

SAFETY DATA SHEET



Beta SureSelect Max Target Enrichment Kit Fast Hyb Module, Box 2, 16 Hybs, Part Number 5280-0062

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

1.1 Product identifier

Product name	: Beta SureSelect Max Target Enrichment Kit Fast Hyb Module, Box 2, 16 Hybs, Part Number 5280-0062		
Part no. (chemical kit)	: 5280-0062		
Part no.	SureSelect Max Fast	52RD-0063	
	Hyb Buffer, 16 Hybs		
	SureSelect RNase Block	5190-4383	
	Blocker Mix, ILM	52RD-0066	
	SureSelect Post-Capture Primer Mix	5190-9730	
	Amplification Master Mix	7K0014-384	

1.2 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	
	SureSelect RNase Block	0.016 ml	
	Blocker Mix, ILM	0.08 ml (16 reactions)	
	SureSelect Post- Capture Primer Mix	0.016 ml (16 reactions)	
	Amplification Master Mix	0.45 ml (16 reactions)	
Uses advised against	: Not for use in diagnostic procedures.		

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.  
5500 Lakeside Cheadle Royal Business Park,  
Cheadle, Cheshire, SK8 3GR  
United Kingdom  
Tel: +44 (0) 345 712 5292  
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 Max Fast	Mixture
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	Mixture
	Blocker Mix, ILM	Mixture
	SureSelect Post-Capture Primer Mix	Mixture
	Amplification Master Mix	Mixture

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

**SECTION 2: Hazards identification****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 Max Fast Hyb Buffer, 16 Hybs	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureSelect RNase Block	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Blocker Mix, ILM	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
SureSelect Post- Capture Primer Mix	The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.
Amplification Master Mix	The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

<b>Ingredients of unknown toxicity</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
	: SureSelect RNase Block	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
	: Amplification Master Mix	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%

<b>Ingredients of unknown ecotoxicity</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Contains 20.3% of components with unknown hazards to the aquatic environment
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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**

<b>Hazard pictograms</b>	: Amplification Master Mix
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<b>Signal word</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No signal word.
	: SureSelect RNase Block	No signal word.
	: Blocker Mix, ILM	No signal word.
	: SureSelect Post-Capture Primer Mix	No signal word.
	: Amplification Master Mix	Warning

<b>Hazard statements</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	: SureSelect RNase Block	No known significant effects or critical hazards.
	: Blocker Mix, ILM	No known significant effects or critical hazards.
	: SureSelect Post-Capture Primer Mix	No known significant effects or critical hazards.
	: Amplification Master Mix	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**

<b>Prevention</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Not applicable.
	: SureSelect RNase Block	Not applicable.
	: Blocker Mix, ILM	Not applicable.
	: SureSelect Post-Capture Primer Mix	Not applicable.
	: Amplification Master Mix	P280 - Wear protective gloves. P273 - Avoid release to the environment.

**SECTION 2: Hazards identification**

P260 - Do not breathe vapour.  
P270 - Do not eat, drink or smoke when using this product.

<b>Response</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not applicable. Not applicable. Not applicable. Not applicable. P308 + P311 - IF exposed or concerned: Call a POISON CENTER or doctor.
<b>Storage</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Disposal</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not applicable. Not applicable. Not applicable. P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	: Amplification Master Mix	tetramethylammonium chloride
<b>Supplemental label elements</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Safety data sheet available on request. Safety data sheet available on request. Not applicable. Not applicable.
<b>Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not applicable. Not applicable. Not applicable. Not applicable.
<b><u>Special packaging requirements</u></b>		
<b>Containers to be fitted with child-resistant fastenings</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not applicable. Not applicable. Not applicable. Not applicable.
<b>Tactile warning of danger</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not applicable. Not applicable. Not applicable. Not applicable.

