## SAFETY DATA SHEET



SureSelect Max Target Enrichment Kit Fast Hyb Module, Box 2, 16\_96 Hybs

## Section 1. Identification

Product identifier	: SureSelect Max Target Enrichment Kit Fast Hyb Module, Box 2, 16_96 Hybs
Part no. (chemical kit)	: 5282-0129, 5282-0131
Part no.	: SureSelect Max Fast Hyb Buffer, 16 Hybs         5271-0085 / 5271-0086           SureSelect RNase Block         5190-4383 / 5972-3700           Amplification Master Mix         5271-0079 / 5271-0083
Relevant identified uses of	of the substance or mixture and uses advised against
Identified uses	: Analytical reagent. For research use only.
	SureSelect Max Fast Hyb Buffer, 16 Hybs0.108 ml / 0.768 mlSureSelect RNase Block0.016 ml / 0.08 mlAmplification Master Mix0.45 ml (16 reactions) / 2.84 ml (96 reactions)
Uses advised against	: Not for use in diagnostic procedures.
Supplier/Manufacturer	: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770
Emergency telephone number (with hours of operation)	: CHEMTREC®: 1-800-424-9300

## Section 2. Hazard identification

Classification of the substar	<u>nce or mixture</u>
SureSelect Max Fast Hyb Buffer, 16 Hybs H373	SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
SureSelect RNase Block H320	EYE IRRITATION - Category 2B
<b>Amplification Master Mix</b> H302 H315 H319 H370 H412	ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3
GHS label elements Hazard pictograms	: SureSelect Max Fast Hyb Buffer, 16 Hybs
	Amplification Master Mix

## Section 2. Hazard identification

Section 2. Hazard		
Signal word	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block	Warning Warning
	Amplification Master Mix	Danger
Hazard statements	: SureSelect Max Fast Hyb Buffer, 16 Hybs	H373 - May cause damage to organs through prolonged or repeated exposure.(central nervous system (CNS))
	SureSelect RNase Block Amplification Master Mix	<ul> <li>H320 - Causes eye irritation.</li> <li>H302 - Harmful if swallowed.</li> <li>H315 - Causes skin irritation.</li> <li>H319 - Causes serious eye irritation.</li> <li>H370 - Causes damage to organs.</li> <li>H412 - Harmful to aquatic life with long lasting effects.</li> </ul>
Precautionary statements		
Prevention	: SureSelect Max Fast Hyb Buffer, 16 Hybs	P260 - Do not breathe vapor.
	SureSelect RNase Block Amplification Master Mix	Not applicable. P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P260 - Do not breathe vapor.
		P270 - Do not eat, drink or smoke when using this product. P264 - Wash thoroughly after handling.
Response	: SureSelect Max Fast Hyb Buffer, 16 Hybs	P314 - Get medical advice or attention if you feel unwell.
	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.
	Amplification Master Mix	P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor. P362 + P364 - Take off contaminated clothing and wash it before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water.
		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.
Storage	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Not applicable.
	SureSelect RNase Block Amplification Master Mix	Not applicable. Not applicable.
Disposal	: SureSelect Max Fast Hyb Buffer, 16 Hybs	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	SureSelect RNase Block Amplification Master Mix	Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements	: SureSelect Max Fast Hyb Buffer, 16 Hybs	None known.
	SureSelect RNase Block Amplification Master Mix	None known. None known.

## Section 2. Hazard identification

	SureSelect Max Fast Hyb Buffer, 16 Hybs	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 20.3%	
Other hazards which do not result in classification	: SureSelect Max Fast Hyb Buffer, 16 Hybs	None known.	
	SureSelect RNase Block	None known.	
	Amplification Master Mix	None known.	
Section 3 Compos	Section 3. Composition/information on ingredients		

## g.

Substance/mixture	:	SureSelect Max Fast Hyb Buffer, 16 Hybs	Mixture
		SureSelect RNase Block Amplification Master Mix	Mixture Mixture

Ingredient name	Synonyms	% (w/w)	CAS number
SureSelect Max Fast Hyb Buffer, 16 Hybs			
Ammonium chloride	Ammoninium chloride	≥1 - ≤5	12125-02-9
SureSelect RNase Block			
Glycerol	Glycerol	≥30 - ≤60	56-81-5
Amplification Master Mix			
Glycerol	Glycerol	≥30 - ≤60	56-81-5
Trometamol	Tris	≥5 - ≤10	77-86-1
tetramethylammonium chloride	tetramethylammonium chloride	≥5 - ≤10	75-57-0

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified 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 fire	<u>st aid measures</u>	
Eye contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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 following exposure or if feeling unwell.
	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.
	Amplification Master Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician.

