

# SAFETY DATA SHEET



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

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

**1.1 Product identifier**

**Product name** : SureSelect Max Target Enrichment Kit Overnight Hyb Module, Box 2, 16\_96 Hybs  
**Part no. (chemical kit)** : 5282-0133, 5282-0135  
**Part no.** : SureSelect Hyb 3 5190-4382 / 5972-3696  
 SureSelect RNase Block 5190-4383 / 5972-3700  
 Amplification Master Mix 5271-0079 / 5271-0083

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

**Identified uses** : Analytical reagent.  
 For research use only.  
 SureSelect Hyb 3 0.16 ml / 0.4 ml  
 SureSelect RNase Block 0.016 ml / 0.08 ml  
 Amplification Master Mix 0.45 ml (16 reactions) / 2.84 (96 reactions)  
**Uses advised against** : Not for use in diagnostic procedures.

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

Agilent Technologies Deutschland GmbH  
 Hewlett-Packard-Str. 8  
 76337 Waldbronn  
 Germany  
 0800 603 1000  
**e-mail address of person responsible for this SDS** : pdl-msds\_author@agilent.com

**1.4 Emergency telephone number**

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

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Product definition** : SureSelect Hyb 3 Mixture  
 SureSelect RNase Block Mixture  
 Amplification Master Mix Mixture

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

**Amplification Master Mix**

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

SureSelect Hyb 3 The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.  
 SureSelect RNase Block The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.  
 Amplification Master Mix The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

**SECTION 2: Hazards identification**

<b>Ingredients of unknown toxicity</b>	: SureSelect Hyb 3  SureSelect RNase Block  Amplification Master Mix	Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1 - 10% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
<b>Ingredients of unknown ecotoxicity</b>	: SureSelect Hyb 3	Contains 3% of components with unknown hazards to the aquatic environment

See Section 16 for the full text of the H statements declared above.  
See Section 11 for more detailed information on health effects and symptoms.

**2.2 Label elements**

**Hazard pictograms** : Amplification Master Mix



**Signal word** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
No signal word.  
No signal word.  
Warning

**Hazard statements** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
No known significant effects or critical hazards.  
No known significant effects or critical hazards.  
H302 - Harmful if swallowed.  
H315 - Causes skin irritation.  
H371 - May cause damage to organs.  
H412 - Harmful to aquatic life with long lasting effects.

**Precautionary statements**

**Prevention** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
Not applicable.  
Not applicable.  
P280 - Wear protective gloves.  
P273 - Avoid release to the environment.  
P260 - Do not breathe vapour.  
P270 - Do not eat, drink or smoke when using this product.

**Response** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
Not applicable.  
Not applicable.  
P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.

**Storage** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
Not applicable.  
Not applicable.  
Not applicable.

**Disposal** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
Not applicable.  
Not applicable.  
P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Hazardous ingredients** : Amplification Master Mix tetramethylammonium chloride

**Supplemental label elements** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
Not applicable.  
Not applicable.  
Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : SureSelect Hyb 3  
SureSelect RNase Block  
Amplification Master Mix  
Not applicable.  
Not applicable.  
Not applicable.

**SECTION 2: Hazards identification**

Special packaging requirements

**Tactile warning of danger** : SureSelect Hyb 3 Not applicable.  
 SureSelect RNase Block Not applicable.  
 Amplification Master Mix Not applicable.

**2.3 Other hazards**

**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII** : SureSelect Hyb 3 This mixture does not contain any substances that are assessed to be a PBT or a vPvB.  
 SureSelect RNase Block This mixture does not contain any substances that are assessed to be a PBT or a vPvB.  
 Amplification Master Mix This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

**Other hazards which do not result in classification** : SureSelect Hyb 3 None known.  
 SureSelect RNase Block None known.  
 Amplification Master Mix None known.

