SAFETY DATA SHEET



Avida DNA Reagent Kit with 97-192 Index Primer Pairs for ILM, 96 Reactions, Part Number G9418B

Section 1. Identification

1.1 Product identifier

Product name : Avida DNA Reagent Kit with 97-192 Index Primer Pairs for ILM, 96 Reactions, Part

Number G9418B

Part no. (chemical kit)

Part no.

: G9418B

: Avida DNA and Duo Reagent Box 2, 96 5282-0142
Reactions

Nuclease-Free Water 5271-0134 Library Wash Buffer 5271-0130 Hvb Wash Buffer 1 5271-0131 Hyb Wash Buffer 2 5271-0132 Resuspension Buffer 5271-0133 Avida DNA Reagent Box 1, 96 Reactions 5282-0140 **End Prep Buffer** 5271-0121 End Prep Enzyme 5271-0122 Ligation Buffer 5271-0123 Ligation Enzyme 5271-0124 Adapter for ILM 5271-0139 Hyb Blocker 5271-0126 Hvb Buffer 5271-0127 Hyb Enhancer 5271-0128 2X Amplification Mastermix 5271-0129 Avida Beads Box, 96 Reactions 5282-0144 Library Binding Beads 5271-0135 Capture Beads 5271-0136 Avida Index Primer Pairs 97 -192 for ILM 5280-0056 Avida Index Primer Pairs 97-192 for ILM 5274-0080

Validation date : 4/11/2024

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

Identified uses : Analytical reagent.

For research use only.

Nuclease-Free Water 5.76 ml (96 reactions) Library Wash Buffer 2 x 21.12 ml (96 reactions) Hyb Wash Buffer 1 2 x 31.68 ml (96 reactions) 2 x 18.24 ml (96 reactions) Hyb Wash Buffer 2 2.364 ml (96 reactions) Resuspension Buffer End Prep Buffer 0.877 ml (96 reactions) End Prep Enzyme 0.351 ml (96 reactions) Ligation Buffer 2.96 ml (96 reactions) 0.695 ml (96 reactions) Ligation Enzyme 0.588 ml (96 reactions) Adapter for ILM 0.349 ml (96 reactions) Hyb Blocker Hvb Buffer 5.524 ml (96 reactions) Hyb Enhancer 0.988 ml (96 reactions) 2X Amplification Mastermix 2.94 ml (96 reactions) Library Binding Beads 10.083 ml (96 reactions) Capture Beads 0.944 ml (96 reactions)

Avida Index Primer Pairs 97-192 for ILM 96 x 0.005 ml

Uses advised against: Not for use in diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

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Section 1. Identification

Supplier/Manufacturer

: Agilent Technologies, Inc. 5301 Stevens Creek Blvd Santa Clara, CA 95051, USA 800-227-9770

1.4 Emergency telephone number

In case of emergency : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

2.1 Classification of the substance or mixture

OSHA/HCS status

: Nuclease-Free Water

End Prep Enzyme

Ligation Buffer

Adapter for ILM

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

Library Wash Buffer
While this material is not considered hazardous by the
OSHA Hazard Communication Standard (29 CFR
1910.1200), this SDS contains valuable information

critical to the safe handling and proper use of the product.
This SDS should be retained and available for employees

and other users of this product.

Hyb Wash Buffer 1 While this material is not considered hazardous by the

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

Hyb Wash Buffer 2 While this material is not considered hazardous by the

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

Resuspension Buffer While this material is not considered hazardous by the

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

End Prep Buffer This material is considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200). This material is considered hazardous by the OSHA

Hazard Communication Standard (29 CFR 1910.1200). While this material is not considered hazardous by the

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

Ligation Enzyme This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information

critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

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and other users of this product.

Hyb Blocker While this material is not considered hazardous by the

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product.

This SDS should be retained and available for employees

and other users of this product.

This material is considered hazardous by the OSHA Hyb Buffer

Hazard Communication Standard (29 CFR 1910.1200).

This material is considered hazardous by the OSHA Hyb Enhancer

Hazard Communication Standard (29 CFR 1910.1200).

While this material is not considered hazardous by the 2X Amplification Mastermix

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

While this material is not considered hazardous by the Library Binding Beads

OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

While this material is not considered hazardous by the Capture Beads

> OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

Avida Index Primer Pairs

97-192 for ILM

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees

and other users of this product.

Classification of the substance or mixture

End Prep Buffer

H412 AQUATIC HAZARD (LONG-TERM) - Category 3

End Prep Enzyme

H320 EYE IRRITATION - Category 2B

Ligation Enzyme

H320 EYE IRRITATION - Category 2B

Hyb Buffer

H302 ACUTE TOXICITY (oral) - Category 4 H315 SKIN IRRITATION - Category 2

H370 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1

H412 AQUATIC HAZARD (LONG-TERM) - Category 3

Hyb Enhancer

H351 CARCINOGENICITY - Category 2

H360 TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 H373

Ingredients of unknown

toxicity

: Hyb Buffer Percentage of the mixture consisting of ingredient (s) of unknown acute oral toxicity: 1 - 10%

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Hyb Buffer

Percentage of the mixture consisting of ingredient (s) of unknown hazards to the aquatic environment: 3.4%

2.2 GHS label elements

Hazard pictograms

: Hyb Buffer





Hyb Enhancer



Signal word

: Nuclease-Free Water No signal word. Library Wash Buffer No signal word. Hyb Wash Buffer 1 No signal word. Hyb Wash Buffer 2 No signal word. Resuspension Buffer No signal word. End Prep Buffer No signal word. End Prep Enzyme Warning **Ligation Buffer** No signal word. Ligation Enzyme Warning Adapter for ILM No signal word. Hyb Blocker No signal word. Hyb Buffer Danger Hyb Enhancer Danger

Hyb Enhancer Danger
2X Amplification Mastermix No signal word.
Library Binding Beads No signal word.
Capture Beads No signal word.

Avida Index Primer Pairs 97-192

for ILM

Hazard statements

Nuclease-Free Water
Library Wash Buffer
No known significant effects or critical hazards.
Hyb Wash Buffer 1
No known significant effects or critical hazards.
Hyb Wash Buffer 2
No known significant effects or critical hazards.
Ho known significant effects or critical hazards.
H412 - Harmful to aquatic life with long lasting effects.

No signal word.

End Prep Enzyme H320 - Causes eye irritation.

Ligation Buffer No known significant effects or critical hazards.

Ligation Enzyme H320 - Causes eye irritation.

Adapter for ILM

No known significant effects or critical hazards.

Hyb Blocker

No known significant effects or critical hazards.

Hyb Buffer H302 - Harmful if swallowed. H315 - Causes skin irritation.

H370 - Causes damage to organs. (central nervous

system (CNS))

H412 - Harmful to aquatic life with long lasting

effects.

Hyb Enhancer H351 - Suspected of causing cancer.

H360 - May damage fertility or the unborn child. H373 - May cause damage to organs through prolonged or repeated exposure. (blood) No known significant effects or critical hazards.

2X Amplification Mastermix Library Binding Beads

Capture Beads

Avida Index Primer Pairs 97-192

No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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for ILM

Precautionary statements

Prevention

Nuclease-Free Water
 Library Wash Buffer
 Hyb Wash Buffer 1
 Hyb Wash Buffer 2
 Resuspension Buffer
 Not applicable.
 Not applicable.
 Not applicable.

End Prep Buffer P273 - Avoid release to the environment.

End Prep Enzyme
Ligation Buffer
Not applicable.
Ligation Enzyme
Not applicable.
Adapter for ILM
Not applicable.
Hyb Blocker
Not applicable.

Hyb Buffer P280 - Wear protective gloves.

P273 - Avoid release to the environment.

P260 - Do not breathe vapor.

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

product.

P264 - Wash thoroughly after handling.
P201 - Obtain special instructions before use.
P280 - Wear protective gloves, protective clothing

and eye or face protection.

P260 - Do not breathe vapor.

2X Amplification Mastermix
Library Binding Beads
Capture Beads
Avida Index Primer Pairs 97-192
Not applicable.
Not applicable.
Not applicable.

- - II NA

Hyb Enhancer

for ILM

Response

Nuclease-Free Water
Library Wash Buffer
Hyb Wash Buffer 1
Hyb Wash Buffer 2
Resuspension Buffer
End Prep Buffer
Not applicable.
Not applicable.
Not applicable.
Not applicable.

End Prep Enzyme P305 + P351 + P338 - IF IN EYES: Rinse

cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P337 + P313 - If eye irritation persists: Get medical

advice or attention.

Ligation Buffer Not applicable.

Ligation Enzyme P305 + P351 + P338 - IF IN EYES: Rinse

cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue

rinsing.

P337 + P313 - If eye irritation persists: Get medical

advice or attention.

Adapter for ILM Not applicable. Hyb Blocker Not applicable.

Hyb Buffer P308 + P311 - IF exposed: Call a POISON

CENTER or doctor.

P362 + P364 - Take off contaminated clothing and

wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of

water.