Inhalation	: SureSelect Max Fast Hyb	Remove victim to fresh air and keep at rest in a
	Buffer, 16 Hybs	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 following exposure or if feeling unwell. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	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.
	Amplification Master Mix	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 necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Skin contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention following exposure or if feeling unwell. Wash clothing before reuse. Clean shoes thoroughly before reuse.
	SureSelect RNase Block Amplification Master Mix	<ul> <li>Flush contaminated skin with plenty of water.</li> <li>Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.</li> <li>Flush contaminated skin with plenty of water.</li> <li>Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention.</li> <li>If necessary, call a poison center or physician. Wash</li> </ul>
		clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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 following exposure or if feeling unwell. 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 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.
	Amplification Master Mix	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 necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	coms/effects, acute and delayed	
Potential acute healt		
Eye contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block	No known significant effects or critical hazards. Causes eye irritation.
	Amplification Master Mix	Causes serious eye irritation.
Inhalation	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect PNase Block	No known significant effects or critical hazards.

SureSelect RNase Block

Amplification Master Mix

No known significant effects or critical hazards. Causes damage to organs following a single exposure if inhaled.

Skin contact	L SuraSalaat Max Faat Uvb	No known significant offects or critical bazarda
Skin contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Amplification Master Mix	Causes damage to organs following a single
	·	exposure in contact with skin. Causes skin irritation.
Ingestion	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Amplification Master Mix	Harmful if swallowed. Causes damage to organs
		following a single exposure if swallowed.
Over-exposure signs/s	ymptoms	
Eye contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	Adverse symptoms may include the following: irritation
		watering
		redness
	Amplification Master Mix	Adverse symptoms may include the following:
	·	pain or irritation
		watering
		redness
Inhalation	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	No specific data.
Skin contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	Adverse symptoms may include the following:
		irritation
		redness
Ingestion	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	No specific data.

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

Notes to physician	: SureSelect Max Fast Hyb Buffer, 16 Hybs	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	SureSelect RNase Block	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Amplification Master 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 Max Fast Hyb Buffer, 16 Hybs	No specific treatment.
	SureSelect RNase Block Amplification Master Mix	No specific treatment. No specific treatment.

Protection of first-aiders	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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 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.
	Amplification Master Mix	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.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

Extinguishing media		
Suitable extinguishing media	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the surrounding fire. Use an extinguishing agent suitable for the
Unsuitable extinguishing media	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	surrounding fire. None known. None known. None known.
Specific hazards arising from the chemical	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst. 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.
Hazardous thermal decomposition products	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	SureSelect RNase Block	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Amplification Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds

## Section 5. Fire-fighting measures

Special protective actions	: SureSelect Max Fast Hyb	Promptly isolate the scene by removing all persons
for fire-fighters	Buffer, 16 Hybs	from the vicinity of the incident if there is a fire. No
ior me-nghters	Baner, re rijse	action shall be taken involving any personal risk or
		without suitable training.
	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.
	Amplification Master 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	: SureSelect Max Fast Hyb	Fire-fighters should wear appropriate protective
equipment for fire-fighters	Buffer, 16 Hybs	equipment and self-contained breathing apparatus
		(SCBA) with a full face-piece operated in positive
		pressure mode.
	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.
	Amplification Master 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 : SureSelect Max Fast Hyb No action shall be taken involving any personal risk For non-emergency Buffer, 16 Hybs or without suitable training. Evacuate surrounding personnel 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 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. No action shall be taken involving any personal risk Amplification Master Mix 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. If specialized clothing is required to deal with the For emergency responders : SureSelect Max Fast Hyb Buffer, 16 Hybs spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". 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".

