

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 the substance or mixture and uses advised against

Identified uses : Analytical reagent.
 For research use only.
 SureSelect Max Fast Hyb Buffer, 16 Hybs 0.108 ml / 0.768 ml
 SureSelect RNase Block 0.016 ml / 0.08 ml
 Amplification Master Mix 0.45 ml (16 reactions) / 2.84 ml (96 reactions)

Uses advised against : Not for use in diagnostic procedures.

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

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

Section 2. Hazard(s) identification

Classification of the substance or mixture

SureSelect Max Fast Hyb Buffer, 16 Hybs

H400 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
 H411 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

SureSelect RNase Block

H320 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2B




Amplification Master Mix

H302 ACUTE TOXICITY (oral) - Category 4
 H315 SKIN CORROSION/IRRITATION - Category 2
 H319 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
 H371 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2
 H412 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3

SureSelect Max Fast Hyb Buffer, 16 Hybs Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 20.3%

GHS label elements

Section 2. Hazard(s) identification

Hazard pictograms	: SureSelect Max Fast Hyb Buffer, 16 Hybs Amplification Master Mix	  
Signal word	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	WARNING WARNING WARNING
Hazard statements	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	H400 - Very toxic to aquatic life. H411 - Toxic to aquatic life with long lasting effects. H320 - Causes eye irritation. H302 - Harmful if swallowed. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H371 - May cause damage to organs.(central nervous system (CNS)) H412 - Harmful to aquatic life with long lasting effects.
<u>Precautionary statements</u>		
Prevention	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	P273 - Avoid release to the environment. Not applicable. P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment. P260 - Do not breathe vapour. P270 - Do not eat, drink or smoke when using this product.
Response	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	P391 - Collect spillage. 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. P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
Storage	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	Not applicable. Not applicable. Not applicable.
Disposal	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements		
Additional warning phrases	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	Not applicable. Not applicable. Not applicable.

Section 2. Hazard(s) identification

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. Composition and ingredient information

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

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
SureSelect Max Fast Hyb Buffer, 16 Hybs		
Ammonium chloride	≤3	12125-02-9
SureSelect RNase Block		
Glycerol	≥30 - ≤60	56-81-5
Amplification Master Mix		
Glycerol	≥30 - ≤60	56-81-5
Trometamol	≤10	77-86-1
tetramethylammonium chloride	<10	75-57-0

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.

The total concentration of ingredients in this product, reported or not in this section, is 100%.

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

Section 4. First aid measures

Description of necessary first aid measures

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. Get medical attention if irritation occurs.
 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 Buffer, 16 Hybs Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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

Section 4. First aid measures

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 following exposure or if feeling unwell. 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. Get medical attention if symptoms occur.

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.

Amplification Master Mix

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. If necessary, call a poison center or physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion

: SureSelect Max Fast Hyb Buffer, 16 Hybs

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.

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

Section 4. First aid measures

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.

Most important symptoms/effects, acute and delayed

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. May cause 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. May cause 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. May cause damage to organs following a single exposure if swallowed.

Over-exposure signs/symptoms

Eye contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. Adverse symptoms may include the following: irritation watering redness Adverse symptoms may include the following: pain or irritation watering redness
Inhalation	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. No specific data.
Skin contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. Adverse symptoms may include the following: irritation redness
Ingestion	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. No specific data.

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

Section 4. First aid measures

Notes to physician	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block 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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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 SureSelect RNase Block Amplification Master Mix	No specific treatment. No specific treatment. No specific treatment.
Protection of first-aiders	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No action shall be taken involving any personal risk or without suitable training. 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. 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. Firefighting 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 surrounding fire.
Unsuitable extinguishing media	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	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. This material is very toxic to aquatic life. This material is toxic 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. 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.

Section 5. Firefighting measures

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
Special protective actions for fire-fighters	: SureSelect Max Fast Hyb Buffer, 16 Hybs	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 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 equipment for fire-fighters	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Fire-fighters should wear appropriate protective 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

For non-emergency personnel	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
	SureSelect RNase Block	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
	Amplification Master Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected

Section 6. Accidental release measures

For emergency responders : SureSelect Max Fast Hyb Buffer, 16 Hybs

SureSelect RNase Block

Amplification Master Mix

personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

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

Environmental precautions : SureSelect Max Fast Hyb Buffer, 16 Hybs

SureSelect RNase Block

Amplification Master Mix

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

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

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

Methods and material for containment and cleaning up

Methods for cleaning up : SureSelect Max Fast Hyb Buffer, 16 Hybs

SureSelect RNase Block

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.