**SECTION 3: Composition/information on ingredients**

**3.1 Substances** : SureSelect Hyb 3 Mixture  
 SureSelect RNase Block Mixture  
 Amplification Master Mix Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
<b>SureSelect RNase Block</b> glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	-	[1]
<b>Amplification Master Mix</b> glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥25 - ≤50	Not classified.	-	[2]
trometamol	EC: 201-064-4 CAS: 77-86-1	<10	Skin Irrit. 2, H315 Eye Irrit. 2, H319	-	[1]
tetramethylammonium chloride	EC: 200-880-8 CAS: 75-57-0	<10	Acute Tox. 2, H300 Acute Tox. 3, H311 Skin Irrit. 2, H315 STOT SE 1, H370 (central nervous system (CNS)) (oral) Aquatic Chronic 2, H411 <b>See Section 16 for the full text of the H statements declared above.</b>	ATE [Oral] = 50 mg/kg ATE [Dermal] = 300 mg/kg	[1]

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type  
 SureSelect RNase Block [1] Substance with a workplace exposure limit  
 Amplification Master Mix [1] Substance classified with a health or environmental hazard  
 [2] Substance with a workplace exposure limit

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

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

<b>Eye contact</b>	: SureSelect Hyb 3	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. Get medical attention if irritation occurs.
	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.
<b>Inhalation</b>	: SureSelect Hyb 3	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	SureSelect RNase Block	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
	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.
<b>Skin contact</b>	: SureSelect Hyb 3	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.
	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.
<b>Ingestion</b>	: SureSelect Hyb 3	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	SureSelect RNase Block	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
	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

**SECTION 4: First aid measures**

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.

<b>Protection of first-aiders</b>	: SureSelect Hyb 3 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. 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.
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**4.2 Most important symptoms and effects, both acute and delayed**

Potential acute health effects

<b>Eye contact</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
<b>Inhalation</b>	: SureSelect Hyb 3 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.
<b>Skin contact</b>	: SureSelect Hyb 3 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.
<b>Ingestion</b>	: SureSelect Hyb 3 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

<b>Eye contact</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. Adverse symptoms may include the following: pain or irritation watering redness
<b>Inhalation</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. No specific data.
<b>Skin contact</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	No specific data. No specific data. No specific data.

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

<b>Notes to physician</b>	: SureSelect Hyb 3 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.
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**SECTION 4: First aid measures**

<b>Specific treatments</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	No specific treatment. No specific treatment. No specific treatment.
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**SECTION 5: Firefighting measures**

**5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: SureSelect Hyb 3 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.
<b>Unsuitable extinguishing media</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	None known. None known. None known.

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

<b>Hazards from the substance or mixture</b>	: SureSelect Hyb 3  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.
<b>Hazardous combustion products</b>	: SureSelect Hyb 3  SureSelect RNase Block  Amplification Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds carbonyl halides Decomposition products may include the following materials: carbon dioxide carbon monoxide Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds

**5.3 Advice for firefighters**

<b>Special precautions for fire-fighters</b>	: SureSelect Hyb 3  SureSelect RNase Block  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. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
<b>Special protective equipment for fire-fighters</b>	: SureSelect Hyb 3  SureSelect RNase Block	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.



## SECTION 5: Firefighting measures

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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.
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## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

<b>For non-emergency personnel</b>	: SureSelect Hyb 3	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. 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 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.
<b>For emergency responders</b>	: SureSelect Hyb 3	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	SureSelect RNase Block	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
	Amplification Master Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

: SureSelect Hyb 3	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureSelect RNase Block	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
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.

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

## SECTION 6: Accidental release measures

<b>Methods for cleaning up</b>	: SureSelect Hyb 3	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.

**6.4 Reference to other sections** : See Section 1 for emergency contact information.  
 See Section 8 for information on appropriate personal protective equipment.  
 See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

<b>Protective measures</b>	: SureSelect Hyb 3	Put on appropriate personal protective equipment (see Section 8).
	SureSelect RNase Block	Put on appropriate personal protective equipment (see Section 8).
	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.
<b>Advice on general occupational hygiene</b>	: SureSelect Hyb 3	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.