## Section 6. Accidental release measures

	Amplification Master 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".
Environmental precautions	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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,
	SureSelect RNase Block	soil or air). 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).
	Amplification Master 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). Water polluting material. May be harmful to the environment if released in large quantities.
Methods and materials for co	ontainment and cleaning up	
Methods for cleaning up	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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 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.
	Amplification Master 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	<u>ng</u>	
Protective measures	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Put on appropriate personal protective equipment (see Section 8). Do not breathe vapor or mist. Do not ingest. Avoid contact with eyes, skin and clothing. 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 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
Date of issue/Date of revision	: 05/31/2024 Date of previous	issue : No previous validation Version : 1 9/22

## Section 7. Handling and storage

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	Amplification Master Mix	retain product residue and can be hazardous. Do not reuse container. Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general occupational hygiene	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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 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.
	Amplification Master Mix	Potentially biohazardous material. 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.
Conditions for safe storage, including any incompatibilities	SureSelect Max Fast Hyb Buffer, 16 Hybs	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.
	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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	Amplification Master Mix	Store in accordance with local regulations. Store in

## Section 7. Handling and storage

original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. 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
Ingredient name SureSelect Max Fast Hyb Buffer, 16 Hybs Ammonium chloride	CA Alberta Provincial (Canada, 3/2023). OEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Fume OEL: 10 mg/m <sup>3</sup> 8 hours. Form: Fume CA British Columbia Provincial (Canada, 8/2023). TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Fume STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Fume CA Ontario Provincial (Canada, 6/2019). TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Fume STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Fume CA Saskatchewan Provincial (Canada, 4/2021). STEL: 20 mg/m <sup>3</sup> 15 minutes.
SureSelect RNase Block	TWA: 10 mg/m <sup>3</sup> 8 hours. <b>CA Quebec Provincial (Canada, 9/2023).</b> TWAEV: 10 mg/m <sup>3</sup> 8 hours. Form: fume STEV: 20 mg/m <sup>3</sup> 15 minutes. Form: fume
Glycerol	CA Alberta Provincial (Canada, 3/2023). OEL: 10 mg/m <sup>3</sup> 8 hours. Form: Mist CA Quebec Provincial (Canada, 9/2023). TWAEV: 10 mg/m <sup>3</sup> 8 hours. Form: mist CA Saskatchewan Provincial (Canada, 4/2021). STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: mist TWA: 10 mg/m <sup>3</sup> 8 hours. Form: mist
	CA British Columbia Provincial (Canada, 8/2023). TWA: 3 mg/m <sup>3</sup> 8 hours. Form: respirable mist TWA: 10 mg/m <sup>3</sup> 8 hours. Form: total mist
Amplification Master Mix Glycerol	CA Alberta Provincial (Canada, 3/2023). OEL: 10 mg/m <sup>3</sup> 8 hours. Form: Mist CA Quebec Provincial (Canada, 9/2023). TWAEV: 10 mg/m <sup>3</sup> 8 hours. Form: mist CA Saskatchewan Provincial (Canada,

## Section 8. Exposure controls/personal protection

4/2021).
STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: mist
TWA: 10 mg/m <sup>3</sup> 8 hours. Form: mist
CA British Columbia Provincial (Canada,
8/2023).
TWA: 3 mg/m <sup>3</sup> 8 hours. Form: respirable
mist
TWA: 10 mg/m <sup>3</sup> 8 hours. Form: total mist
-

#### **Biological exposure indices**

No exposure indices known.

Appropriate engineering controls	If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.
Individual protection measur	
Hygiene measures	Handle as biohazard material (Biosafety level 1). 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**

