

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 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 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 Regulation (EC) 1272/2008 as amended.	
SureSelect RNase Block	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
Blocker Mix, ILM	The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.	
SureSelect Post- Capture Primer Mix	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.	

Ingredients of unknown toxicity	: 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%

Ingredients of unknown ecotoxicity	: 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

Hazard pictograms : Amplification Master Mix



Signal word	: 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

Hazard statements	: 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

Prevention	: 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. P260 - Do not breathe vapour.

SECTION 2: Hazards identification

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

Response

: 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.

Storage

: 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.

Not applicable.

Disposal

: 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.

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 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.

Not applicable.

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 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.

Not applicable.

Special packaging requirements**Tactile warning of danger**

: 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.

Not applicable.

2.3 Other hazards**Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII**

: SureSelect Max Fast
Hyb Buffer, 16 Hybs
SureSelect RNase Block

Blocker Mix, ILM

SureSelect Post-
Capture Primer Mix
Amplification Master Mix

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

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

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

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

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

SECTION 2: Hazards identification

Other hazards which do not result in classification	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.

SECTION 3: Composition/information on ingredients

3.1 Substances	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	Specific Conc. Limits, M-factors and ATEs	Type
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	EC: 235-186-4 CAS: 12125-02-9 Index: 017-014-00-8	≤3	Acute Tox. 4, H302 Eye Irrit. 2, H319	ATE [Oral] = 1650 mg/kg	[1] [2]
SureSelect RNase Block glycerol	REACH #: Annex V EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	-	[1]
Amplification Master Mix 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 See Section 16 for the full text of the H statements declared above.	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

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

SECTION 4: First aid measures**Ingestion**

		contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect Post-Capture Primer Mix	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**Potential acute health effects**

SECTION 4: First aid measures

Eye contact	: 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.
Inhalation	: 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.
Skin contact	: SureSelect Max Fast	May cause damage to organs following a single exposure if inhaled.
	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.
Ingestion	: SureSelect Max Fast	May cause damage to organs following a single exposure in contact with skin. Causes skin irritation.
	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.
	: SureSelect Max Fast	Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	
	Blocker Mix, ILM	
	SureSelect Post-Capture Primer Mix	

Over-exposure signs/symptoms

Eye contact	: 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.
Inhalation	: SureSelect Max Fast	Adverse symptoms may include the following: pain or irritation watering redness
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	No specific data.
	Blocker Mix, ILM	No specific data.
	SureSelect Post-Capture Primer Mix	No specific data.
Skin contact	: 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.
	: SureSelect Max Fast	Adverse symptoms may include the following: irritation redness
	Hyb Buffer, 16 Hybs	
	SureSelect RNase Block	
	Blocker Mix, ILM	
	SureSelect Post-Capture Primer Mix	

SECTION 4: First aid measures

Ingestion	: 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.
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4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: 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.
Specific treatments	: 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. No specific treatment.

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

Suitable extinguishing media	: 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. Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	None known. None known. None known. None known. None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix 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. 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.
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SECTION 5: Firefighting measures

Hazardous combustion products	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	SureSelect RNase Block	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Blocker Mix, ILM SureSelect Post-Capture Primer Mix	No specific data. 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

Special precautions for fire-fighters	: SureSelect Max Fast Hyb Buffer, 16 Hybs	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	SureSelect RNase Block	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
	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.
Special protective equipment for fire-fighters	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.
	: 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. 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.
	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.
	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. 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.
	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. 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.
	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

SECTION 5: Firefighting measures

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 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 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).

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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.
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SECTION 7: Handling and storage**7.1 Precautions for safe handling**

Protective measures	: 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).
	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

SECTION 7: Handling and storage

Advice on general occupational hygiene	SureSelect Max Fast Hyb Buffer, 16 Hybs	or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
	SureSelect RNase Block	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

Storage	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 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.
	Blocker Mix, ILM	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

SECTION 7: Handling and storage

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

Recommendations	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not available. 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 Max Fast Hyb Buffer, 16 Hybs ammonium chloride	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 10 mg/m³ 8 hours. Form: fume OELV: 20 mg/m³ 15 minutes. Form: fume
SureSelect RNase Block Glycerol	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 10 mg/m³ 8 hours. Form: mist
Amplification Master Mix Glycerol	NAOSH (Ireland, 5/2021). Notes: Advisory Occupational Exposure Limit Values (OELVs) OELV: 10 mg/m³ 8 hours. Form: mist

SECTION 8: Exposure controls/personal protection

Biological exposure indices

No exposure indices known.

