</b>	: SureSelect RNase Block	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2 Hybridization Buffer	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect XT2 Blocking Mix	Use an extinguishing agent suitable for the surrounding fire.

<b>Unsuitable extinguishing media</b>	: SureSelect RNase Block	None known.
	SureSelect XT2	None known.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	None known.

### Specific hazards arising from the chemical

:	☑ 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.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	In a fire or if heated, a pressure increase will occur and the container may burst.

### Hazardous thermal decomposition products

:	SureSelect RNase Block	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	SureSelect XT2	Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides halogenated compounds metal oxide/oxides
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides

### Special protective actions 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.
	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.

## Section 5. Fire-fighting measures

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.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: 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 spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. 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 spilled material. Avoid breathing vapor 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 spilled material. Put on appropriate personal protective equipment.
<b>For emergency responders</b>	: SureSelect RNase Block	If specialized 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 specialized 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 specialized 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".
<b>Environmental precautions</b>	: SureSelect RNase Block	Avoid dispersal of spilled 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 spilled 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 Blocking Mix	Avoid dispersal of spilled 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).

## Section 6. Accidental release measures

### Methods and materials for containment and cleaning up

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

## Section 7. Handling and storage

### Precautions for safe handling

<b>Protective measures</b>	: SureSelect RNase Block	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureSelect XT2 Hybridization Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureSelect XT2 Blocking Mix	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	: 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

## Section 7. Handling and storage

**Conditions for safe storage, including any incompatibilities** : SureSelect RNase Block

SureSelect XT2  
Hybridization Buffer

SureSelect XT2 Blocking Mix

before entering eating areas. See also Section 8 for additional information on hygiene measures.

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

## Section 8. Exposure controls/personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
<p>SureSelect RNase Block Glycerol</p>	<p><b>CA Alberta Provincial (Canada, 6/2018).</b> 8 hrs OEL: 10 mg/m<sup>3</sup> 8 hours. Form: Mist  <b>CA Quebec Provincial (Canada, 7/2019).</b> TWAEV: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> STEL: 20 mg/m<sup>3</sup> 15 minutes. Form: mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: mist  <b>CA British Columbia Provincial (Canada, 1/2021).</b> TWA: 3 mg/m<sup>3</sup> 8 hours. Form: respirable mist TWA: 10 mg/m<sup>3</sup> 8 hours. Form: total mist</p>

## Section 8. Exposure controls/personal protection

<b>SureSelect XT2 Hybridization Buffer</b> Sodium hydroxide	<b>CA Alberta Provincial (Canada, 6/2018).</b> C: 2 mg/m <sup>3</sup> <b>CA British Columbia Provincial (Canada, 1/2021).</b> C: 2 mg/m <sup>3</sup> <b>CA Ontario Provincial (Canada, 6/2019).</b> Ceiling Limit: 2 mg/m <sup>3</sup> <b>CA Quebec Provincial (Canada, 7/2019).</b> STEV: 2 mg/m <sup>3</sup> 15 minutes. <b>CA Saskatchewan Provincial (Canada, 7/2013).</b> CEIL: 2 mg/m <sup>3</sup>
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- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
- Individual protection measures**
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
- 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.

## Section 9. Physical and chemical properties and safety characteristics

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### Appearance

<b>Physical state</b>	: SureSelect RNase Block	Liquid.
	SureSelect XT2	Liquid.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Liquid.
<b>Color</b>	: SureSelect RNase Block	Not available.
	SureSelect XT2	Not available.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Not available.
<b>Odor</b>	: SureSelect RNase Block	Not available.
	SureSelect XT2	Not available.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Not available.
<b>Odor threshold</b>	: SureSelect RNase Block	Not available.
	SureSelect XT2	Not available.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	Not available.
<b>pH</b>	: SureSelect RNase Block	7.6
	SureSelect XT2	7.4
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	7.5
<b>Melting point/freezing point</b>	: SureSelect RNase Block	Not available.
	SureSelect XT2	Not available.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	0°C (32°F)
<b>Boiling point, initial boiling point, and boiling range</b>	: SureSelect RNase Block	Not available.
	SureSelect XT2	Not available.
	Hybridization Buffer	
	SureSelect XT2 Blocking Mix	100°C (212°F)

### Flash point

Ingredient name	Closed cup			Open cup		
	°C	°F	Method	°C	°F	Method
<b>SureSelect RNase Block</b>						
(R*,R*) -1,4-Dimercaptobutane- 2,3-diol	>110	>230				
Glycerol				177	350.6	
<b>SureSelect XT2 Hybridization Buffer</b>						
Acetic acid, (ethylenedinitrilo)tetra-, disodium salt, dihydrate	>100	>212				
Edetic acid	>100	>212	DIN 51758			
<b>SureSelect XT2 Blocking Mix</b>						
Edetic acid	>100	>212	DIN 51758			

## Section 9. Physical and chemical properties and safety characteristics

**Evaporation rate** : SureSelect RNase Block Not available.  
 SureSelect XT2 Not available.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix Not available.

**Flammability** : SureSelect RNase Block Not applicable.  
 SureSelect XT2 Not applicable.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix Not applicable.