Physical state	:	SureSelect Max Fast	Hyb	Liquid.			
		Buffer, 16 Hybs SureSelect RNase B Amplification Master		Liquid. Liquid.			
Color	:	Buffer, 16 Hybs SureSelect RNase Bl	SureSelect RNase Block				
Odor		Amplification Master SureSelect Max Fast		Not avail Not avail			
	1	Buffer, 16 Hybs					
		SureSelect RNase Bl Amplification Master		Not avail Not avail			
Odor threshold	:	SureSelect Max Fast Buffer, 16 Hybs	Hyb	Not avail	able.		
		SureSelect RNase Bl Amplification Master		Not avail Not avail			
рН	:	<ul> <li>SureSelect Max Fast Hyb Buffer, 16 Hybs</li> </ul>		8			
		SureSelect RNase Bl Amplification Master		7.6 8.5			
Melting point/freezing point	-		Hyb	Not avail	able.		
		SureSelect RNase Bl Amplification Master		Not avail Not avail			
Boiling point, initial boiling point, and boiling range	:	SureSelect Max Fast Buffer, 16 Hybs	Hyb	Not avail	able.		
		SureSelect RNase Bl Amplification Master		Not avail Not avail			
Flash point	:			Closed			Оре
		Ingredient name	°C	°F	Method	°C	°F

Flash point			Closed	cup		Open	cup
	Ingredient name	°C	°F	Method	°C	°F	Method
	SureSelect RNase Block						
	Glycerol	-	-	-	177	350.6	-
	Amplification Master Mix						
	Glycerol	-	-	-	177	350.6	-
Evaporation rate	SureSelect Max Fast Buffer, 16 Hybs	t Hyb	Not avai	lable.			·
	SureSelect RNase B Amplification Master		Not avai Not avai				
Flammability	SureSelect Max Fast Buffer, 16 Hybs	t Hyb	Not appl	icable.			
	SureSelect RNase B Amplification Master		Not appl Not appl				

# Section 9. Physical and chemical properties and safety characteristics

Lower and upper explosion limit/flammability limit	:	SureSelect Max Fast Buffer, 16 Hybs SureSelect RNase B Amplification Master	lock	Not avail Not avail Not avail	able.			
Vapor pressure			Vapor Pressure		re at 20°C	Vapor pressure at 50°C		
		Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
		SureSelect Max Fast Hyb Buffer, 16 Hybs						
		water	17.5	2.3	-	92.258	12.3	-
		SureSelect RNase Block						
		water	17.5	2.3	-	92.258	12.3	-
		Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
		Amplification Master Mix						
		water	17.5	2.3	-	92.258	12.3	-
		Trometamol	<0.00075006	<0.0001	-	-	-	-
Relative vapor density	:	SureSelect Max Fast Buffer, 16 Hybs SureSelect RNase B Amplification Master	lock	Not avail Not avail Not avail	able.			
Relative density	:	SureSelect Max Fast Buffer, 16 Hybs	-	Not avail	able.			
		SureSelect RNase B Amplification Master		Not avail Not avail				
Solubility(ies)	1	Media			Result			
		SureSelect Max Fas Hybs water	-	uffer, 16	Soluble			
		SureSelect RNase E water Amplification Maste water			Soluble Soluble			
Partition coefficient: n- octanol/water	:	SureSelect Max Fast Buffer, 16 Hybs	Hyb	Not appl				
octanon water		SureSelect RNase B Amplification Master		Not appli Not appli				
Auto-ignition temperature	:							

# Section 9. Physical and chemical properties and safety characteristics

		Ingredient name	Ī	°C	°F	Method	
		SureSelect Max Fast Hyb Buffer, 16 Hybs					
		Ammonium chloride		>400	>752	EU A.16	
		SureSelect RNase Block					
		Glycerol		370	698	-	
		Amplification Master Mix					
		Glycerol		370	698	-	
Decomposition temperature	:	SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	N	ot available. ot available. ot available.			
Viscosity	:	SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	N	ot available. ot available. ot available.			
Particle characteristics							
Median particle size	:	SureSelect Max Fast Hyb Buffer, 16 Hybs	N	ot applicable			
		SureSelect RNase Block Amplification Master Mix		ot applicable ot applicable			

## Section 10. Stability and reactivity

Reactivity	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master 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.
Chemical stability	: SureSelect Max Fast Hyb Buffer, 16 Hybs	The product is stable.
	SureSelect RNase Block	The product is stable.
	Amplification Master Mix	The product is stable.
Possibility of hazardous reactions	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use,
Conditions to avoid	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	hazardous reactions will not occur. No specific data. No specific data. No specific data.