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
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	DNEL	Long term Inhalation	9.4 mg/m³	General population	Systemic
	DNEL	Long term Oral	11.4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	33.5 mg/m³	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
Amplification Master Mix Trometamol	DNEL	Long term Oral	8.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	29 mg/m³	General population	Systemic
	DNEL	Long term Dermal	83.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	117.5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	166.7 mg/kg bw/day	Workers	Systemic
tetramethylammonium chloride	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/m³	General population	Systemic
	DNEL	Long term Inhalation	2.9 mg/m³	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

SECTION 8: Exposure controls/personal protection

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**

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

SECTION 9: Physical and chemical properties

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		Closed cup		Open cup	
	Ingredient name	°C	Method	°C	Method
	SureSelect RNase Block				
	glycerol	-	-	177	-
	Amplification Master Mix				
	glycerol	-	-	177	-
Auto-ignition temperature	Ingredient name	°C		Method	
	SureSelect Max Fast Hyb Buffer, 16 Hybs				
	ammonium chloride	>400		EU A.16	
	SureSelect RNase Block				
	glycerol	370		-	
	Amplification Master Mix				
	glycerol	370		-	

SECTION 9: Physical and chemical properties

Decomposition temperature	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not available. Not available. Not available. Not available. Not available.																																									
pH	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	7.5 7.6 7.5 7.5 8.5																																									
Viscosity	: SureSelect Max Fast Hyb Buffer, 16 Hybs SureSelect RNase Block Blocker Mix, ILM SureSelect Post-Capture Primer Mix Amplification Master Mix	Not available. Not available. Not available. Not available. Not available.																																									
Solubility(ies)	: <table><tr><th>Media</th><th>Result</th></tr><tr><td>SureSelect Max Fast Hyb Buffer, 16 Hybs water</td><td>Soluble</td></tr><tr><td>SureSelect RNase Block water</td><td>Soluble</td></tr><tr><td>Blocker Mix, ILM water</td><td>Soluble</td></tr><tr><td>SureSelect Post- Capture Primer Mix water</td><td>Soluble</td></tr><tr><td>Amplification Master Mix water</td><td>Soluble</td></tr></table>	Media	Result	SureSelect Max Fast Hyb Buffer, 16 Hybs water	Soluble	SureSelect RNase Block water	Soluble	Blocker Mix, ILM water	Soluble	SureSelect Post- Capture Primer Mix water	Soluble	Amplification Master Mix water	Soluble																														
Media	Result																																										
SureSelect Max Fast Hyb Buffer, 16 Hybs water	Soluble																																										
SureSelect RNase Block water	Soluble																																										
Blocker Mix, ILM water	Soluble																																										
SureSelect Post- Capture Primer Mix water	Soluble																																										
Amplification Master Mix water	Soluble																																										
Partition coefficient: n-octanol/water	: 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. Not applicable.																																									
Vapour pressure	: <table><tr><th rowspan="2">Ingredient name</th><th colspan="3">Vapour Pressure at 20°C</th><th colspan="3">Vapour pressure at 50°C</th></tr><tr><th>mm Hg</th><th>kPa</th><th>Method</th><th>mm Hg</th><th>kPa</th><th>Method</th></tr><tr><td>SureSelect Max Fast Hyb Buffer, 16 Hybs water</td><td>17.5</td><td>2.3</td><td>-</td><td>92.258</td><td>12.3</td><td>-</td></tr><tr><td>SureSelect RNase Block water</td><td>17.5</td><td>2.3</td><td>-</td><td>92.258</td><td>12.3</td><td>-</td></tr><tr><td>glycerol</td><td>0.000075</td><td>0.00001</td><td>-</td><td>0.0025</td><td>0.00033</td><td>-</td></tr><tr><td>Blocker Mix, ILM water</td><td>17.5</td><td>2.3</td><td>-</td><td>92.258</td><td>12.3</td><td>-</td></tr></table>	Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C			mm Hg	kPa	Method	mm Hg	kPa	Method	SureSelect Max Fast Hyb Buffer, 16 Hybs water	17.5	2.3	-	92.258	12.3	-	SureSelect RNase Block water	17.5	2.3	-	92.258	12.3	-	glycerol	0.000075	0.00001	-	0.0025	0.00033	-	Blocker Mix, ILM water	17.5	2.3	-	92.258	12.3	-	
Ingredient name	Vapour Pressure at 20°C			Vapour pressure at 50°C																																							
	mm Hg	kPa	Method	mm Hg	kPa	Method																																					
SureSelect Max Fast Hyb Buffer, 16 Hybs water	17.5	2.3	-	92.258	12.3	-																																					
SureSelect RNase Block water	17.5	2.3	-	92.258	12.3	-																																					
glycerol	0.000075	0.00001	-	0.0025	0.00033	-																																					
Blocker Mix, ILM water	17.5	2.3	-	92.258	12.3	-																																					

SECTION 9: Physical and chemical properties

SureSelect Post-Capture Primer Mix							
water	17.5	2.3	-		92.258	12.3	-
Amplification Master Mix							
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
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
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
Blocker Mix, ILM Not available.
SureSelect Post-Capture Primer Mix Not available.
Amplification Master Mix Not available.

Explosive properties : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.

SureSelect RNase Block
Blocker Mix, ILM Not available.
SureSelect Post-Capture Primer Mix Not available.
Amplification Master Mix Not available.