**Lower and upper explosion limit/flammability limit** : SureSelect RNase Block Not available.  
 SureSelect XT2 Not available.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix Not available.

**Vapor pressure** :

Ingredient name	Vapor Pressure at 20°C			Vapor pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>SureSelect RNase Block</b>						
water	23.8	3.2		92.258	12.3	
Glycerol	0.000075	0.00001		0.0025	0.00033	
<b>SureSelect XT2 Hybridization Buffer</b>						
water	23.8	3.2		92.258	12.3	
Sodium dodecyl sulphate	≤0.0013501	≤0.00018				
<b>SureSelect XT2 Blocking Mix</b>						
water	23.8	3.2		92.258	12.3	
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	0.000027	0.0000036		0.000007501	0.000001	

**Relative vapor density** : SureSelect RNase Block Not available.  
 SureSelect XT2 Not available.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix Not available.

**Relative density** : SureSelect RNase Block Not available.  
 SureSelect XT2 Not available.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix Not available.

**Solubility** :  SureSelect RNase Block Easily soluble in the following materials: cold water and hot water.  
 SureSelect XT2 Easily soluble in the following materials: cold water and hot water.  
 Hybridization Buffer Easily soluble in the following materials: cold water and hot water.  
 SureSelect XT2 Blocking Mix Easily soluble in the following materials: cold water and hot water.

**Partition coefficient: n-octanol/water** :  SureSelect RNase Block Not applicable.  
 SureSelect XT2 Not applicable.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix Not applicable.

**Auto-ignition temperature** :

## Section 9. Physical and chemical properties and safety characteristics

Ingredient name	°C	°F	Method
<b>SureSelect RNase Block</b>			
Glycerol	370	698	
4-(2-Hydroxyethyl)piperazin-1-ylethanesulphonic acid	>400	>752	EU A.16
<b>SureSelect XT2 Hybridization Buffer</b>			
Sodium dodecyl sulphate	310.5	590.9	VDI 2263
Edetic acid	>400	>752	VDI 2263
<b>SureSelect XT2 Blocking Mix</b>			
Edetic acid	>400	>752	VDI 2263

**Decomposition temperature** : SureSelect RNase Block Not available.  
 SureSelect XT2 Hybridization Buffer Not available.  
 SureSelect XT2 Blocking Mix Not available.

**Viscosity** : SureSelect RNase Block Not available.  
 SureSelect XT2 Hybridization Buffer Not available.  
 SureSelect XT2 Blocking Mix Not available.

### Particle characteristics

**Median particle size** : SureSelect RNase Block Not applicable.  
 SureSelect XT2 Hybridization Buffer Not applicable.  
 SureSelect XT2 Blocking Mix Not applicable.

## Section 10. Stability and reactivity

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

**Chemical stability** : SureSelect RNase Block The product is stable.  
 SureSelect XT2 Hybridization Buffer The product is stable.  
 SureSelect XT2 Blocking Mix The product is stable.

**Possibility of hazardous reactions** : SureSelect RNase Block Under normal conditions of storage and use, hazardous reactions will not occur.  
 SureSelect XT2 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.

**Conditions to avoid** : SureSelect RNase Block No specific data.  
 SureSelect XT2 Hybridization Buffer No specific data.  
 SureSelect XT2 Blocking Mix No specific data.

## Section 10. Stability and reactivity

**Incompatible materials** : SureSelect RNase Block May react or be incompatible with oxidizing materials.  
 SureSelect XT2 May react or be incompatible with oxidizing materials.  
 Hybridization Buffer  
 SureSelect XT2 Blocking Mix May react or be incompatible with oxidizing materials.

**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  
 SureSelect XT2 Blocking Mix Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
SureSelect RNase Block Glycerol	LD50 Oral	Rat	12600 mg/kg	-
SureSelect XT2 Hybridization Buffer Sodium chloride	LD50 Oral	Rat	3000 mg/kg	-
Sodium dodecyl sulphate	LD50 Oral	Rat	1288 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
SureSelect RNase Block Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
SureSelect XT2 Hybridization Buffer Sodium chloride	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Sodium dodecyl sulphate	Eyes - Mild irritant	Rabbit	-	250 ug	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100 mg	-
	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Skin - Mild irritant	Guinea pig	-	24 hours 25 mg	-
Sodium hydroxide	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 50 ug	-
	Eyes - Severe irritant	Rabbit	-	1 %	-

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	Eyes - Severe irritant	Rabbit	-	0.5 minutes	-
	Skin - Severe irritant	Rabbit	-	1 mg 24 hours 500 mg	-

### Sensitization

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)

Name	Category	Route of exposure	Target organs
<b>SureSelect XT2 Hybridization Buffer</b>			
Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation
Sodium hydroxide	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Not available.