### 7.2 Conditions for safe storage, including any incompatibilities



## SECTION 7: Handling and storage

<b>Storage</b>	: SureSelect Hyb 3	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
	SureSelect 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.

### 7.3 Specific end use(s)

<b>Recommendations</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
<b>Industrial sector specific solutions</b>	: SureSelect Hyb 3 SureSelect RNase Block Amplification Master Mix	Not available. Not available. Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

Product/ingredient name	Exposure limit values
SureSelect RNase Block Glycerol	<b>NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)</b> OELV: 10 mg/m <sup>3</sup> 8 hours. Form: mist
Amplification Master Mix Glycerol	<b>NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs)</b> OELV: 10 mg/m <sup>3</sup> 8 hours. Form: mist

#### Biological exposure indices

No exposure indices known.

## SECTION 8: Exposure controls/personal protection

**Recommended monitoring procedures** : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Amplification Master Mix Trometamol  tetramethylammonium chloride	DNEL	Long term Oral	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	29 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	83.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	117.5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	166.7 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	0.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.4 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.76 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	2.9 mg/m <sup>3</sup>	Workers	Systemic

### PNECs

No PNECs available

### 8.2 Exposure controls

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

### Individual protection measures

**Hygiene measures** : 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: safety glasses with side-shields.

### 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.

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

- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**SECTION 9: Physical and chemical properties**

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

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

**Appearance**

- Physical state** : SureSelect Hyb 3 Liquid.  
SureSelect RNase Block Liquid.  
Amplification Master Mix Liquid.
- Colour** : SureSelect Hyb 3 Not available.  
SureSelect RNase Block Not available.  
Amplification Master Mix Not available.
- Odour** : SureSelect Hyb 3 Not available.  
SureSelect RNase Block Not available.  
Amplification Master Mix Not available.
- Odour threshold** : SureSelect Hyb 3 Not available.  
SureSelect RNase Block Not available.  
Amplification Master Mix Not available.
- Melting point/freezing point** : SureSelect Hyb 3 0°C  
SureSelect RNase Block Not available.  
Amplification Master Mix Not available.
- Initial boiling point and boiling range** : SureSelect Hyb 3 100°C  
SureSelect RNase Block Not available.  
Amplification Master Mix Not available.
- Flammability** : SureSelect Hyb 3 Not applicable.  
SureSelect RNase Block Not applicable.  
Amplification Master Mix Not applicable.
- Upper/lower flammability or explosive limits** : SureSelect Hyb 3 Not available.  
SureSelect RNase Block Not available.  
Amplification Master Mix Not available.

**Flash point** :

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
<b>SureSelect RNase Block</b>				
glycerol	-	-	177	-
<b>Amplification Master Mix</b>				
glycerol	-	-	177	-

**Auto-ignition temperature** :

**SECTION 9: Physical and chemical properties**

Ingredient name	°C	Method
<b>SureSelect RNase Block</b>		
glycerol	370	-
<b>Amplification Master Mix</b>		
glycerol	370	-

**Decomposition temperature** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

**pH** : SureSelect Hyb 3 7  
 SureSelect RNase Block 7.6  
 Amplification Master Mix 8.5

**Viscosity** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

Media	Result
<b>SureSelect Hyb 3</b>	
water	Soluble
<b>SureSelect RNase Block</b>	
water	Soluble
<b>Amplification Master Mix</b>	
water	Soluble

**Partition coefficient: n-octanol/water** : SureSelect Hyb 3 Not applicable.  
 SureSelect RNase Block Not applicable.  
 Amplification Master Mix Not applicable.