Hyb Enhancer P308 + P313 - IF exposed or concerned: Get

Not applicable.

medical advice or attention.

2X Amplification Mastermix

Library Binding Beads Not applicable.
Capture Beads Not applicable.

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	Avida Index Primer Pairs 97-192 for ILM	Not applicable.
Storage	: Nuclease-Free Water	Not applicable.
•	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1	Not applicable.
	Hyb Wash Buffer 2	Not applicable.
	Resuspension Buffer	Not applicable.
	End Prep Buffer	Not applicable.
	End Prep Enzyme	Not applicable.
	Ligation Buffer	Not applicable.
	Ligation Enzyme	Not applicable.
	Adapter for ILM	Not applicable.
	Hyb Blocker	Not applicable.
	Hyb Buffer	Not applicable.
	Hyb Enhancer	Not applicable.
	2X Amplification Mastermix	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads	Not applicable.
	Avida Index Primer Pairs 97-192	Not applicable.
	for ILM	
Disposal	Nuclease-Free Water	Not applicable.
	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1	Not applicable.
	Hyb Wash Buffer 2	Not applicable.
	Resuspension Buffer	Not applicable.
	End Prep Buffer	P501 - Dispose of contents and container in
		accordance with all local, regional, national and
		international regulations.
	End Prep Enzyme	Not applicable.
	Ligation Buffer	Not applicable.
	Ligation Enzyme	Not applicable.
	Adapter for ILM	Not applicable.
	Hyb Blocker	Not applicable.
	Hyb Buffer	P501 - Dispose of contents and container in
		accordance with all local, regional, national and
	Uvb Enhancer	international regulations.
	Hyb Enhancer	P501 - Dispose of contents and container in
		accordance with all local, regional, national and
	OV Amplification Mostermiy	international regulations.
	2X Amplification Mastermix	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads Avida Index Primer Pairs 97-192	Not applicable.
	for ILM	Not applicable.
Supplemental label	: Nuclease-Free Water	None known.
elements	Library Wash Buffer	None known.
	Hyb Wash Buffer 1	None known.
	Hyb Wash Buffer 2	None known.
	Resuspension Buffer	None known.
	End Prep Buffer	None known.
	End Prep Enzyme	None known.
	Ligation Buffer	None known.
	Ligation Enzyme	None known.
	Adapter for ILM	None known.
	Hyb Blocker	None known.
	Hyb Buffer	None known.
	Hyb Enhancer	None known.
	2X Amplification Mastermiy	None known

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None known. None known.

None known.

2X Amplification Mastermix Library Binding Beads

Capture Beads

Avida Index Primer Pairs 97-192 None known. for ILM

2.3 Other hazards

Hazards not otherwise classified

: Nuclease-Free Water None known. Library Wash Buffer None known. Hyb Wash Buffer 1 None known. Hyb Wash Buffer 2 None known. Resuspension Buffer None known. End Prep Buffer None known. End Prep Enzyme None known. Ligation Buffer None known. Ligation Enzyme None known. Adapter for ILM None known. Hyb Blocker None known. Hyb Buffer None known. Hyb Enhancer None known. 2X Amplification Mastermix None known. Library Binding Beads None known. Capture Beads None known. Avida Index Primer Pairs 97-192 None known. for ILM

Section 3. Composition/information on ingredients

Substance/mixture

: Nuclease-Free Water Substance Library Wash Buffer Mixture Hyb Wash Buffer 1 Mixture Hyb Wash Buffer 2 Mixture Resuspension Buffer Mixture End Prep Buffer Mixture End Prep Enzyme Mixture **Ligation Buffer** Mixture Ligation Enzyme Mixture Adapter for ILM Mixture Hyb Blocker Mixture Hyb Buffer Mixture Hyb Enhancer Mixture 2X Amplification Mastermix Mixture Library Binding Beads Mixture Capture Beads Mixture Avida Index Primer Pairs 97-192 for Mixture ILM

Ingredient name	%	CAS number
Nuclease-Free Water		
water	100	7732-18-5
Hyb Wash Buffer 1		
Sodium dodecyl sulphate	≤0.3	151-21-3
Hyb Wash Buffer 2		
Poly(oxy-1,2-ethanediyl), .alpha[(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	<0.1	9036-19-5

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Section 3. Composition/information on ingredients

		,
End Prep Buffer		
Magnesium chloride	<2.5	7786-30-3
End Prep Enzyme		
Glycerol	≥50 - ≤75	56-81-5
Ligation Enzyme		
Glycerol	≥50 - ≤75	56-81-5
Hyb Buffer		
tetramethylammonium chloride	≥10 - <15	75-57-0
Dextran sulfate sodium	≤3	9011-18-1
Poly(oxy-1,2-ethanediyl), .alpha[(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	<0.1	9036-19-5
Hyb Enhancer		
Formamide	≥90	75-12-7
2V Amplification Mastarmiy		
2X Amplification Mastermix		
Glycerol	<10	56-81-5

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

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

Section 4. First aid measures

4.1 Description of necessary first aid measures	4.1	Description of	f necessarv	<i>ı</i> first aid	l measures
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Eye contact	: Nuclease-Free Water	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.
	Library Wash Buffer	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.
	Hyb Wash Buffer 1	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.
	Hyb Wash Buffer 2	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.
	Resuspension Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids.

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Adapter for ILM

Section 4. First aid measures

Check for and remove any contact lenses. Get

medical attention if irritation occurs.

End Prep Buffer 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.

End Prep Enzyme Immediately flush eyes with plenty of water,

occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention. Immediately flush eyes with plenty of water,

Ligation Buffer 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.

Ligation Enzyme Immediately flush eyes with plenty of water,

occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. If irritation persists, get medical attention. 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.

Hyb Blocker 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.

Hyb Buffer 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.

Hyb Enhancer 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.

2X Amplification Mastermix 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.

Library Binding Beads 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.

Capture Beads 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.

Avida Index Primer Pairs 97-192

for 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.

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: Nuclease-Free Water

First aid massuras

Inhalation

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Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical

attention if symptoms occur.

Remove victim to fresh air and keep at rest in a Library Wash Buffer

position comfortable for breathing. Get medical

attention if symptoms occur.

Hyb Wash Buffer 1 Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical

attention if symptoms occur.

Hyb Wash Buffer 2 Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical

attention if symptoms occur.

Remove victim to fresh air and keep at rest in a Resuspension Buffer position comfortable for breathing. Get medical

attention if symptoms occur.

Remove victim to fresh air and keep at rest in a **End Prep Buffer**

position comfortable for breathing. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance

for 48 hours.

Remove victim to fresh air and keep at rest in a End Prep Enzyme

position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or

oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a

collar, tie, belt or waistband.

Ligation Buffer 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

Ligation Enzyme Remove victim to fresh air and keep at rest in a

> position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be

dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a

collar, tie, belt or waistband.

Remove victim to fresh air and keep at rest in a Adapter for ILM

position comfortable for breathing. Get medical

attention if symptoms occur.

Hyb Blocker Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical

attention if symptoms occur.

Remove victim to fresh air and keep at rest in a Hyb Buffer

position comfortable for breathing. If not

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breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Hyb Enhancer

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If 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.

2X Amplification Mastermix

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

attention if symptoms occur.

Library Binding Beads

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

attention if symptoms occur.

Capture Beads

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

attention if symptoms occur.

Avida Index Primer Pairs 97-192

for ILM

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical

attention if symptoms occur.

: Nuclease-Free Water

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Library Wash Buffer

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Hyb Wash Buffer 1

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Hyb Wash Buffer 2

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur. Flush contaminated skin with plenty of water. Resuspension Buffer

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

medical attention if symptoms occur.

Flush contaminated skin with plenty of water.

Skin contact

Flush contaminated skin with plenty of water. **End Prep Buffer** Remove contaminated clothing and shoes. Get

End Prep Enzyme

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Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

Flush contaminated skin with plenty of water. Ligation Buffer

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Ligation Enzyme

Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

Flush contaminated skin with plenty of water. Adapter for ILM

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Hyb Blocker Flush contaminated skin with plenty of water.

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Hyb Buffer 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.

Flush contaminated skin with plenty of water. Hyb Enhancer

Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly

before reuse.

2X Amplification Mastermix Flush contaminated skin with plenty of water.

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Library Binding Beads Flush contaminated skin with plenty of water.

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Capture Beads

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Avida Index Primer Pairs 97-192

for ILM

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

: Nuclease-Free Water Wash out mouth with water. If material has been Ingestion

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.

Wash out mouth with water. If material has been Library Wash Buffer

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

Hyb Wash Buffer 1 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

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Hyb Wash Buffer 2

occur.

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.

Resuspension Buffer

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

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.

End Prep Enzyme

End Prep Buffer

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

sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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

occur.

Ligation Buffer

Ligation Enzyme

Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

personnel. Get medical attention if symptoms

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.

Wash out mouth with water. If material has been swallowed and the exposed person is conscious,

Adapter for ILM

Hyb Blocker

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Hyb Buffer

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.

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. 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. 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. 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

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.

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.

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.