**2.3 Other hazards**

SECTION 2: Hazards identification

<b>Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII</b>	SureSelect Max Fast Hyb Buffer, 16 Hybs	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.
	Blocker Mix, ILM	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SureSelect Post-Capture Primer Mix	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.
<b>Other hazards which do not result in classification</b>	SureSelect Max Fast Hyb Buffer, 16 Hybs	None known.
	SureSelect RNase Block	None known.
	Blocker Mix, ILM	None known.
	SureSelect Post-Capture Primer Mix	None known.
	Amplification Master Mix	None known.

SECTION 3: Composition/information on ingredients

<b>3.1 Substances</b>	SureSelect Max Fast Hyb Buffer, 16 Hybs	Mixture
	SureSelect RNase Block	Mixture
	Blocker Mix, ILM	Mixture
	SureSelect Post- Capture Primer Mix	Mixture
	Amplification Master Mix	Mixture

Product/ingredient name	Identifiers	%	Classification	Type
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	EC: 235-186-4 CAS: 12125-02-9 Index: 017-014-00-8	≤3	Acute Tox. 4, H302 Eye Irrit. 2, H319	[1] [2]
<b>SureSelect RNase Block</b> Glycerol	UK (GB) REACH #: Annex V REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[1]
<b>Amplification Master Mix</b> Glycerol	UK (GB) REACH #: Annex V 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>	[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

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

SureSelect Max Fast Hyb Buffer, 16 Hybs	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
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****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. Get medical attention if irritation occurs.
Blocker Mix, ILM	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 Post-Capture Primer Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
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. 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.
Blocker Mix, ILM	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
SureSelect Post-Capture Primer Mix	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.

**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.
Blocker Mix, ILM	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if

**SECTION 4: First aid measures****Ingestion**

SureSelect Post-Capture Primer Mix	symptoms occur. 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.
: 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. 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.
Blocker Mix, ILM	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 Post-Capture Primer Mix	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Amplification Master Mix	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. If necessary, call a poison center or physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**Protection of first-aiders**

: SureSelect Max Fast Hyb Buffer, 16 Hybs	No action shall be taken involving any personal risk or without suitable training.
SureSelect RNase Block	No action shall be taken involving any personal risk or without suitable training.
Blocker Mix, ILM	No action shall be taken involving any personal risk or without suitable training.
SureSelect Post-Capture Primer Mix	No action shall be taken involving any personal risk or without suitable training.
Amplification Master Mix	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**4.2 Most important symptoms and effects, both acute and delayed****Over-exposure signs/symptoms****Eye contact**

: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block	No specific data.
Blocker Mix, ILM	No specific data.
SureSelect Post-Capture Primer Mix	No specific data.
Amplification Master Mix	Adverse symptoms may include the following:

**SECTION 4: First aid measures**

		pain or irritation watering redness
<b>Inhalation</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	No specific data. No specific data. No specific data. No specific data. No specific data.
<b>Skin contact</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	No specific data. No specific data. No specific data. No specific data. Adverse symptoms may include the following: irritation redness
<b>Ingestion</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	No specific data. No specific data. 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 Max Fast Hyb Buffer, 16 Hybs  SureSelect RNase Block  Blocker Mix, ILM  SureSelect Post-Capture Primer Mix 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. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. 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.
<b>Specific treatments</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	No specific treatment. No specific treatment. No specific treatment. No specific treatment.

**SECTION 5: Firefighting measures****5.1 Extinguishing media**

<b>Suitable extinguishing media</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix 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. Use an extinguishing agent suitable for the surrounding fire.
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**SECTION 5: Firefighting measures**

<b>Unsuitable extinguishing media</b>	SureSelect Max Fast	None known.
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	None known.
	Blocker Mix, ILM	None known.
	SureSelect Post-Capture Primer Mix	None known.
	Amplification Master Mix	None known.

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

<b>Hazards from the substance or mixture</b>	SureSelect Max Fast	In a fire or if heated, a pressure increase will occur and the container may burst.
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	In a fire or if heated, a pressure increase will occur and the container may burst.
	Blocker Mix, ILM	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureSelect Post-Capture Primer Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	Amplification Master Mix	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 Max Fast	Decomposition products may include the following materials:
	Hyb Buffer, 16 Hybs	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
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	No specific data.
	Amplification Master Mix	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds

**5.3 Advice for firefighters**

<b>Special protective actions for fire-fighters</b>	SureSelect Max Fast	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.
	Hyb Buffer, 16 Hybs	
	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.
	Blocker Mix, ILM	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 Post-Capture Primer 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.
	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.