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>SureSelect Hyb 3</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>SureSelect RNase Block</b>						
water	17.5	2.3	-	92.258	12.3	-
glycerol	0.000075	0.00001	-	0.0025	0.00033	-
<b>Amplification Master Mix</b>						
water	17.5	2.3	-	92.258	12.3	-
trometamol	<0.00075006	<0.0001	-	-	-	-

**Evaporation rate** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

**Relative density** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

**Vapour density** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

## SECTION 9: Physical and chemical properties

**Explosive properties** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

**Oxidising properties** : SureSelect Hyb 3 Not available.  
 SureSelect RNase Block Not available.  
 Amplification Master Mix Not available.

### Particle characteristics

**Median particle size** : SureSelect Hyb 3 Not applicable.  
 SureSelect RNase Block Not applicable.  
 Amplification Master Mix Not applicable.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

**10.1 Reactivity** : SureSelect Hyb 3 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.

**10.2 Chemical stability** : SureSelect Hyb 3 The product is stable.  
 SureSelect RNase Block The product is stable.  
 Amplification Master Mix The product is stable.

**10.3 Possibility of hazardous reactions** : SureSelect Hyb 3 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.

**10.4 Conditions to avoid** : SureSelect Hyb 3 No specific data.  
 SureSelect RNase Block No specific data.  
 Amplification Master Mix No specific data.

**10.5 Incompatible materials** : SureSelect Hyb 3 May react or be incompatible with oxidising materials.  
 SureSelect RNase Block May react or be incompatible with oxidising materials.  
 Amplification Master Mix May react or be incompatible with oxidising materials.

**10.6 Hazardous decomposition products** : SureSelect Hyb 3 Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 SureSelect RNase Block Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
 Amplification Master Mix Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Amplification Master Mix Trometamol tetramethylammonium chloride	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Dermal	Rabbit - Male, Female	200 to 500 mg/kg	-
	LD50 Oral	Rat	50 mg/kg	-

## SECTION 11: Toxicological information

### 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)
<b>Amplification Master Mix</b> Amplification Master Mix tetramethylammonium chloride	1279.5 50	7677.0 300	N/A N/A	N/A N/A	N/A N/A

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
<b>Amplification Master Mix</b> Trometamol	Skin - Moderate irritant Skin - Severe irritant	Rabbit Rabbit	- -	25 % 500 mg	- -

### Sensitiser

**Conclusion/Summary** : Not available.

### Mutagenicity

**Conclusion/Summary** : Not available.

### Carcinogenicity

**Conclusion/Summary** : Not available.

### Reproductive toxicity

**Conclusion/Summary** : Not available.

### Teratogenicity

**Conclusion/Summary** : Not available.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<b>Amplification Master Mix</b> 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 Hyb 3 Not available.  
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

**Inhalation** : SureSelect Hyb 3 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.

**Ingestion** : SureSelect Hyb 3 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.

**Skin contact** : SureSelect Hyb 3 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.

**Eye contact** : SureSelect Hyb 3 No known significant effects or critical hazards.  
SureSelect RNase Block No known significant effects or critical hazards.  
Amplification Master Mix No known significant effects or critical hazards.



## SECTION 11: Toxicological information

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

<b>Inhalation</b>	: SureSelect Hyb 3	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	No specific data.
<b>Ingestion</b>	: SureSelect Hyb 3	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	No specific data.
<b>Skin contact</b>	: SureSelect Hyb 3	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	Adverse symptoms may include the following: irritation redness
<b>Eye contact</b>	: SureSelect Hyb 3	No specific data.
	SureSelect RNase Block	No specific data.
	Amplification Master Mix	Adverse symptoms may include the following: pain or irritation watering redness

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

#### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

#### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

### Potential chronic health effects

**Conclusion/Summary** : Not available.

<b>General</b>	: SureSelect Hyb 3	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Amplification Master Mix	No known significant effects or critical hazards.
<b>Carcinogenicity</b>	: SureSelect Hyb 3	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Amplification Master Mix	No known significant effects or critical hazards.
<b>Mutagenicity</b>	: SureSelect Hyb 3	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Amplification Master Mix	No known significant effects or critical hazards.
<b>Reproductive toxicity</b>	: SureSelect Hyb 3	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Amplification Master Mix	No known significant effects or critical hazards.