**Information on the 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

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

**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.

**Skin contact** : 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.

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

## Section 11. Toxicological information

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

### Delayed and immediate effects and also 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

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

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

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

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

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

**Reproductive toxicity** : SureSelect RNase Block No known significant effects or critical hazards.  
SureSelect XT2 No known significant effects or critical hazards.  
Hybridization Buffer

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

### Numerical measures of toxicity

#### Acute toxicity estimates

## Section 11. Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
<b>SureSelect RNase Block</b> Glycerol	12600	N/A	N/A	N/A	N/A
<b>SureSelect XT2 Hybridization Buffer</b> SureSelect XT2 Hybridization Buffer	19924.5	N/A	N/A	N/A	50.7
Sodium chloride	3000	N/A	N/A	N/A	N/A
Sodium dodecyl sulphate	1288	N/A	N/A	N/A	1.5

**Other information** : **SureSelect RNase Block** Adverse symptoms may include the following: May cause skin sensitization.

**SureSelect XT2 Hybridization Buffer** Not available.

**SureSelect XT2 Blocking Mix** Not available.

## Section 12. Ecological information

### Toxicity

Product/ingredient name	Result	Species	Exposure
<b>SureSelect RNase Block</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
<b>SureSelect XT2 Hybridization Buffer</b> Sodium chloride	Acute EC50 2430000 µg/l Fresh water Acute EC50 519.6 mg/l Fresh water	Algae - Navicula seminulum Crustaceans - Cypris subglobosa	96 hours 48 hours
	Acute EC50 402.6 mg/l Fresh water Acute IC50 6.87 g/L Fresh water Acute LC50 1000000 µg/l Fresh water Chronic LC10 781 mg/l Fresh water	Daphnia - Daphnia magna Aquatic plants - Lemna minor Fish - Morone saxatilis - Larvae	48 hours 96 hours 96 hours
	Chronic NOEC 6 g/L Fresh water Chronic NOEC 0.314 g/L Fresh water Chronic NOEC 100 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling) Aquatic plants - Lemna minor Daphnia - Daphnia pulex Fish - Gambusia holbrooki - Adult	3 weeks 96 hours 21 days 8 weeks
Sodium dodecyl sulphate	Acute EC50 1200 µg/l Marine water Acute LC50 900 µg/l Marine water	Algae - Skeletonema costatum Crustaceans - Artemia salina - Adult	96 hours 48 hours
	Acute LC50 1400 µg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours
	Acute LC50 590 µg/l Fresh water Chronic NOEC 1.25 mg/l Marine water Chronic NOEC 1 mg/l Fresh water	Fish - Cirrhinus mrigala - Larvae Algae - Ulva fasciata - Zoea Crustaceans - Pseudosida ramosa - Neonate	96 hours 96 hours 21 days
	Chronic NOEC 3.2 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
Sodium hydroxide	Chronic NOEC >1357 µg/l Fresh water Acute LC50 125 ppm Fresh water	Fish - Pimephales promelas Fish - Gambusia affinis - Adult	42 days 96 hours

### Persistence and degradability

## Section 12. Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
SureSelect RNase Block Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
SureSelect XT2 Hybridization Buffer Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	95 % - Readily - 28 days	20 mg/l	Activated sludge
Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability	
SureSelect XT2 Hybridization Buffer Sodium dodecyl sulphate Sodium hydroxide	- -	- -	Readily Readily	

### Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
SureSelect RNase Block Glycerol	-1.76	-	low
SureSelect XT2 Hybridization Buffer Sodium dodecyl sulphate	-2.03	-	low

### Mobility in soil

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

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

## Section 13. Disposal considerations

**Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

**TDG / IMDG / IATA** : Not regulated.

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

**Transport in bulk according to IMO instruments** : Not available.

## Section 15. Regulatory information

### Canadian lists

**Canadian NPRI** : None of the components are listed.

**CEPA Toxic substances** : None of the components are listed.

### International regulations

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

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

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

Not listed.

### Inventory list

**Australia** : Not determined.

**Canada** : Not determined.

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

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

**Japan** : **Japan inventory (CSCL):** Not determined.  
**Japan inventory (ISHL):** Not determined.

**New Zealand** : Not determined.

**Philippines** : Not determined.

**Republic of Korea** : Not determined.

**Taiwan** : All components are listed or exempted.

**Thailand** : Not determined.

**Turkey** : Not determined.

**United States** :  All components are active or exempted.

**Viet Nam** : Not determined.

## Section 16. Other information

### History

**Date of issue/Date of revision** : 06/02/2022

**Date of previous issue** : 10/24/2019

**Version** : 5

### Key to abbreviations

: ATE = Acute Toxicity Estimate  
 BCF = Bioconcentration Factor  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 HPR = Hazardous Products Regulations  
 IATA = International Air Transport Association  
 IBC = Intermediate Bulk Container  
 IMDG = International Maritime Dangerous Goods  
 LogPow = logarithm of the octanol/water partition coefficient  
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)  
 N/A = Not available  
 UN = United Nations

### Procedure used to derive the classification

Classification	Justification
<input checked="" type="checkbox"/> <b>SureSelect RNase Block</b> EYE IRRITATION - Category 2B	Calculation method
<b>SureSelect XT2 Hybridization Buffer</b> EYE IRRITATION - Category 2A	Calculation method

**References** : Not available.

Indicates information that has changed from previously issued version.

### Notice to reader

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