**SECTION 5: Firefighting measures****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.
Blocker Mix, ILM	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureSelect Post-Capture Primer Mix	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****6.1 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. Put on appropriate personal protective equipment.
Blocker Mix, ILM	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 Post-Capture Primer Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
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.

**For emergency responders**

: SureSelect Max Fast Hyb Buffer, 16 Hybs	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".
Blocker Mix, ILM	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 Post-Capture Primer 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".
Amplification Master Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and

**SECTION 6: Accidental release measures**

unsuitable materials. See also the information in "For non-emergency personnel".

**6.2 Environmental precautions**

SureSelect Max Fast Hyb Buffer, 16 Hybs	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).
Blocker Mix, ILM	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 Post-Capture Primer 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).
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**

Methods for cleaning up	SureSelect Max Fast Hyb Buffer, 16 Hybs	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	SureSelect RNase Block	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
	Blocker Mix, ILM	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 Post-Capture Primer 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.
	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 Max Fast Hyb Buffer, 16 Hybs	Put on appropriate personal protective equipment (see Section 8).
	SureSelect RNase Block	Put on appropriate personal protective equipment (see Section 8).
<b>Advice on general occupational hygiene</b>	Blocker Mix, ILM	Put on appropriate personal protective equipment (see Section 8).
	SureSelect Post-Capture Primer Mix	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.
	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.
	Blocker Mix, ILM	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 Post-Capture Primer Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Amplification Master Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

<b>Storage</b>	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.
	SureSelect RNase Block	Store in accordance with local regulations. Store in original

**SECTION 7: Handling and storage**

Blocker Mix, ILM

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 Post-Capture Primer Mix

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

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. 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.

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)****Recommendations**

- : SureSelect Max Fast Hyb Buffer, 16 Hybs Industrial applications, Professional applications.
- : SureSelect RNase Block Industrial applications, Professional applications.
- : Blocker Mix, ILM Industrial applications, Professional applications.
- : SureSelect Post-Capture Primer Mix Industrial applications, Professional applications.
- : Amplification Master Mix Industrial applications, Professional applications.

**Industrial sector specific solutions**

- : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.
- : SureSelect RNase Block Not available.
- : Blocker Mix, ILM Not available.
- : SureSelect Post-Capture Primer Mix Not available.
- : Amplification Master Mix Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> STEL: 20 mg/m <sup>3</sup> 15 minutes. Form: Fume TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Fume
<b>SureSelect RNase Block</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist
<b>Amplification Master Mix</b> Glycerol	<b>EH40/2005 WELs (United Kingdom (UK), 1/2020).</b> TWA: 10 mg/m <sup>3</sup> 8 hours. Form: Mist

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. 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
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	DNEL	Long term Inhalation	9.4 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Oral	11.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	33.5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	55.2 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	55.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	128.9 mg/kg bw/day	Workers	Systemic
<b>Amplification Master Mix</b> Trometamol	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
tetramethylammonium chloride	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

## SECTION 8: Exposure controls/personal protection

### 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** : 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.

**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

<b>Physical state</b>	:	SureSelect Max Fast	Liquid.
		Hyb Buffer, 16 Hybs	
		SureSelect RNase Block	Liquid.
		Blocker Mix, ILM	Liquid.
		SureSelect Post-	Liquid.
		Capture Primer Mix	
		Amplification Master Mix	Liquid.