Hyb Enhancer

2X Amplification Mastermix

Library Binding Beads

Capture Beads

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4.2 Most important symptoms/effects, acute and delayed Potential acute health effects

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Eye contact

Inhalation

: Nuclease-Free Water Library Wash Buffer Hvb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads

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: Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker

Hyb Buffer

Hyb Enhancer
2X Amplification Mastermix
Library Binding Beads
Capture Beads
Avida Index Primer Pairs 97-192
for ILM

Skin contact

Nuclease-Free Water
Library Wash Buffer
Hyb Wash Buffer 1
Hyb Wash Buffer 2
Resuspension Buffer
End Prep Buffer
End Prep Enzyme
Ligation Buffer
Ligation Enzyme
Adapter for ILM
Hyb Blocker
Hyb Buffer

Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads Avida Index Primer Pairs 97-192 for ILM No known significant effects or critical hazards. Causes eye irritation.

No known significant effects or critical hazards. Causes eye irritation.

No known significant effects or critical hazards. No known significant effects or critical hazards.

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

No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation.

No known significant effects or critical hazards. No known significant effects or critical hazards.

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Ingestion

: Nuclease-Free Water No known significant effects or critical hazards. Library Wash Buffer No known significant effects or critical hazards. Hyb Wash Buffer 1 No known significant effects or critical hazards. Hyb Wash Buffer 2 No known significant effects or critical hazards. Resuspension Buffer No known significant effects or critical hazards. End Prep Buffer No known significant effects or critical hazards. End Prep Enzyme No known significant effects or critical hazards. Ligation Buffer No known significant effects or critical hazards. Ligation Enzyme No known significant effects or critical hazards. Adapter for ILM No known significant effects or critical hazards. No known significant effects or critical hazards. Hyb Blocker Harmful if swallowed. Causes damage to organs Hyb Buffer

following a single exposure if swallowed.

Hyb Enhancer No known significant effects or critical hazards. 2X Amplification Mastermix No known significant effects or critical hazards. No known significant effects or critical hazards. Library Binding Beads Capture Beads No known significant effects or critical hazards. No known significant effects or critical hazards.

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for ILM

Over-exposure signs/symptoms

Eye contact

Inhalation

: Nuclease-Free Water No specific data. Library Wash Buffer No specific data. Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. End Prep Buffer No specific data.

Adverse symptoms may include the following: End Prep Enzyme

> irritation watering redness

Ligation Buffer No specific data.

Ligation Enzyme Adverse symptoms may include the following:

> irritation watering redness

No specific data. Adapter for ILM Hvb Blocker No specific data.

Hyb Buffer Adverse symptoms may include the following:

> pain or irritation watering

redness

Hyb Enhancer No specific data. 2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. No specific data.

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for ILM

Nuclease-Free Water No specific data.

No specific data. Library Wash Buffer Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. **End Prep Buffer** No specific data. End Prep Enzyme No specific data. Ligation Buffer No specific data. No specific data. Ligation Enzyme Adapter for ILM No specific data. Hyb Blocker No specific data. Hyb Buffer No specific data.

Hyb Enhancer Adverse symptoms may include the following:

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reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix No specific data. Library Binding Beads No specific data. No specific data. Capture Beads Avida Index Primer Pairs 97-192 No specific data.

for ILM

Skin contact : Nuclease-Free Water No specific data.

Library Wash Buffer No specific data. No specific data. Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 Resuspension Buffer No specific data. **End Prep Buffer** No specific data. End Prep Enzyme No specific data. Ligation Buffer No specific data. Ligation Enzyme No specific data. Adapter for ILM No specific data. Hvb Blocker No specific data.

Hyb Buffer Adverse symptoms may include the following:

> irritation redness

Hyb Enhancer Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. Avida Index Primer Pairs 97-192 No specific data.

for ILM

: Nuclease-Free Water No specific data. Ingestion

No specific data. Library Wash Buffer Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. End Prep Buffer No specific data. No specific data. End Prep Enzyme No specific data. Ligation Buffer Ligation Enzyme No specific data. No specific data. Adapter for ILM Hyb Blocker No specific data. Hyb Buffer No specific data.

Hyb Enhancer Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. Avida Index Primer Pairs 97-192 No specific data.

for ILM

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

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Notes to physician	Not	tes 1	to i	phy	ysi	C	an
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: Nuclease-Free Water Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Library Wash Buffer Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Hyb Wash Buffer 1 Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Hyb Wash Buffer 2 Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Resuspension Buffer Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

End Prep Buffer 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.

End Prep Enzyme Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Ligation Buffer 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.

Ligation Enzyme Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Adapter for ILM Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Hyb Blocker Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Hyb Buffer 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.

Hyb Enhancer 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.

2X Amplification Mastermix Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Library Binding Beads Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Capture Beads Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

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for ILM

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been

ingested or inhaled.

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Specific treatments

: Nuclease-Free Water No specific treatment. Library Wash Buffer No specific treatment. Hvb Wash Buffer 1 No specific treatment. Hyb Wash Buffer 2 No specific treatment. Resuspension Buffer No specific treatment. End Prep Buffer No specific treatment. End Prep Enzyme No specific treatment. Ligation Buffer No specific treatment. No specific treatment. Ligation Enzyme Adapter for ILM No specific treatment. Hyb Blocker No specific treatment. Hyb Buffer No specific treatment. No specific treatment. Hvb Enhancer 2X Amplification Mastermix No specific treatment. Library Binding Beads No specific treatment. Capture Beads No specific treatment. No specific treatment.

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Protection of first-aiders

: Nuclease-Free Water

No action shall be taken involving any personal risk or without suitable training.

Library Wash Buffer No action shall be taken involving any personal risk

or without suitable training.

Hyb Wash Buffer 1 No action shall be taken involving any personal risk or without suitable training.

No action shall be taken involving any personal risk Hyb Wash Buffer 2

or without suitable training.

No action shall be taken involving any personal risk Resuspension Buffer

or without suitable training.

End Prep Buffer No action shall be taken involving any personal risk

or without suitable training.

End Prep Enzyme 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.

Ligation Buffer No action shall be taken involving any personal risk

or without suitable training.

Ligation Enzyme 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.

Adapter for ILM No action shall be taken involving any personal risk

or without suitable training.

No action shall be taken involving any personal risk Hyb Blocker

or without suitable training.

Hyb Buffer No action shall be taken involving any personal risk

or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth

resuscitation.

No action shall be taken involving any personal risk Hyb Enhancer

or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water

before removing it, or wear gloves.

No action shall be taken involving any personal risk 2X Amplification Mastermix

or without suitable training.

No action shall be taken involving any personal risk Library Binding Beads

or without suitable training.

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Capture Beads No action shall be taken involving any personal risk

or without suitable training.

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for ILM

No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Nuclease-Free Water Use an extinguishing agent suitable for the

surrounding fire.

Library Wash Buffer Use an extinguishing agent suitable for the

surrounding fire.

Hyb Wash Buffer 1 Use an extinguishing agent suitable for the

surrounding fire.

Hyb Wash Buffer 2 Use an extinguishing agent suitable for the

surrounding fire.

Resuspension Buffer Use an extinguishing agent suitable for the

surrounding fire.

End Prep Buffer Use an extinguishing agent suitable for the

surrounding fire.

End Prep Enzyme

Use an extinguishing agent suitable for the

surrounding fire.

Ligation Buffer Use an extinguishing agent suitable for the

surrounding fire.

Ligation Enzyme Use an extinguishing agent suitable for the

surrounding fire.

Adapter for ILM Use an extinguishing agent suitable for the

surrounding fire.

Hyb Blocker Use an extinguishing agent suitable for the

surrounding fire.

Hyb Buffer Use an extinguishing agent suitable for the

surrounding fire.

Hyb Enhancer Use an extinguishing agent suitable for the

surrounding fire.

surrounding fire.

Library Binding Beads

Use an extinguishing agent suitable for the

surrounding fire.

Capture Beads Use an extinguishing agent suitable for the

surrounding fire.

Avida Index Primer Pairs 97-192

for ILM

Use an extinguishing agent suitable for the

surrounding fire.

Unsuitable extinguishing media

Nuclease-Free Water None known. Library Wash Buffer None known. Hyb Wash Buffer 1 None known. Hyb Wash Buffer 2 None known. Resuspension Buffer None known. End Prep Buffer None known. End Prep Enzyme None known. Ligation Buffer None known. Ligation Enzyme None known. Adapter for ILM None known. Hyb Blocker None known. Hyb Buffer None known. Hyb Enhancer None known. 2X Amplification Mastermix None known. Library Binding Beads None known. Capture Beads None known.

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None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur : Nuclease-Free Water

and the container may burst.

Library Wash Buffer In a fire or if heated, a pressure increase will occur

and the container may burst.

Hyb Wash Buffer 1 In a fire or if heated, a pressure increase will occur

and the container may burst.

Hyb Wash Buffer 2 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 Resuspension Buffer

and the container may burst.

End Prep Buffer 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.

End Prep Enzyme 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 Ligation Buffer

and the container may burst.

In a fire or if heated, a pressure increase will occur Ligation Enzyme

and the container may burst.