## Section 10. Stability and reactivity

Incompatible materials	SureSelect Max Fast Hyb May react or be incompatible with o Buffer, 16 Hybs	xidizing materials.
	SureSelect RNase BlockMay react or be incompatible with oAmplification Master MixMay react or be incompatible with o	
Hazardous decomposition products	SureSelect Max Fast Hyb Buffer, 16 Hybs broduced.	
	SureSelect RNase Block Under normal conditions of storage hazardous decomposition products produced.	
	Amplification Master Mix hazardous decomposition products produced.	

## Section 11. Toxicological information

#### Information on toxicological effects

Acute toxicity				
Product/ingredient name	Result	Species	Dose	Exposure
SureSelect Max Fast Hyb Buffer, 16 Hybs				
Ammonium chloride	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	1650 mg/kg	-
SureSelect RNase Block				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Amplification Master Mix				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Trometamol	LD50 Dermal	Rat	>5000 mg/kg	-
tetramethylammonium	LD50 Dermal	Rabbit - Male,	200 to 500 mg/	-
chloride		Female	kg	
	LD50 Oral	Rat	50 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
SureSelect Max Fast Hyb Buffer, 16 Hybs					
Ammonium chloride	Eyes - Severe irritant	Rabbit	-	100 mg	-
SureSelect RNase Block					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Amplification Master Mix					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Trometamol	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-

**Sensitization** 

Not available.

## Section 11. Toxicological information

Mutagenicity	
<b>Conclusion/Summary</b>	: Not available.
<b>Carcinogenicity</b>	
<b>Conclusion/Summary</b>	: Not available.
Reproductive toxicity	
<b>Conclusion/Summary</b>	: Not available.
Teratogenicity	
<b>Conclusion/Summary</b>	: Not available.
Specific target organ toxi	icity (single exposure

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

Name	Category	Route of exposure	Target organs
Amplification Master Mix			
Trometamol	Category 3	-	Respiratory tract irritation
tetramethylammonium chloride	Category 1	oral	central nervous system (CNS)

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

Name		Route of exposure	Target organs
SureSelect Max Fast Hyb Buffer, 16 Hybs Ammonium chloride	Category 2	-	central nervous system (CNS)

#### **Aspiration hazard**

Not available.

Information on the likely routes of exposure	:	SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes. Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Potential acute health effects			
Eye contact		SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No known significant effects or critical hazards. Causes eye irritation. Causes serious eye irritation.
Inhalation	 :	SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards. Causes damage to organs following a single exposure if inhaled.
Skin contact		SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation.
Ingestion	 ;	SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards. Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

## Section 11. Toxicological information

hysical, chemical and toxicolog	ical characteristics
: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block	Adverse symptoms may include the following: irritation watering redness
Amplification Master Mix	Adverse symptoms may include the following: pain or irritation watering redness
: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block Amplification Master Mix	No specific data. No specific data.
: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block Amplification Master Mix	No specific data. Adverse symptoms may include the following: irritation redness
: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block Amplification Master Mix	No specific data. No specific data.
	<ul> <li>SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block</li> <li>Amplification Master Mix</li> <li>SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix</li> <li>SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix</li> <li>SureSelect RNase Block Amplification Master Mix</li> <li>SureSelect RNase Block Amplification Master Mix</li> </ul>

#### 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.	
<u>Long term exposure</u>		
Potential immediate effects	Not available.	
Potential delayed effects	Not available.	
Potential chronic health ef	<u>is</u>	
General	SureSelect Max Fast Hyb Buffer, 16 HybsMay cause damage to organs through prolonge repeated exposure.SureSelect RNase Block Amplification Master MixNo known significant effects or critical hazards. No known significant effects or critical hazards.	
Carcinogenicity	SureSelect Max Fast HybNo known significant effects or critical hazards.Buffer, 16 HybsSureSelect RNase BlockSureSelect RNase BlockNo known significant effects or critical hazards.Amplification Master MixNo known significant effects or critical hazards.	
Mutagenicity	SureSelect Max Fast HybNo known significant effects or critical hazards.Buffer, 16 HybsSureSelect RNase BlockSureSelect RNase BlockNo known significant effects or critical hazards.Amplification Master MixNo known significant effects or critical hazards.	
Reproductive toxicity	SureSelect Max Fast HybNo known significant effects or critical hazards.Buffer, 16 HybsNo known significant effects or critical hazards.SureSelect RNase Block Amplification Master MixNo known significant effects or critical hazards.	