SECTION 9: Physical and chemical properties

Colour	: SureSelect Max Fast	Not available.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not available.																													
	Blocker Mix, ILM	Not available.																													
	SureSelect Post-Capture Primer Mix	Not available.																													
	Amplification Master Mix	Not available.																													
Odour	: SureSelect Max Fast	Not available.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not available.																													
	Blocker Mix, ILM	Not available.																													
	SureSelect Post-Capture Primer Mix	Not available.																													
	Amplification Master Mix	Not available.																													
Odour threshold	: SureSelect Max Fast	Not available.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not available.																													
	Blocker Mix, ILM	Not available.																													
	SureSelect Post-Capture Primer Mix	Not available.																													
	Amplification Master Mix	Not available.																													
Melting point/freezing point	: SureSelect Max Fast	Not available.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not available.																													
	Blocker Mix, ILM	0°C																													
	SureSelect Post-Capture Primer Mix	0°C																													
	Amplification Master Mix	Not available.																													
Initial boiling point and boiling range	: SureSelect Max Fast	Not available.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not available.																													
	Blocker Mix, ILM	100°C																													
	SureSelect Post-Capture Primer Mix	100°C																													
	Amplification Master Mix	Not available.																													
Flammability	: SureSelect Max Fast	Not applicable.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not applicable.																													
	Blocker Mix, ILM	Not applicable.																													
	SureSelect Post-Capture Primer Mix	Not applicable.																													
	Amplification Master Mix	Not applicable.																													
Upper/lower flammability or explosive limits	: SureSelect Max Fast	Not available.																													
	Hyb Buffer, 16 Hybs																														
	SureSelect RNase Block	Not available.																													
	Blocker Mix, ILM	Not available.																													
	SureSelect Post-Capture Primer Mix	Not available.																													
	Amplification Master Mix	Not available.																													
Flash point	:	<table><tr><th rowspan="2">Ingredient name</th><th colspan="2">Closed cup</th><th colspan="2">Open cup</th></tr><tr><th>°C</th><th>Method</th><th>°C</th><th>Method</th></tr><tr><td>SureSelect RNase Block</td><td></td><td></td><td></td><td></td></tr><tr><td>glycerol</td><td>-</td><td>-</td><td>177</td><td>-</td></tr><tr><td>Amplification Master Mix</td><td></td><td></td><td></td><td></td></tr><tr><td>glycerol</td><td>-</td><td>-</td><td>177</td><td>-</td></tr></table>	Ingredient name	Closed cup		Open cup		°C	Method	°C	Method	SureSelect RNase Block					glycerol	-	-	177	-	Amplification Master Mix					glycerol	-	-	177	-
Ingredient name	Closed cup			Open cup																											
	°C	Method	°C	Method																											
SureSelect RNase Block																															
glycerol	-	-	177	-																											
Amplification Master Mix																															
glycerol	-	-	177	-																											
Auto-ignition temperature	:																														

**SECTION 9: Physical and chemical properties**

		<b>Ingredient name</b>	<b>°C</b>	<b>Method</b>
		<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b>		
		ammonium chloride	>400	EU A.16
		<b>SureSelect RNase Block</b>		
		glycerol	370	-
		<b>Amplification Master Mix</b>		
		glycerol	370	-
<b>Decomposition temperature</b>	:	SureSelect Max Fast Hyb Buffer, 16 Hybs	Not available.	
		SureSelect RNase Block	Not available.	
		Blocker Mix, ILM	Not available.	
		SureSelect Post-Capture Primer Mix	Not available.	
		Amplification Master Mix	Not available.	
<b>pH</b>	:	SureSelect Max Fast Hyb Buffer, 16 Hybs	7.5	
		SureSelect RNase Block	7.6	
		Blocker Mix, ILM	7.5	
		SureSelect Post-Capture Primer Mix	7.5	
		Amplification Master Mix	8.5	
<b>Viscosity</b>	:	SureSelect Max Fast Hyb Buffer, 16 Hybs	Not available.	
		SureSelect RNase Block	Not available.	
		Blocker Mix, ILM	Not available.	
		SureSelect Post-Capture Primer Mix	Not available.	
		Amplification Master Mix	Not available.	
<b>Solubility(ies)</b>	:	<b>Media</b>	<b>Result</b>	
		<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b>		
		water	Soluble	
		<b>SureSelect RNase Block</b>		
		water	Soluble	
		<b>Blocker Mix, ILM</b>		
		water	Soluble	
		<b>SureSelect Post- Capture Primer Mix</b>		
		water	Soluble	
		<b>Amplification Master Mix</b>		
		water	Soluble	
<b>Partition coefficient: n-octanol/water</b>	:	SureSelect Max Fast Hyb Buffer, 16 Hybs	Not applicable.	
		SureSelect RNase Block	Not applicable.	
		Blocker Mix, ILM	Not applicable.	
		SureSelect Post-Capture Primer Mix	Not applicable.	
		Amplification Master Mix	Not applicable.	
<b>Vapour pressure</b>	:			