Adapter for ILM In a fire or if heated, a pressure increase will occur

and the container may burst.

Hyb Blocker In a fire or if heated, a pressure increase will occur

and the container may burst.

Hyb Buffer 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.

Hyb Enhancer 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 2X Amplification Mastermix

and the container may burst.

Library Binding Beads 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 Capture Beads

and the container may burst.

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for ILM

In a fire or if heated, a pressure increase will occur

and the container may burst.

Hazardous thermal : Nuclease-Free Water Library Wash Buffer decomposition products

No specific data.

Decomposition products may include the following

materials: carbon dioxide carbon monoxide halogenated compounds

metal oxide/oxides Hyb Wash Buffer 1 Decomposition products may include the following

materials:

halogenated compounds metal oxide/oxides No specific data.

Hyb Wash Buffer 2 Resuspension Buffer No specific data.

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End Prep Buffer Decomposition products may include the following

materials: carbon dioxide carbon monoxide nitrogen oxides

halogenated compounds metal oxide/oxides

End Prep Enzyme Decomposition products may include the following

materials: carbon dioxide carbon monoxide

Ligation Buffer Decomposition products may include the following

materials: carbon dioxide carbon monoxide nitrogen oxides

halogenated compounds

Ligation Enzyme Decomposition products may include the following

materials: carbon dioxide carbon monoxide

Adapter for ILM No specific data. Hyb Blocker No specific data.

Hyb Buffer Decomposition products may include the following

materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
phosphorus oxides
halogenated compounds

metal oxide/oxides

Hyb Enhancer Decomposition products may include the following

materials: carbon dioxide carbon monoxide nitrogen oxides

2X Amplification Mastermix Decomposition products may include the following

materials: carbon dioxide carbon monoxide

Library Binding Beads Decomposition products may include the following

materials: carbon dioxide carbon monoxide halogenated compounds metal oxide/oxides No specific data.

Capture Beads

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for ILM

No specific data.

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Nuclease-Free Water

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.

Library Wash Buffer 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

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without suitable training.

Hyb Wash Buffer 1 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 Wash Buffer 2 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.

Resuspension Buffer 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.

End Prep Buffer 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.

End Prep Enzyme 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.

Ligation Buffer 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.

Ligation Enzyme 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.

Adapter for 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.

Hyb Blocker 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 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 Enhancer 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.

2X Amplification Mastermix 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.

Library Binding Beads 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.

Capture Beads 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.

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for 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

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Special protective equipment for fire-fighters

: Nuclease-Free Water Fire-fighters sho

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

without suitable training.

Library Wash Buffer Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Hyb Wash Buffer 1 Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Hyb Wash Buffer 2 Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Resuspension Buffer Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

End Prep Buffer Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

End Prep Enzyme Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Ligation Buffer Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Ligation Enzyme Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Adapter for ILM Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Hyb Blocker Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Hyb Buffer Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Hyb Enhancer Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

2X Amplification Mastermix Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

Library Binding Beads Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

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pressure mode.

Capture Beads Fire-fighters should wear appropriate protective

equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

pressure mode.

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for ILM

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

: Nuclease-Free Water

Library Wash Buffer

Hyb Wash Buffer 1

Hyb Wash Buffer 2

Resuspension Buffer

End Prep Buffer

End Prep Enzyme

No action shall be taken involving any personal risk or without suitable training. Evacuate

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal

risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal

risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and

unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and

unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate

personal protective equipment.

Ligation Buffer No action shall be taken involving any personal risk or without suitable training. Evacuate

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Ligation Enzyme

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate

personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal

risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate

personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when

ventilation is inadequate. Put on appropriate personal protective equipment.

2X Amplification Mastermix No action shall be taken involving any personal

> risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal

> risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal protective equipment. No action shall be taken involving any personal

risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on

Adapter for ILM

Hyb Blocker

Hyb Buffer

Hyb Enhancer

Library Binding Beads

Capture Beads

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appropriate personal protective equipment. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on

For emergency responders : Nuclease-Free Water

Library Wash Buffer

Hyb Wash Buffer 1

Hyb Wash Buffer 2

Resuspension Buffer

End Prep Buffer

End Prep Enzyme

Ligation Buffer

Ligation Enzyme

Adapter for ILM

Hyb Blocker

Hyb Buffer

Hyb Enhancer

2X Amplification Mastermix

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

If specialized clothing is required to deal with the

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Capture Beads

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

spillage, take note of any information in Section 8

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

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

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for ILM

6.2 Environmental precautions

: Nuclease-Free Water Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

Library Wash Buffer Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

Hyb Wash Buffer 1 Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Hyb Wash Buffer 2 Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Resuspension Buffer Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

End Prep Buffer Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air). Water polluting material. May be harmful to the environment if released in

large quantities.

End Prep Enzyme Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Ligation Buffer Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Ligation Enzyme Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers.

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Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Adapter for ILM Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Hyb Blocker Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Hyb Buffer Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air). Water polluting material. May be harmful to the environment if released in

large quantities.

Hyb Enhancer Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

waterways, soil or air).

2X Amplification Mastermix Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers,

Saused environmental polition (se

waterways, soil or air).

Library Binding Beads Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

Capture Beads Avoid dispersal of spilled material and runoff and

contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

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for ILM

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has

caused environmental pollution (sewers,

waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Nuclease-Free Water

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.

Library Wash Buffer Stop leak if without risk. Move containers from spill

area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste

disposal contractor.

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Hyb Wash Buffer 1 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.

Hyb Wash Buffer 2 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.

Resuspension Buffer 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.

End Prep Buffer 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.

End Prep Enzyme 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.

Ligation Buffer 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.

Ligation Enzyme 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.

Adapter for 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.

Hyb Blocker 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.

Hyb Buffer Stop leak if without risk. Move containers from spill

area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste

disposal contractor.

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Hyb Enhancer 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.

2X Amplification Mastermix 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.

Library Binding Beads 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.

Stop leak if without risk. Move containers from spill Capture Beads

> 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.

Avida Index Primer Pairs 97-192

for 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.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures : Nuclease-Free Water

Put on appropriate personal protective equipment

(see Section 8).

Library Wash Buffer Put on appropriate personal protective equipment

(see Section 8).

Hyb Wash Buffer 1 Put on appropriate personal protective equipment

(see Section 8).

Hyb Wash Buffer 2 Put on appropriate personal protective equipment

(see Section 8).

Resuspension Buffer Put on appropriate personal protective equipment

(see Section 8).

Put on appropriate personal protective equipment End Prep Buffer

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

reuse container.

End Prep Enzyme Put on appropriate personal protective equipment

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

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Ligation Buffer

Hyb Enhancer

Ligation Enzyme

not reuse container.

Put on appropriate personal protective equipment

(see Section 8).

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

not reuse container.

Adapter for ILM Put on appropriate personal protective equipment

(see Section 8).

Hyb Blocker Put on appropriate personal protective equipment

(see Section 8).

Hyb Buffer Put on appropriate personal protective equipment

(see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and

can be hazardous. Do not reuse container.

Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety

precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

Put on appropriate personal protective equipment (see Section 8).

Library Binding Beads Put on appropriate personal protective equipment

(see Section 8).

Capture Beads Put on appropriate personal protective equipment

(see Section 8).

Avida Index Primer Pairs 97-192 Put on appropriate personal protective equipment

(see Section 8).

Advice on general occupational hygiene

: Nuclease-Free Water

for ILM

2X Amplification Mastermix

Library Wash Buffer

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. 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

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Hyb Wash Buffer 1

Hyb Wash Buffer 2

Resuspension Buffer

End Prep Buffer

End Prep Enzyme

Ligation Buffer

Ligation Enzyme

Adapter for ILM

Hyb Blocker

before entering eating areas. See also Section 8 for additional information on hygiene measures. 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. 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. 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. 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. 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. 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. 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. 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. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and

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Hyb Buffer

Hyb Enhancer

2X Amplification Mastermix

Library Binding Beads

Capture Beads

Avida Index Primer Pairs 97-192 for ILM

: Nuclease-Free Water

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

Store in accordance with local regulations. Store in

Library Wash Buffer

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. 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. 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. 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. 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. 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. 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

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Hyb Wash Buffer 1

Hyb Wash Buffer 2

Resuspension Buffer

End Prep Buffer

End Prep Enzyme

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

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Ligation Buffer

Ligation Enzyme

Adapter for ILM

Hyb Blocker

Hyb Buffer

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

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Hyb Enhancer

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 unlabeled 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

2X Amplification Mastermix

original container protected from direct sunlight in a dry, cool and well-ventilated area, away from

incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. 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 until ready for use. Containers that have been

and drink. Keep container tightly closed and sealed opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a

dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for

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

incompatible materials before handling or use.