## 11.2 Information on other hazards

### 11.2.1 Endocrine disrupting properties

Not available.

### 11.2.2 Other information

SureSelect RNase Block                      Adverse symptoms may include the following: May cause skin sensitisation.

## SECTION 12: Ecological information

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
<b>Amplification Master Mix</b> Trometamol	Acute EC50 >980 mg/l Fresh water Acute NOEC 520 mg/l Fresh water	Daphnia Daphnia	48 hours 48 hours
tetramethylammonium chloride	Acute LC50 462 mg/l Fresh water	Fish - <i>Pimephales promelas</i>	96 hours

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<b>Amplification Master Mix</b> Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>Amplification Master Mix</b> Trometamol	-	-	Readily
tetramethylammonium chloride	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>Amplification Master Mix</b> Trometamol	-2.31	-	Low
tetramethylammonium chloride	<-1.6	-	Low

### 12.4 Mobility in soil

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

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

### 12.6 Endocrine disrupting properties

Not available.

### 12.7 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

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

#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.

### Additional information

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

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

## SECTION 15: Regulatory information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU Regulation (EC) No. 1907/2006 (REACH)

#### Annex XIV - List of substances subject to authorisation

#### Annex XIV

None of the components are listed.

#### Substances of very high concern

None of the components are listed.

## SECTION 15: Regulatory information

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles**

Product / Ingredient name	Identifiers	Designation [Usage]
Amplification Master Mix Amplification Master Mix	-	3

**Label** : SureSelect Hyb 3 Not applicable.  
 SureSelect RNase Block Not applicable.  
 Amplification Master Mix Not applicable.

### Other EU regulations

#### Ozone depleting substances (1005/2009/EU)

Not listed.

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

Not listed.

#### Persistent Organic Pollutants

Not listed.

#### Seveso Directive

This product is not controlled under the Seveso Directive.

### International regulations

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

Not listed.

#### Montreal Protocol

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

Not listed.

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

Not listed.

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

Not listed.

### Inventory list

**Australia** : Not determined.  
**Canada** : Not determined.  
**China** : Not determined.  
**Eurasian Economic Union** : **Russian Federation inventory**: Not determined.  
**Japan** : **Japan inventory (CSCL)**: Not determined.  
**Japan inventory (ISHL)**: Not determined.  
**New Zealand** : Not determined.  
**Philippines** : Not determined.  
**Republic of Korea** : Not determined.  
**Taiwan** : All components are listed or exempted.  
**Thailand** : Not determined.  
**Turkey** : Not determined.  
**United States** : Not determined.  
**Viet Nam** : Not determined.

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

**SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 N/A = Not available  
 PBT = Persistent, Bioaccumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 vPvB = Very Persistent and Very Bioaccumulative

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

Classification	Justification
<b>Amplification Master Mix</b> Acute Tox. 4, H302 Skin Irrit. 2, H315 STOT SE 2, H371 Aquatic Chronic 3, H412	Calculation method Calculation method Calculation method Calculation method

**Full text of abbreviated H statements**

<b>Amplification Master Mix</b> H300 H302 H311 H315 H319 H370 H371 H411 H412	Fatal if swallowed. Harmful if swallowed. Toxic in contact with skin. Causes skin irritation. Causes serious eye irritation. Causes damage to organs. May cause damage to organs. Toxic to aquatic life with long lasting effects. Harmful to aquatic life with long lasting effects.
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**Full text of classifications [CLP/GHS]**

<b>Amplification Master Mix</b> Acute Tox. 2 Acute Tox. 3 Acute Tox. 4 Aquatic Chronic 2 Aquatic Chronic 3 Eye Irrit. 2 Skin Irrit. 2 STOT SE 1 STOT SE 2	ACUTE TOXICITY - Category 2 ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2
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**Date of issue/ Date of revision** : 31/05/2024

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**Version** : 1

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