Oxidising properties : SureSelect Max Fast Hyb Buffer, 16 Hybs Not available.

SureSelect RNase Block
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 Hyb Buffer, 16 Hybs Not applicable.
SureSelect RNase Block
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 Hyb Buffer, 16 Hybs	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect RNase Block	No specific test data related to reactivity available for this product or its ingredients.
	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 Hyb Buffer, 16 Hybs	The product is stable.
	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 Hyb Buffer, 16 Hybs	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect RNase Block	Under normal conditions of storage and use, hazardous reactions will not occur.
	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.
10.4 Conditions to avoid	: 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.
10.5 Incompatible materials	: 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.
10.6 Hazardous decomposition products	: 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
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	1650 mg/kg	-
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	-

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)
SureSelect Max Fast Hyb Buffer, 16 Hybs 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
Amplification Master Mix 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
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	Eyes - Severe irritant	Rabbit	-	100 mg	-
Amplification Master Mix 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
Amplification Master Mix tetramethylammonium chloride	Category 1	oral	central nervous system (CNS)

Specific target organ toxicity (repeated exposure)

Not available.

SECTION 11: Toxicological information**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 Blocker Mix, ILM	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
SureSelect Post-Capture Primer Mix	Not available.
Amplification Master Mix	Not available.
	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

Potential acute health effects**Inhalation**

SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
SureSelect RNase Block 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.
	May cause damage to organs following a single exposure if inhaled.

Ingestion

SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
SureSelect RNase Block 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.
	Harmful if swallowed. May cause damage to organs following a single exposure if swallowed.

Skin contact

SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
SureSelect RNase Block 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.
	May cause damage to organs following a single exposure in contact with skin. Causes skin irritation.

Eye contact

SureSelect Max Fast Hyb Buffer, 16 Hybs	No known significant effects or critical hazards.
SureSelect RNase Block 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**Inhalation**

SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block Blocker Mix, ILM	No specific data.
SureSelect Post-Capture Primer Mix	No specific data.
Amplification Master Mix	No specific data.

Ingestion

SureSelect Max Fast Hyb Buffer, 16 Hybs	No specific data.
SureSelect RNase Block Blocker Mix, ILM	No specific data.
SureSelect Post-Capture Primer Mix	No specific data.
Amplification Master Mix	No specific data.

SECTION 11: Toxicological information

Skin contact	: 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: irritation redness
Eye contact	: 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.

SECTION 11: Toxicological information

Reproductive toxicity	: 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.

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
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	Acute EC50 0.07 mg/l Marine water	Algae - <i>Hormosira banksii</i> - Gamete	72 hours
	Acute LC50 20 µg/l Fresh water	Crustaceans - <i>Macrobrachium rosenbergii</i> - Post-larvae	48 hours
	Acute LC50 390 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Young	48 hours
	Acute LC50 80 µg/l Fresh water	Fish - <i>Oncorhynchus mykiss</i>	96 hours
	Chronic EC10 0.03 mg/l Fresh water	Daphnia - <i>Daphnia obtusa</i>	21 days
	Chronic NOEC 0.6 mg/l Marine water	Algae - <i>Entomoneis punctulata</i> - Exponential growth phase	72 hours
	Chronic NOEC 330 µg/l Fresh water	Crustaceans - <i>Crangonyx sp.</i> - Juvenile (Fledgling, Hatchling, Weanling)	21 days
Amplification Master Mix Trometamol tetramethylammonium chloride	Chronic NOEC 0.006 mg/l Fresh water	Fish - <i>Ictalurus punctatus</i> - Fry	30 days
	Acute EC50 >980 mg/l Fresh water	Daphnia	48 hours
	Acute NOEC 520 mg/l Fresh water	Daphnia	48 hours
	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
Amplification Master Mix Trometamol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97.1 % - Readily - 28 days	30 mg/l	-

SECTION 12: Ecological information

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

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride	-3.2	-	Low
Amplification Master Mix Trometamol	-2.31	-	Low
tetramethylammonium chloride	<-1.6	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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 spilt 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.

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]
SureSelect Max Fast Hyb Buffer, 16 Hybs ammonium chloride		65
Amplification Master Mix Amplification Master Mix		3

Label : 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.

Other EU regulations

Ozone depleting substances (1005/2009/EU)

Not listed.

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

SECTION 15: Regulatory information

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	: Not determined.
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.
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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
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[Procedure used to derive the classification according to Regulation \(EC\) No. 1272/2008 \[CLP/GHS\]](#)

SECTION 16: Other information

Classification	Justification
Amplification Master Mix 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

SureSelect Max Fast Hyb Buffer, 16 Hybs H302 H319	Harmful if swallowed. Causes serious eye irritation.
Amplification Master Mix 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.

Full text of classifications [CLP/GHS]

SureSelect Max Fast Hyb Buffer, 16 Hybs Acute Tox. 4 Eye Irrit. 2	ACUTE TOXICITY - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Amplification Master Mix 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

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

Date of previous issue : No previous validation

Version : 1

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