Library Binding Beads

Capture Beads

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7.3 Specific end use(s)

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Section 7. Handling and storage

Recommendations

Nuclease-Free Water Industrial applications, Professional applications. Library Wash Buffer Industrial applications, Professional applications. Hyb Wash Buffer 1 Industrial applications, Professional applications. Hyb Wash Buffer 2 Industrial applications, Professional applications. Industrial applications, Professional applications. Resuspension Buffer Industrial applications, Professional applications. **End Prep Buffer** End Prep Enzyme Industrial applications, Professional applications. Ligation Buffer Industrial applications, Professional applications. Ligation Enzyme Industrial applications, Professional applications. Adapter for ILM Industrial applications, Professional applications. Hyb Blocker Industrial applications, Professional applications. Industrial applications, Professional applications. Hyb Buffer Industrial applications, Professional applications. Hyb Enhancer 2X Amplification Mastermix Industrial applications, Professional applications. Library Binding Beads Industrial applications, Professional applications. Capture Beads Industrial applications, Professional applications. Avida Index Primer Pairs 97-192 Industrial applications, Professional applications. for ILM

Industrial sector specific solutions

Nuclease-Free Water Not available. Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hvb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Section 8. Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Nuclease-Free Water water	None.
Hyb Wash Buffer 1 Sodium dodecyl sulphate	None.
Hyb Wash Buffer 2 Poly(oxy-1,2-ethanediyl), .alpha[(1,1,3,3-tetramethylbutyl)phenyl] omegahydroxy-	None.
End Prep Buffer Magnesium chloride	None.
End Prep Enzyme Glycerol	OSHA PEL 1989 (United States, 3/1989). TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

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Section 8. Exposure controls/personal protection

TWA: 10 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 5/2018).

TWA: 5 mg/m³ 8 hours. Form: Respirable

fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust **CAL OSHA PEL (United States, 5/2018).** TWA: 5 mg/m³ 8 hours. Form: respirable

IWA: 5 mg/m³ 8 hours. Form: respirable fraction

TWA: 10 mg/m³ 8 hours. Form: total dust

Ligation Enzyme

Glycerol

OSHA PEL 1989 (United States, 3/1989).

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 10 mg/m³ 8 hours. Form: Total dust **OSHA PEL (United States, 5/2018).**

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust CAL OSHA PEL (United States, 5/2018).

TWA: 5 mg/m³ 8 hours. Form: respirable fraction

TWA: 10 mg/m³ 8 hours. Form: total dust

Hyb Buffer

tetramethylammonium chloride

Dextran sulfate sodium

Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-. omega.-hydroxy-

Hyb Enhancer

Formamide

None.

None.

None.

ACGIH TLV (United States, 1/2023).

Absorbed through skin.

TWA: 1 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 20 ppm 8 hours. TWA: 30 mg/m³ 8 hours. STEL: 30 ppm 15 minutes. STEL: 45 mg/m³ 15 minutes.

NIOSH REL (United States, 10/2020).

Absorbed through skin.

TWA: 10 ppm 10 hours. TWA: 15 mg/m³ 10 hours.

CAL OSHA PEL (United States, 5/2018).

Absorbed through skin.

TWA: 18 mg/m³ 8 hours. TWA: 10 ppm 8 hours.

2X Amplification Mastermix

Glycerol

OSHA PEL 1989 (United States, 3/1989).

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 10 mg/m³ 8 hours. Form: Total dust OSHA PEL (United States, 5/2018).

TWA: 5 mg/m³ 8 hours. Form: Respirable fraction

TWA: 15 mg/m³ 8 hours. Form: Total dust CAL OSHA PEL (United States, 5/2018).

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Section 8. Exposure controls/personal protection

TWA: 5 mg/m³ 8 hours. Form: respirable

fraction

TWA: 10 mg/m³ 8 hours. Form: total dust

Biological exposure indices

No exposure indices known.

8.2 Exposure controls

Appropriate engineering controls

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

Environmental exposure controls

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

Individual protection 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 sideshields.

Skin protection

Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties and safety characteristics

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

Appearance

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	ica		

: Nuclease-Free Water Liquid. Library Wash Buffer Liquid. Hyb Wash Buffer 1 Liquid. Hyb Wash Buffer 2 Liquid. Resuspension Buffer Liquid. End Prep Buffer Liquid. End Prep Enzyme Liquid. Ligation Buffer Liquid. Ligation Enzyme Liquid. Adapter for ILM Liquid. Hyb Blocker Liquid. Hyb Buffer Liquid. Hyb Enhancer Liquid. 2X Amplification Mastermix Liquid. Library Binding Beads Liquid. Capture Beads Liquid. Avida Index Primer Pairs 97-192 Liquid. for ILM

Color

Nuclease-Free Water Colorless. Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Not available. Hyb Wash Buffer 2 Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hvb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Odor

Nuclease-Free Water Odorless. Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

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: Nuclease-Free Water Not available. Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available.

Library Wash Buffer

for ILM

: Nuclease-Free Water 7

Hyb Wash Buffer 1 7.2 to 7.6 Hyb Wash Buffer 2 7.2 to 7.6 Resuspension Buffer End Prep Buffer 8 End Prep Enzyme 7.5 Ligation Buffer Ligation Enzyme 7.5 8 Adapter for ILM Hyb Blocker 8 Hyb Buffer 7.5

Not available.

Hyb Enhancer Not available. 2X Amplification Mastermix Not available.

Library Binding Beads

Capture Beads Not available.

Avida Index Primer Pairs 97-192

for ILM

Melting point/freezing point

Nuclease-Free Water 0°C (32°F) Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 0°C (32°F) Resuspension Buffer 0°C (32°F) End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM 0°C (32°F) 0°C (32°F) Hyb Blocker Hyb Buffer Not available. Hvb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 0°C (32°F)

for ILM

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Boiling point, initial boiling point, and boiling range

100°C (212°F) Nuclease-Free Water Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 100°C (212°F) 100°C (212°F) Resuspension Buffer **End Prep Buffer** Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. 100°C (212°F) Adapter for ILM Hyb Blocker 100°C (212°F) Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 100°C (212°F) for ILM

Flash point

:		Closed cup			Open cup		
Ingredient name	°C	°F	Method	°C	°F	Method	
End Prep Enzyme							
Glycerol	-	-	-	177	350.6	-	
Ligation Enzyme							
Glycerol	-	-	-	177	350.6	-	
Hyb Enhancer							
Formamide	150	302	-	152	305.6	DIN EN ISO 2592	
2X Amplification Mastermix							
Glycerol	-	-	-	177	350.6	-	

Evaporation rate

: Nuclease-Free Water Not available. Not available. Library Wash Buffer Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. **End Prep Buffer** Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

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Flammability

: Nuclease-Free Water Not applicable. Library Wash Buffer Not applicable. Not applicable. Hyb Wash Buffer 1 Hyb Wash Buffer 2 Not applicable. Not applicable. Resuspension Buffer End Prep Buffer Not applicable. Not applicable. End Prep Enzyme Ligation Buffer Not applicable. Not applicable. Ligation Enzyme Not applicable. Adapter for ILM Not applicable. Hyb Blocker Hyb Buffer Not applicable. Hyb Enhancer Not applicable. 2X Amplification Mastermix Not applicable. Library Binding Beads Not applicable. Capture Beads Not applicable. Avida Index Primer Pairs 97-192 Not applicable. for ILM

Lower and upper explosion limit/flammability limit

Nuclease-Free Water Not available. Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Not available. Hyb Wash Buffer 2 Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. **Ligation Buffer** Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Vapor pressure

: Nuclease-Free Water 2.3 kPa (17.5 mm Hg) [room temperature] 12.3 kPa (92.258 mm Hg) [50°C (122°F)]

	Vapor Pressure at 20°C			Vapor pressure at 50°C		
Ingredient name	mm Hg	kPa	Method	mm Hg	kPa	Method
Library Wash Buffer						
water	17.5	2.3	-	92.258	12.3	-
Hyb Wash Buffer 1						
water	17.5	2.3	-	92.258	12.3	-
Hyb Wash Buffer 2						
water	17.5	2.3	-	92.258	12.3	-
Resuspension						

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and chemical	brobe	, ucs	and Said	ty Cin	aracic	Houcs
Buffer						
water	17.5	2.3	-	92.258	12.3	-
End Prep Buffer						
water	17.5	2.3	-	92.258	12.3	-
End Prep Enzyme						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
Ligation Buffer						
water	17.5	2.3	-	92.258	12.3	-
Ligation Enzyme						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
Adapter for ILM						
water	17.5	2.3	-	92.258	12.3	-
Hyb Blocker						
water	17.5	2.3	-	92.258	12.3	-
Hyb Buffer						
water	17.5	2.3	-	92.258	12.3	-
tetramethylammonium chloride	0.000000001	0.00000000013	EU A.4	-	-	-
Hyb Enhancer						
Formamide	0.045	0.006	-	-	-	-
2X Amplification Mastermix						
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
Library Binding Beads						
water	17.5	2.3	-	92.258	12.3	-

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Capture Beads water	17.5	2.3	-	92.258	12.3	-
Avida Index Primer Pairs 97-192 for ILM						
water	17.5	2.3	-	92.258	12.3	-

Relative vapor density

: Nuclease-Free Water 0.62 [Air = 1]Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. **End Prep Buffer** Not available. End Prep Enzyme Not available. **Ligation Buffer** Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Relative density