## Section 11. Toxicological information

#### Numerical measures of toxicity

#### Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/l)
SureSelect Max Fast Hyb Buffer, 16 Hybs					
SureSelect Max Fast Hyb Buffer, 16 Hybs	61693.9	93475.6	N/A	N/A	N/A
Ammonium chloride	1650	2500	N/A	N/A	N/A
SureSelect RNase Block					
Glycerol	12600	N/A	N/A	N/A	N/A
Amplification Master Mix					
Amplification Master Mix	1279.5	7677.0	N/A	N/A	N/A
Glycerol	12600	N/A	N/A	N/A	N/A
tetramethylammonium chloride	50	300	N/A	N/A	N/A

#### **Other information**

: SureSelect RNase Block

Adverse symptoms may include the following: May cause skin sensitization.

## Section 12. Ecological information

Product/ingredient name	Result	Species	Exposure
SureSelect Max Fast Hyb Buffer, 16 Hybs			
Ammonium chloride	Acute EC50 0.07 mg/l Marine water	Algae - <i>Hormosira banksii -</i> Gamete	72 hours
	Acute LC50 20 µg/l Fresh water	Crustaceans - <i>Macrobrachium</i> <i>rosenbergii</i> - Post-larvae	48 hours
	Acute LC50 390 μg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Young	48 hours
	Acute LC50 80 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
	Chronic EC10 0.03 mg/l Fresh water	Daphnia - Daphnia obtusa	21 days
	Chronic NOEC 0.6 mg/l Marine water	Algae - <i>Entomoneis punctulata</i> - Exponential growth phase	72 hours
	Chronic NOEC 330 µg/l Fresh water	Crustaceans - <i>Crangonyx sp.</i> - Juvenile (Fledgling, Hatchling, Weanling)	21 days
	Chronic NOEC 0.006 mg/l Fresh water	Fish - Ictalurus punctatus - Fry	30 days
SureSelect RNase Block			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Amplification Master Mix			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Trometamol	Acute EC50 >980 mg/l Fresh water	Daphnia	48 hours
	Acute NOEC 520 mg/l Fresh water	Daphnia	48 hours
tetramethylammonium chloride	Acute LC50 462 mg/l Fresh water	Fish - Pimephales promelas	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		-	-
Amplification Master Mix					
Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days		-	-
Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 2	8 days?	30 mg/l	-
Product/ingredient name	Aquatic half-life		Photolysi	S	Biodegradability
SureSelect Max Fast Hyb Buffer, 16 Hybs Ammonium chloride	-		-		Readily
<b>Amplification Master Mix</b> Trometamol tetramethylammonium chloride	-		-		Readily Readily

#### **Bioaccumulative potential**

Product/ingredient name	LogPow	BCF	Potential
SureSelect Max Fast Hyb Buffer, 16 Hybs Ammonium chloride	-3.2	_	Low
SureSelect RNase Block Glycerol	-1.76	-	Low
Amplification Master Mix			
Glycerol	-1.76	-	Low
Trometamol	-2.31	-	Low
tetramethylammonium chloride	<-1.6	-	Low

<u>Mobility in soil</u>	
Soil/water partition coefficient (Koc)	: 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 : Not available. to IMO instruments

## 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

- Canada United States
- : Not determined.
- : Not determined.

## Section 16. Other information

<u>History</u>	
Date of issue/Date of revision	: 05/31/2024
Date of previous issue	: No previous validation
Version	: 1
Key to abbreviations	<ul> <li>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 = Internediate 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</li> </ul>

#### Procedure used to derive the classification

Classification	Justification	
SureSelect Max Fast Hyb Buffer, 16 Hybs SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method	
SureSelect RNase Block EYE IRRITATION - Category 2B	Calculation method	
Amplification Master Mix ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method Calculation method Calculation method Calculation method Calculation method	

**V** Indicates information that has changed from previously issued version.

#### Notice to reader

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