**SECTION 9: Physical and chemical properties**

Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</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>Blocker Mix, ILM</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>SureSelect Post-Capture Primer Mix</b>						
water	17.5	2.3	-	92.258	12.3	-
<b>Amplification Master Mix</b>						
water	17.5	2.3	-	92.258	12.3	-
trometamol	<0.00075006	<0.0001	-	-	-	-

**Evaporation rate** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.  
 SureSelect RNase Block Not available.  
 Blocker Mix, ILM Not available.  
 SureSelect Post-Capture Primer Mix Not available.  
 Amplification Master Mix Not available.

**Relative density** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.  
 SureSelect RNase Block Not available.  
 Blocker Mix, ILM Not available.  
 SureSelect Post-Capture Primer Mix Not available.  
 Amplification Master Mix Not available.

**Vapour density** : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.  
 SureSelect RNase Block Not available.  
 Blocker Mix, ILM Not available.  
 SureSelect Post-Capture Primer Mix Not available.  
 Amplification Master Mix Not available.

**SECTION 9: Physical and chemical properties**

**Explosive properties** : SureSelect Max Fast Not available.  
 Hyb Buffer, 16 Hybs  
 SureSelect RNase Block Not available.  
 Blocker Mix, ILM Not available.  
 SureSelect Post-Capture Primer Mix Not available.  
 Amplification Master Mix Not available.

**Oxidising properties** : SureSelect Max Fast Not available.  
 Hyb Buffer, 16 Hybs  
 SureSelect RNase Block Not available.  
 Blocker Mix, ILM Not available.  
 SureSelect Post-Capture Primer Mix Not available.  
 Amplification Master Mix Not available.

**Particle characteristics**

**Median particle size** : SureSelect Max Fast Not applicable.  
 Hyb Buffer, 16 Hybs  
 SureSelect RNase Block Not applicable.  
 Blocker Mix, ILM Not applicable.  
 SureSelect Post-Capture Primer Mix Not applicable.  
 Amplification Master Mix Not applicable.

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

**10.1 Reactivity** : SureSelect Max Fast No specific test data related to reactivity available for this product or its ingredients.  
 Hyb Buffer, 16 Hybs  
 SureSelect RNase Block No specific test data related to reactivity available for this product or its ingredients.  
 Blocker Mix, ILM No specific test data related to reactivity available for this product or its ingredients.  
 SureSelect Post-Capture Primer Mix 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 Max Fast The product is stable.  
 Hyb Buffer, 16 Hybs  
 SureSelect RNase Block The product is stable.  
 Blocker Mix, ILM The product is stable.  
 SureSelect Post-Capture Primer Mix The product is stable.  
 Amplification Master Mix The product is stable.

**10.3 Possibility of hazardous reactions** : SureSelect Max Fast Under normal conditions of storage and use, hazardous reactions will not occur.  
 Hyb Buffer, 16 Hybs  
 SureSelect RNase Block Under normal conditions of storage and use, hazardous reactions will not occur.  
 Blocker Mix, ILM Under normal conditions of storage and use, hazardous reactions will not occur.  
 SureSelect Post-Capture Primer Mix 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.