: Nuclease-Free Water 1

Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Solubility(ies)

Media	Result	
Nuclease-Free Water		
water	Soluble	
Library Wash Buffer		
water	Soluble	
Hyb Wash Buffer 1		
water	Soluble	
Hyb Wash Buffer 2		
water	Soluble	
Resuspension Buffer		
water	Soluble	
End Pron Buffor		

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water	Soluble
End Prep Enzyme	
water	Soluble
Ligation Buffer	
water	Soluble
Ligation Enzyme	
water	Soluble
Adapter for ILM	
water	Soluble
Hyb Blocker	
water	Soluble
Hyb Buffer	O a livitat a
water	Soluble
Hyb Enhancer water	Soluble
Library Binding Beads	Soluble
water	Soluble
Capture Beads	Colubic
water	Soluble
Avida Index Primer Pairs 97-192 for ILM	
water	Soluble

Partition coefficient: n-octanol/water

-1.38 : Nuclease-Free Water Library Wash Buffer Not applicable. Hyb Wash Buffer 1 Not applicable. Not applicable. Hyb Wash Buffer 2 Resuspension Buffer Not applicable. End Prep Buffer Not applicable. Not applicable. End Prep Enzyme Ligation Buffer Not applicable. Ligation Enzyme Not applicable. Adapter for ILM Not applicable. Hyb Blocker Not applicable. Hyb Buffer Not applicable. Hyb Enhancer Not applicable. 2X Amplification Mastermix Not applicable. Library Binding Beads Not applicable. Capture Beads Not applicable. Avida Index Primer Pairs 97-192 Not applicable. for ILM

Auto-ignition temperature

Ingredient name	°C	°F	Method
End Prep Enzyme			
Glycerol	370	698	-
Ligation Enzyme			
Glycerol	370	698	-
Hyb Enhancer			
Formamide	>500	>932	ASTM D 2155-66
2X Amplification Mastermix			
Glycerol	370	698	-

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Decomposition temperature

Nuclease-Free Water Not available. Library Wash Buffer Not available. Hvb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. **End Prep Buffer** Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Viscosity

Nuclease-Free Water Not available. Library Wash Buffer Not available. Hyb Wash Buffer 1 Not available. Hyb Wash Buffer 2 Not available. Resuspension Buffer Not available. End Prep Buffer Not available. End Prep Enzyme Not available. Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Avida Index Primer Pairs 97-192 Not available. for ILM

Particle characteristics Median particle size

Nuclease-Free Water Not applicable. Not applicable. Library Wash Buffer Hyb Wash Buffer 1 Not applicable. Hyb Wash Buffer 2 Not applicable. Resuspension Buffer Not applicable. End Prep Buffer Not applicable. Not applicable. End Prep Enzyme Ligation Buffer Not applicable. Not applicable. Ligation Enzyme Not applicable. Adapter for ILM Hyb Blocker Not applicable. Hyb Buffer Not applicable. Not applicable. Hyb Enhancer Not applicable. 2X Amplification Mastermix Library Binding Beads Not applicable. Capture Beads Not applicable. Avida Index Primer Pairs 97-192 Not applicable. for ILM

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Section 10. Stability and reactivity

10.1 Reactivity

: Nuclease-Free Water No specific test data related to reactivity available

for this product or its ingredients.

No specific test data related to reactivity available Library Wash Buffer

for this product or its ingredients.

Hyb Wash Buffer 1 No specific test data related to reactivity available

for this product or its ingredients.

Hyb Wash Buffer 2 No specific test data related to reactivity available

for this product or its ingredients.

No specific test data related to reactivity available Resuspension Buffer

for this product or its ingredients.

End Prep Buffer No specific test data related to reactivity available

for this product or its ingredients.

End Prep Enzyme No specific test data related to reactivity available

for this product or its ingredients.

No specific test data related to reactivity available Ligation Buffer

for this product or its ingredients.

No specific test data related to reactivity available Ligation Enzyme

for this product or its ingredients.

No specific test data related to reactivity available Adapter for ILM

for this product or its ingredients.

No specific test data related to reactivity available Hyb Blocker

for this product or its ingredients.

Hyb Buffer No specific test data related to reactivity available

for this product or its ingredients.

Hyb Enhancer No specific test data related to reactivity available

for this product or its ingredients.

2X Amplification Mastermix No specific test data related to reactivity available

for this product or its ingredients.

No specific test data related to reactivity available Library Binding Beads

for this product or its ingredients.

Capture Beads No specific test data related to reactivity available

for this product or its ingredients.

Avida Index Primer Pairs 97-192

for ILM

No specific test data related to reactivity available

for this product or its ingredients.

10.2 Chemical stability

: Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer Hyb Enhancer 2X Amplification Mastermix

Library Binding Beads

Capture Beads

Avida Index Primer Pairs 97-192

for ILM

The product is stable. The product is stable.

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for ILM

Capture Beads

for ILM

Avida Index Primer Pairs 97-192

Section 10. Stability and reactivity

10.3 Possibility of hazardous reactions

: Nuclease-Free Water Under normal conditions of storage and use,

hazardous reactions will not occur.

Library Wash Buffer Under normal conditions of storage and use,

hazardous reactions will not occur.

Hyb Wash Buffer 1 Under normal conditions of storage and use,

hazardous reactions will not occur.

Hyb Wash Buffer 2 Under normal conditions of storage and use,

hazardous reactions will not occur.

Resuspension Buffer Under normal conditions of storage and use,

hazardous reactions will not occur.

End Prep Buffer Under normal conditions of storage and use,

hazardous reactions will not occur.

End Prep Enzyme Under normal conditions of storage and use,

hazardous reactions will not occur.

Ligation Buffer Under normal conditions of storage and use,

hazardous reactions will not occur.

Ligation Enzyme Under normal conditions of storage and use,

hazardous reactions will not occur.

hazardous reactions will not occur.

Hyb Blocker Under normal conditions of storage and use,

hazardous reactions will not occur.

Hyb Buffer Under normal conditions of storage and use,

hazardous reactions will not occur.

Hyb Enhancer Under normal conditions of storage and use,

hazardous reactions will not occur.

2X Amplification Mastermix Under normal conditions of storage and use,

hazardous reactions will not occur.

Library Binding Beads Under normal conditions of storage and use,

hazardous reactions will not occur.

Capture Beads Under normal conditions of storage and use,

hazardous reactions will not occur.

No specific data.

No specific data.

hazardous reactions will not occur.

10.4 Conditions to avoid

: Nuclease-Free Water No specific data. No specific data. Library Wash Buffer No specific data. Hyb Wash Buffer 1 Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. End Prep Buffer No specific data. End Prep Enzyme No specific data. Ligation Buffer No specific data. Ligation Enzyme No specific data. Adapter for ILM No specific data. Hyb Blocker No specific data. Hyb Buffer No specific data. Hyb Enhancer No specific data. 2X Amplification Mastermix No specific data. Library Binding Beads No specific data.

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Section 10. Stability and reactivity

10.5 Incompatible materials

: Nuclease-Free Water May react or be incompatible with oxidizing

materials.

May react or be incompatible with oxidizing Library Wash Buffer

materials.

May react or be incompatible with oxidizing Hyb Wash Buffer 1

materials.

Hyb Wash Buffer 2 May react or be incompatible with oxidizing

materials.

May react or be incompatible with oxidizing Resuspension Buffer

materials.

End Prep Buffer May react or be incompatible with oxidizing

materials.

End Prep Enzyme May react or be incompatible with oxidizing

materials.

May react or be incompatible with oxidizing **Ligation Buffer**

materials.

Ligation Enzyme May react or be incompatible with oxidizing

materials.

Adapter for ILM May react or be incompatible with oxidizing

materials.

Hyb Blocker May react or be incompatible with oxidizing

materials.

Hyb Buffer May react or be incompatible with oxidizing

materials.

Hyb Enhancer May react or be incompatible with oxidizing

materials.

2X Amplification Mastermix May react or be incompatible with oxidizing

materials.

May react or be incompatible with oxidizing **Library Binding Beads** materials.

May react or be incompatible with oxidizing Capture Beads

Avida Index Primer Pairs 97-192

for ILM

May react or be incompatible with oxidizing

materials.

10.6 Hazardous decomposition products : Nuclease-Free Water Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Under normal conditions of storage and use, Library Wash Buffer

hazardous decomposition products should not be

produced.

Hyb Wash Buffer 1 Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Under normal conditions of storage and use, Hyb Wash Buffer 2

hazardous decomposition products should not be

produced.

Under normal conditions of storage and use, Resuspension Buffer

hazardous decomposition products should not be

produced.