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Section 7. Handling and storage

Precautions for safe handling

Protective measures

: SureSelect Max Fast Hyb Buffer, 16 Hybs

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

SureSelect RNase Block

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Amplification Master Mix

Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 7. Handling and storage

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

Section 8. Exposure controls and personal protection

[Control parameters](#)

[Occupational exposure limits](#)

Ingredient name	Exposure limits
SureSelect Max Fast Hyb Buffer, 16 Hybs Ammonium chloride	Safe Work Australia (Australia, 10/2022). STEL: 20 mg/m ³ 15 minutes. Form: Fume TWA: 10 mg/m ³ 8 hours. Form: Fume
SureSelect RNase Block Glycerol	Safe Work Australia (Australia, 10/2022). TWA: 10 mg/m ³ 8 hours.
Amplification Master Mix Glycerol	Safe Work Australia (Australia, 10/2022). TWA: 10 mg/m ³ 8 hours.

[Biological exposure indices](#)

No exposure indices known.

[Appropriate engineering controls](#)

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

[Environmental exposure controls](#)

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

[Individual protection measures](#)

[Hygiene measures](#)

: 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.

Section 8. Exposure controls and personal protection

- 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 Buffer, 16 Hybs Liquid.
SureSelect RNase Block Amplification Master Mix Liquid.
- Colour** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
SureSelect RNase Block Amplification Master Mix Not available.
- Odour** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
SureSelect RNase Block Amplification Master Mix Not available.
- Odour threshold** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
SureSelect RNase Block Amplification Master Mix Not available.
- pH** : SureSelect Max Fast Hyb Buffer, 16 Hybs 8
SureSelect RNase Block Amplification Master Mix 7.6
8.5
- Melting point/freezing point** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
SureSelect RNase Block Amplification Master Mix Not available.
- Boiling point, initial boiling point, and boiling range** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
SureSelect RNase Block Amplification Master Mix Not available.
- Flash point** :

Section 9. Physical and chemical properties and safety characteristics

Ingredient name	Closed cup			Open cup		
	°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 Hyb Buffer, 16 Hybs Not available.
 SureSelect RNase Block Amplification Master Mix Not available.

Flammability : SureSelect Max Fast Hyb Buffer, 16 Hybs Not applicable.
 SureSelect RNase Block Amplification Master Mix Not applicable.

Lower and upper explosion limit/flammability limit : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
 SureSelect RNase Block Amplification Master Mix Not available.

Vapour pressure :

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	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	-

Relative vapour density : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
 SureSelect RNase Block Amplification Master Mix Not available.

Relative density : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
 SureSelect RNase Block Amplification Master Mix Not available.

Solubility(ies) :

Media	Result
SureSelect Max Fast Hyb Buffer, 16 Hybs	
water	Soluble
SureSelect RNase Block	
water	Soluble
Amplification Master Mix	
water	Soluble

Section 9. Physical and chemical properties and safety characteristics

Partition coefficient: n-octanol/water : SureSelect Max Fast Hyb Buffer, 16 Hybs Not applicable.
 SureSelect RNase Block Amplification Master Mix Not applicable.
 Not applicable.

Auto-ignition temperature :

Ingredient name	°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 Not available.
 SureSelect RNase Block Amplification Master Mix Not available.
 Not available.

Viscosity : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
 SureSelect RNase Block Amplification Master Mix Not available.
 Not available.

Particle characteristics

Median particle size : SureSelect Max Fast Hyb Buffer, 16 Hybs Not applicable.
 SureSelect RNase Block Amplification Master Mix Not applicable.
 Not applicable.