**SECTION 10: Stability and reactivity**

<b>10.4 Conditions to avoid</b>	SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	No specific data.
	Amplification Master Mix	No specific data.
<b>10.5 Incompatible materials</b>	SureSelect Max Fast Hyb Buffer, 16 Hybs	May react or be incompatible with oxidising materials.
	SureSelect RNase Block	May react or be incompatible with oxidising materials.
	Blocker Mix, ILM	May react or be incompatible with oxidising materials.
	SureSelect Post-Capture Primer Mix	May react or be incompatible with oxidising materials.
	Amplification Master Mix	May react or be incompatible with oxidising materials.
<b>10.6 Hazardous decomposition products</b>	SureSelect Max Fast Hyb Buffer, 16 Hybs	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.
	Blocker Mix, ILM	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect Post-Capture Primer Mix	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
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	1650 mg/kg	-
<b>SureSelect RNase Block</b> Glycerol	LD50 Oral	Rat	12600 mg/kg	-
<b>Amplification Master Mix</b> 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	-

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>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	61807.6 1650	N/A N/A	N/A N/A	N/A N/A	N/A N/A
<b>SureSelect RNase Block</b> Glycerol	12600	N/A	N/A	N/A	N/A
<b>Amplification Master Mix</b>					

**SECTION 11: Toxicological information**

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

**Irritation/Corrosion**

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

**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 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.
Blocker Mix, ILM	Not available.
SureSelect Post-Capture Primer Mix	Not available.
Amplification Master Mix	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

**Potential acute health effects**

**SECTION 11: Toxicological information**

<b>Inhalation</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Blocker Mix, ILM	No known significant effects or critical hazards.
	SureSelect Post-Capture Primer Mix	No known significant effects or critical hazards.
	Amplification Master Mix	May cause damage to organs following a single exposure if inhaled.
<b>Ingestion</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Blocker Mix, ILM	No known significant effects or critical hazards.
	SureSelect Post-Capture Primer Mix	No known significant effects or critical hazards.
	Amplification Master Mix	Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.
<b>Skin contact</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Blocker Mix, ILM	No known significant effects or critical hazards.
	SureSelect Post-Capture Primer Mix	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.
<b>Eye contact</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
	SureSelect RNase Block	No known significant effects or critical hazards.
	Blocker Mix, ILM	No known significant effects or critical hazards.
	SureSelect Post-Capture Primer Mix	No known significant effects or critical hazards.
	Amplification Master Mix	No known significant effects or critical hazards.

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

<b>Inhalation</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	No specific data.
	Amplification Master Mix	No specific data.
<b>Ingestion</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	No specific data.
	Amplification Master Mix	No specific data.
<b>Skin contact</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
	SureSelect RNase Block	No specific data.
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	No specific data.
	Amplification Master Mix	Adverse symptoms may include the following: irritation redness

**SECTION 11: Toxicological information**

<b>Eye contact</b>	SureSelect Max Fast	No specific data.
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	No specific data.
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	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.

**General** : SureSelect Max Fast No known significant effects or critical hazards.  
Hyb Buffer, 16 Hybs  
SureSelect RNase Block No known significant effects or critical hazards.  
Blocker Mix, ILM No known significant effects or critical hazards.  
SureSelect Post-Capture Primer Mix No known significant effects or critical hazards.  
Amplification Master Mix No known significant effects or critical hazards.

**Carcinogenicity** : SureSelect Max Fast No known significant effects or critical hazards.  
Hyb Buffer, 16 Hybs  
SureSelect RNase Block No known significant effects or critical hazards.  
Blocker Mix, ILM No known significant effects or critical hazards.  
SureSelect Post-Capture Primer Mix No known significant effects or critical hazards.  
Amplification Master Mix No known significant effects or critical hazards.

**Mutagenicity** : SureSelect Max Fast No known significant effects or critical hazards.  
Hyb Buffer, 16 Hybs  
SureSelect RNase Block No known significant effects or critical hazards.  
Blocker Mix, ILM No known significant effects or critical hazards.  
SureSelect Post-Capture Primer Mix No known significant effects or critical hazards.  
Amplification Master Mix No known significant effects or critical hazards.

**Reproductive toxicity** : SureSelect Max Fast No known significant effects or critical hazards.  
Hyb Buffer, 16 Hybs  
SureSelect RNase Block No known significant effects or critical hazards.  
Blocker Mix, ILM No known significant effects or critical hazards.  
SureSelect Post-Capture Primer Mix No known significant effects or critical hazards.  
Amplification Master Mix No known significant effects or critical hazards.