End Prep Buffer Under normal conditions of storage and use,

hazardous decomposition products should not be

End Prep Enzyme Under normal conditions of storage and use,

hazardous decomposition products should not be

Ligation Buffer Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Under normal conditions of storage and use, Ligation Enzyme

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hazardous decomposition products should not be produced. Adapter for ILM Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hyb Blocker Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hyb Buffer Under normal conditions of storage and use, hazardous decomposition products should not be Under normal conditions of storage and use, Hyb Enhancer hazardous decomposition products should not be produced. 2X Amplification Mastermix Under normal conditions of storage and use, hazardous decomposition products should not be produced. Library Binding Beads Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, Capture Beads hazardous decomposition products should not be produced. Avida Index Primer Pairs 97-192 Under normal conditions of storage and use,

produced.

hazardous decomposition products should not be

Section 11. Toxicological information

for ILM

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hyb Wash Buffer 1				
Sodium dodecyl sulphate	LD50 Oral	Rat	1288 mg/kg	-
Hyb Wash Buffer 2				
Poly(oxy-1,2-ethanediyl), .	LD50 Oral	Rat	2800 mg/kg	-
alpha[
(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-				
prierry, j.e.n.ega. rryarexy				
End Prep Buffer				
Magnesium chloride	LD50 Dermal	Rat - Male, Female	>2000 mg/kg	-
	LD50 Oral	Rat	2800 mg/kg	-
			0 0	
End Prep Enzyme			40000 #	
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Ligation Enzyme				
Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Hyb Buffer				
tetramethylammonium	LD50 Dermal	Rabbit - Male,	200 to 500 mg/kg	_
chloride		Female		
	LD50 Oral	Rat	50 mg/kg	-
Dextran sulfate sodium	LD50 Oral	Rat	20600 mg/kg	-
Poly(oxy-1,2-ethanediyl), . alpha[LD50 Oral	Rat	2800 mg/kg	-

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(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-				
Hyb Enhancer Formamide	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rabbit	>21 mg/l 17 g/kg 5570 mg/kg	4 hours -
2X Amplification Mastermix Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hyb Wash Buffer 1					
Sodium dodecyl sulphate	Eyes - Mild irritant	Rabbit	-	250 ug	-
,	Eyes - Moderate irritant	Rabbit	-	10 mg	-
	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
				mg	
	Skin - Mild irritant	Guinea pig	-	24 hours 25	-
	Skin - Mild irritant	Rabbit	_	mg 24 hours 50	_
	OKIT - WIIIG IITIGITE	Rabbit	_	mg	
	Skin - Moderate irritant	Mouse	_	24 hours 25	_
				mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 25	-
				mg	
Hyb Wash Buffer 2	Even Sovere irritent	Rabbit		1 %	
Poly(oxy-1,2-ethanediyl), . alpha[Eyes - Severe irritant	Rabbit	-	1 70	-
(1,1,3,3-tetramethylbutyl)					
phenyl]omegahydroxy-					
End Prep Enzyme					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Olein Mildimiterat	Dabbit		mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
Ligation Enzyme					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
Hyb Buffer					
Poly(oxy-1,2-ethanediyl), .	Eyes - Severe irritant	Rabbit	_	1 %	_
alpha[Lycs - ocvoie iiiitant	Tabbit	=	1 70	
(1,1,3,3-tetramethylbutyl)					
phenyl]omegahydroxy-					
2X Amplification Mastermix				041 555	
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Skin - Mild irritant	Rabbit		mg 24 hours 500	
	OKIII - WIIIU IIIIIAIII	Tabbit	-	mg	-
				פייין	

Sensitization

Not available.

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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)

Name	Category	Route of exposure	Target organs
Hyb Wash Buffer 1 Sodium dodecyl sulphate	Category 3	-	Respiratory tract irritation
Hyb Buffer tetramethylammonium chloride	Category 1	oral	central nervous system (CNS)
Dextran sulfate sodium	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	3 3 3	Route of exposure	Target organs
Hyb Enhancer Formamide	Category 2	oral	blood

Aspiration hazard

Not available.

Information on the likely routes of exposure

Nuclease-Free Water
 Library Wash Buffer
 Hyb Wash Buffer 1
 Hyb Wash Buffer 2
 Resuspension Buffer Not available.

End Prep Buffer Routes of entry anticipated: Oral, Dermal,

Inhalation, Eyes.

End Prep Enzyme Routes of entry anticipated: Oral, Dermal,

Inhalation, Eyes.

Ligation Buffer Not available.

Ligation Enzyme Routes of entry anticipated: Oral, Dermal,

Inhalation, Eyes.

Adapter for ILM Routes of entry anticipated: Oral, Dermal,

Inhalation, Eyes.

Hyb Blocker Not available.

Hyb Buffer Routes of entry anticipated: Oral, Dermal,

Inhalation, Eyes.

Hyb Enhancer Routes of entry anticipated: Oral, Dermal,

Inhalation, Eyes. Not available.

Not available.

2X Amplification Mastermix Library Binding Beads

Capture Beads Not available.

Avida Index Primer Pairs 97-192 Not available.

for ILM

Potential acute health effects

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Eye contact

: Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads Avida Index Primer Pairs 97-192 for II M

No known significant effects or critical hazards. Causes eye irritation.

No known significant effects or critical hazards. Causes eye irritation.

No known significant effects or critical hazards. No known significant effects or critical hazards.

Inhalation

: Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer No known significant effects or critical hazards. Causes damage to organs following a single exposure if inhaled.

Hyb Enhancer
2X Amplification Mastermix
Library Binding Beads
Capture Beads
Avida Index Primer Pairs 97-192
for ILM

No known significant effects or critical hazards. No known significant effects or critical hazards.

Skin contact

: Nuclease-Free Water
Library Wash Buffer
Hyb Wash Buffer 1
Hyb Wash Buffer 2
Resuspension Buffer
End Prep Buffer
End Prep Enzyme
Ligation Buffer
Ligation Enzyme
Adapter for ILM
Hyb Blocker
Hyb Buffer

No known significant effects or critical hazards. Causes damage to organs following a single exposure in contact with skin. Causes skin irritation.

Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads Avida Index Primer Pairs 97-192 for ILM No known significant effects or critical hazards. No known significant effects or critical hazards.

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Ingestion

: Nuclease-Free Water No known significant effects or critical hazards. Library Wash Buffer No known significant effects or critical hazards. No known significant effects or critical hazards. Hyb Wash Buffer 1 Hvb Wash Buffer 2 No known significant effects or critical hazards. Resuspension Buffer No known significant effects or critical hazards. **End Prep Buffer** No known significant effects or critical hazards. End Prep Enzyme No known significant effects or critical hazards. Ligation Buffer No known significant effects or critical hazards. Ligation Enzyme No known significant effects or critical hazards. Adapter for ILM No known significant effects or critical hazards. Hyb Blocker No known significant effects or critical hazards. Harmful if swallowed. Causes damage to organs Hyb Buffer

following a single exposure if swallowed.

No known significant effects or critical hazards. Hvb Enhancer 2X Amplification Mastermix No known significant effects or critical hazards. No known significant effects or critical hazards. Library Binding Beads Capture Beads No known significant effects or critical hazards. Avida Index Primer Pairs 97-192 No known significant effects or critical hazards.

for ILM

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

No specific data. : Nuclease-Free Water Library Wash Buffer No specific data. Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. End Prep Buffer No specific data.

End Prep Enzyme Adverse symptoms may include the following:

> irritation watering redness

Ligation Buffer No specific data.

Ligation Enzyme Adverse symptoms may include the following:

> irritation watering redness

Adapter for ILM No specific data. Hyb Blocker No specific data.

Adverse symptoms may include the following: Hyb Buffer

pain or irritation

watering redness

Hvb Enhancer No specific data. 2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. Avida Index Primer Pairs 97-192 No specific data.

for ILM

Inhalation Nuclease-Free Water No specific data.

Library Wash Buffer No specific data. Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. End Prep Buffer No specific data. End Prep Enzyme No specific data. **Ligation Buffer** No specific data. Ligation Enzyme No specific data. Adapter for ILM No specific data. Hyb Blocker No specific data. Hyb Buffer No specific data.

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Hyb Enhancer Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. Avida Index Primer Pairs 97-192 No specific data.

for ILM

Skin contact

Nuclease-Free Water No specific data. Library Wash Buffer No specific data. Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer No specific data. End Prep Buffer No specific data. End Prep Enzyme No specific data. Ligation Buffer No specific data. Ligation Enzyme No specific data. Adapter for ILM No specific data. Hyb Blocker No specific data.

Hyb Buffer Adverse symptoms may include the following:

> irritation redness

Hyb Enhancer Adverse symptoms may include the following:

> reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. Avida Index Primer Pairs 97-192 No specific data.

for ILM

Ingestion Nuclease-Free Water No specific data.

> Library Wash Buffer No specific data. Hyb Wash Buffer 1 No specific data. Hyb Wash Buffer 2 No specific data. No specific data. Resuspension Buffer End Prep Buffer No specific data. End Prep Enzyme No specific data. **Ligation Buffer** No specific data. No specific data. Ligation Enzyme Adapter for ILM No specific data. Hyb Blocker No specific data. Hyb Buffer No specific data.

Hyb Enhancer Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix No specific data. Library Binding Beads No specific data. Capture Beads No specific data. Avida Index Primer Pairs 97-192 No specific data.

for ILM

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

: Not available. Potential immediate

effects

Potential delayed effects : Not available.

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Long term exposure

Potential immediate

effects

: Not available.