Section 10. Stability and reactivity

Reactivity : SureSelect Max Fast Hyb Buffer, 16 Hybs No specific test data related to reactivity available for this product or its ingredients.
 SureSelect RNase Block No specific test data related to reactivity available for this product or its ingredients.
 Amplification Master Mix 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 Under normal conditions of storage and use, hazardous reactions will not occur.
 SureSelect RNase Block Under normal conditions of storage and use, hazardous reactions will not occur.
 Amplification Master Mix Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid : SureSelect Max Fast Hyb Buffer, 16 Hybs No specific data.
 SureSelect RNase Block No specific data.
 Amplification Master Mix No specific data.

Section 10. Stability and reactivity

Incompatible materials	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
Hazardous decomposition products	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. 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 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 Trometamol tetramethylammonium chloride	LD50 Oral	Rat	12600 mg/kg	-
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit - Male, Female	200 to 500 mg/ 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	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
SureSelect RNase Block Glycerol	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Amplification Master Mix Glycerol	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
Trometamol	Skin - Moderate irritant	Rabbit	-	25 %	-
	Skin - Severe irritant	Rabbit	-	500 mg	-

Sensitisation

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Section 11. Toxicological information

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
Amplification Master Mix			
Trometamol	Category 3	-	Respiratory tract irritation
tetramethylammonium chloride	Category 1	oral	central nervous system (CNS)

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure : SureSelect Max Fast Hyb Buffer, 16 Hybs Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 SureSelect RNase Block Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
 Amplification Master Mix Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects

Eye contact : SureSelect Max Fast Hyb Buffer, 16 Hybs No known significant effects or critical hazards.
 SureSelect RNase Block Causes eye irritation.
 Amplification Master Mix Causes serious eye irritation.

Inhalation : 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 May cause damage to organs following a single exposure if inhaled.

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 May cause 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. May cause damage to organs following a single exposure if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

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

Section 11. Toxicological information

		watering redness
Inhalation	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. No specific data.
Skin contact	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. Adverse symptoms may include the following: irritation redness
Ingestion	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. No specific data.

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

Short term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Long term exposure

- Potential immediate effects** : Not available.
- Potential delayed effects** : Not available.

Potential chronic health effects

- General** : SureSelect Max Fast Hyb Buffer, 16 Hybs
SureSelect RNase Block Amplification Master Mix
No known significant effects or critical hazards.
- Carcinogenicity** : SureSelect Max Fast Hyb Buffer, 16 Hybs
SureSelect RNase Block Amplification Master Mix
No known significant effects or critical hazards.
- Mutagenicity** : SureSelect Max Fast Hyb Buffer, 16 Hybs
SureSelect RNase Block Amplification Master Mix
No known significant effects or critical hazards.
- Reproductive toxicity** : SureSelect Max Fast Hyb Buffer, 16 Hybs
SureSelect RNase Block Amplification Master Mix
No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)

Section 11. Toxicological information

SureSelect Max Fast Hyb Buffer, 16 Hybs					
SureSelect Max Fast Hyb Buffer, 16 Hybs	61693.9	N/A	N/A	N/A	N/A
Ammonium chloride	1650	N/A	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 sensitisation.

Section 12. Ecological information

Toxicity

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 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 - <i>Oncorhynchus mykiss</i>	96 hours
	Chronic EC10 0.03 mg/l Fresh water	Daphnia - <i>Daphnia obtusa</i>	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 - <i>Ictalurus punctatus</i> - Fry	30 days
SureSelect RNase Block			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
Amplification Master Mix			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	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 - <i>Pimephales promelas</i>	96 hours

Persistence and degradability

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	93 % - 30 days	-	-

Section 12. Ecological information

Trometamol	Test OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-
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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
SureSelect Max Fast Hyb Buffer, 16 Hybs Ammonium chloride	-	-	Readily
Amplification Master Mix Trometamol	-	-	Readily
tetramethylammonium chloride	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	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

Mobility in soil

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

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

Section 13. Disposal considerations

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

Section 14. Transport information

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

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

Standard for the Uniform Scheduling of Medicines and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

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.

New Zealand : Not determined.

United States : Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 31/05/2024

Date of previous issue : No previous validation

Version : 1

Key to abbreviations :

- ADG = Australian Dangerous Goods
- ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
- N/A = Not available
- SUSMP = Standard Uniform Schedule of Medicine and Poisons
- UN = United Nations

Section 16. Any other relevant information

[Procedure used to derive the classification](#)

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

✔ Indicates information that has changed from previously issued version.

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