**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>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	Acute EC50 0.07 mg/l Marine water	Algae - Neptune's Necklace - <i>Hormosira banksii</i> - Gamete	72 hours
	Acute LC50 20 µg/l Fresh water	Crustaceans - Giant river prawn - <i>Macrobrachium rosenbergii</i> - Post-larvae	48 hours
	Acute LC50 390 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia magna</i> - Young	48 hours
	Acute LC50 80 µg/l Fresh water	Fish - Rainbow trout, donaldson trout - <i>Oncorhynchus mykiss</i>	96 hours
	Chronic EC10 0.03 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia obtusa</i>	21 days
	Chronic NOEC 0.6 mg/l Marine water	Algae - Algae - <i>Entomoneis punctulata</i> - Exponential growth phase	72 hours
	Chronic NOEC 330 µg/l Fresh water	Crustaceans - Amphipod - <i>Crangonyx sp.</i> - Juvenile (Fledgling, Hatchling, Weanling)	21 days
	Chronic NOEC 0.006 mg/l Fresh water	Fish - Channel catfish - <i>Ictalurus punctatus</i> - Fry	30 days
<b>SureSelect RNase Block</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours
<b>Amplification Master Mix</b> Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - <i>Oncorhynchus mykiss</i>	96 hours
Trometamol	Acute EC50 >980 mg/l Fresh water	Daphnia	48 hours
tetramethylammonium chloride	Acute NOEC 520 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 462 mg/l Fresh water	Fish - Fathead minnow - <i>Pimephales promelas</i>	96 hours

**Conclusion/Summary** : Not available.**12.2 Persistence and degradability**

Product/ingredient name	Test	Result	Dose	Inoculum
<b>SureSelect RNase Block</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
<b>Amplification Master Mix</b> Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-

**Conclusion/Summary** : Not available.

**SECTION 12: Ecological information**

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	-	-	Readily
<b>Amplification Master Mix</b> Trometamol	-	-	Readily
tetramethylammonium chloride	-	-	Readily

**12.3 Bioaccumulative potential**

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b> ammonium chloride	-3.2	-	Low
<b>SureSelect RNase Block</b> Glycerol	-1.76	-	Low
<b>Amplification Master Mix</b> Glycerol	-1.76	-	Low
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 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**Product

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

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

Packaging

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

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

SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN 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  
UK (GB)/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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

Product / Ingredient name	Identifiers	Status
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride		65
Amplification Master Mix Amplification Master Mix		3

## SECTION 15: Regulatory information

<b>Label</b>	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Not applicable.
	SureSelect RNase Block	Not applicable.
	Blocker Mix, ILM	Not applicable.
	SureSelect Post- Capture Primer Mix	Not applicable.
	Amplification Master Mix	Not applicable.

### Seveso Directive

This product is not controlled under the Seveso Directive.

### EU regulations

**Industrial emissions (integrated pollution prevention and control) - Air** : Not listed

**Industrial emissions (integrated pollution prevention and control) - Water** : Not listed

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

### 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

**United States** : Not determined.

## 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

**SECTION 16: Other information**

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>SureSelect Max Fast Hyb Buffer, 16 Hybs</b>	
H302	Harmful if swallowed.
H319	Causes serious eye irritation.
<b>Amplification Master Mix</b>	
H300	Fatal if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H370	Causes damage to organs.
H371	May cause damage to organs.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**Full text of classifications**

<b>SureSelect Max Fast Hyb Buffer, 16 Hybs</b>	
Acute Tox. 4	ACUTE TOXICITY - Category 4
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
<b>Amplification Master Mix</b>	
Acute Tox. 2	ACUTE TOXICITY - Category 2
Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 1	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 1
STOT SE 2	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 2

**Date of issue/ Date of revision** : 12/01/2024

**Date of previous issue** : No previous validation

**Version** : 1

**Notice to reader**

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