Potential delayed effects

: Not available.

Potential chronic health effects

General

: Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer Hyb Enhancer

2X Amplification Mastermix Library Binding Beads

Capture Beads

Avida Index Primer Pairs 97-192

for ILM

Carcinogenicity

Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme Ligation Buffer Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer Hyb Enhancer

2X Amplification Mastermix Library Binding Beads

Capture Beads

Avida Index Primer Pairs 97-192

for ILM

Mutagenicity

: Nuclease-Free Water
Library Wash Buffer
Hyb Wash Buffer 1
Hyb Wash Buffer 2
Resuspension Buffer
End Prep Buffer
End Prep Enzyme
Ligation Buffer
Ligation Enzyme
Adapter for ILM
Hyb Blocker
Hyb Buffer
Hyb Enhancer
2X Amplification Mastermix

2X Amplification Mastermix Library Binding Beads

Capture Beads

No known significant effects or critical hazards.
May cause damage to organs through prolonged or

No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

repeated exposure.

No known significant effects or critical hazards. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

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Reproductive toxicity

Avida Index Primer Pairs 97-192 for ILM

No known significant effects or critical hazards.

Nuclease-Free Water Library Wash Buffer Hyb Wash Buffer 1 Hyb Wash Buffer 2 Resuspension Buffer End Prep Buffer End Prep Enzyme **Ligation Buffer** Ligation Enzyme Adapter for ILM Hyb Blocker Hyb Buffer Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads

No known significant effects or critical hazards. May damage fertility or the unborn child. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

No known significant effects or critical hazards.

No known significant effects or critical hazards.

Avida Index Primer Pairs 97-192

for ILM

Numerical measures of toxicity

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapors) (mg/l)	Inhalation (dusts and mists) (mg/ I)
Library Wash Buffer Library Wash Buffer	37635.4	N/A	N/A	N/A	N/A
Hyb Wash Buffer 1 Hyb Wash Buffer 1 Sodium dodecyl sulphate	171428.6 1288	N/A N/A	N/A N/A	N/A N/A	N/A 1.5
Hyb Wash Buffer 2 Poly(oxy-1,2-ethanediyl), .alpha[(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	500	N/A	N/A	N/A	N/A
End Prep Buffer End Prep Buffer Magnesium chloride	229323.3 2800	204752.9 2500	N/A N/A	N/A N/A	N/A N/A
End Prep Enzyme Glycerol	12600	N/A	N/A	N/A	N/A
Ligation Enzyme Glycerol	12600	N/A	N/A	N/A	N/A
Hyb Buffer Hyb Buffer tetramethylammonium chloride Dextran sulfate sodium Poly(oxy-1,2-ethanediyl), .alpha[(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	450.2 50 20600 500	2737.2 300 N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
Hyb Enhancer Formamide	5570	17000	N/A	N/A	N/A

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2X Amplification Mastermix Glycerol	12600	N/A	N/A	N/A	N/A	
Library Binding Beads Library Binding Beads	17855.8	N/A	N/A	N/A	N/A	

Other information

: End Prep Buffer

Adapter for ILM

Adverse symptoms may include the following: May

cause skin sensitization.

Adverse symptoms may include the following: May

cause skin sensitization.

Hyb Enhancer Adverse symptoms may include the following: May

cause eye irritation. May cause skin irritation.

Section 12. Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Hyb Wash Buffer 1			
Sodium dodecyl sulphate	Acute EC50 1200 μg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute LC50 900 μg/l Marine water	Crustaceans - <i>Artemia salina</i> - Adult	48 hours
	Acute LC50 1400 μg/l Fresh water	Daphnia - <i>Daphnia pulex</i> - Neonate	48 hours
	Acute LC50 590 μg/l Fresh water	Fish - <i>Cirrhinus mrigala</i> - Larvae	96 hours
	Chronic NOEC 1.25 mg/l Marine water	Algae - <i>Ulva fasciata</i> - Zoea	96 hours
	Chronic NOEC 1 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	21 days
	Chronic NOEC 3.2 mg/l Fresh water	Daphnia - <i>Daphnia magna</i> - Neonate	21 days
	Chronic NOEC 0.8 mg/l Fresh water	Fish - Gambusia holbrooki	28 days
Hyb Wash Buffer 2			
Poly(oxy-1,2-ethanediyl), . alpha[Acute EC50 210 μg/l Fresh water	Algae - Selenastrum sp.	96 hours
(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-			
[, 1	Acute LC50 10800 μg/l Marine water	Crustaceans - Pandalus montagui - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
End Prep Buffer			
Magnesium chloride	Acute EC50 >100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 180000 μg/l Fresh water	Crustaceans - Eudiaptomus padanus ssp. padanus - Adult	48 hours
	Acute IC50 6.8 mg/l Fresh water	Aquatic plants - Lemna aequinoctialis	96 hours
	Acute LC50 32000 µg/l Fresh water	Daphnia - <i>Daphnia hyalina</i> - Adult	48 hours
	Acute LC50 2120 mg/l Fresh water	Fish - Pimephales promelas	96 hours
	Acute NOEC 100 mg/l Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Chronic NOEC 0.1 mg/l Fresh water	Fish - Cyprinus carpio	35 days
End Prep Enzyme			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

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Ligation Enzyme Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Hyb Buffer tetramethylammonium chloride	Acute LC50 462 mg/l Fresh water	Fish - Pimephales promelas	96 hours
Poly(oxy-1,2-ethanediyl), . alpha[(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-	Acute EC50 210 μg/l Fresh water	Algae - Selenastrum sp.	96 hours
	Acute LC50 10800 μg/l Marine water	Crustaceans - <i>Pandalus montagui</i> - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water Acute LC50 7200 µg/l Fresh water	Daphnia - <i>Daphnia magna</i> Fish - <i>Oncorhynchus mykiss</i>	48 hours 96 hours
Hyb Enhancer			
Formamide	Acute EC50 >500 mg/l Fresh water	Algae	72 hours
	Acute EC50 >500 mg/l Fresh water Acute LC50 6569 mg/l Fresh water	Daphnia Fish	48 hours 96 hours
	Acute NOEC 4640 mg/l Fresh water	Algae	72 hours
	Acute NOEC 4640 mg/l Fresh water	Fish	96 hours
2X Amplification Mastermix	A custo I OFO 54000 mag// Freeh	Fish Open who we also see which	06 h a
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hyb Wash Buffer 1 Sodium dodecyl sulphate	OECD 301B Ready Biodegradability - CO ₂ Evolution Test	95 % - Readily - 28 days	20 mg/l	-
End Prep Enzyme Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Ligation Enzyme Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Hyb Enhancer Formamide	OECD 301A Ready Biodegradability - DOC Die-Away Test	99 % - Readily - 28 days	-	-
2X Amplification Mastermix Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Nuclease-Free Water water	-	-	Readily
Hyb Wash Buffer 1 Sodium dodecyl sulphate	-	-	Readily
Hyb Buffer tetramethylammonium chloride	-	-	Readily
Hyb Enhancer Formamide	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Nuclease-Free Water			
water	-1.38	-	Low
Hyb Wash Buffer 1			
Sodium dodecyl sulphate	-2.03	-	Low
Hyb Wash Buffer 2			
Poly(oxy-1,2-ethanediyl), .	2.7	78.67	Low
alpha[(1,1,3,3-tetramethylbutyl)			
phenyl]omegahydroxy-			
End Prep Enzyme			
Glycerol	-1.76	-	Low
Ligation Enzyme			
Glycerol	-1.76	-	Low
Hyb Buffer			
tetramethylammonium chloride	<-1.6	-	Low
Poly(oxy-1,2-ethanediyl), .	2.7	78.67	Low
alpha[
(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-			
Hyb Enhancer Formamide	-0.82	_	Low
	-0.02		LOVV
2X Amplification Mastermix	4.76		1
Glycerol	-1.76	-	Low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

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

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Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods

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

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

DOT / TDG / Mexico / IMDG / : Not regulated. **IATA**

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

Transport in bulk according : Not available. to IMO instruments

Section 15. Regulatory information

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

U.S. Federal regulations

: TSCA 5(a)2 proposed significant new use rules: Nonylphenol, ethoxylated

TSCA 8(a) PAIR: Formamide; Poly(oxy-1,2-ethanediyl), .alpha.-[

(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-; Nonylphenol, ethoxylated;

Polyoxyethylene octyl phenyl ether

TSCA 8(a) CDR Exempt/Partial exemption: Not determined

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Not listed

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

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Section 15. Regulatory information

DEA List II Chemicals (Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

			SARA 302 TPQ		SARA 304 RQ	
Name	%	EHS	(lbs)	(gallons)	(lbs)	(gallons)
Capture Beads Sodium azide	<0.1	Yes.	500	-	1000	-

SARA 304 RQ : 68000000 lbs / 30872000 kg

SARA 311/312

Classification : Nuclease-Free Water Not applicable.
Library Wash Buffer Not applicable.

Library Wash Buffer Not applicable. Hyb Wash Buffer 1 Not applicable. Hyb Wash Buffer 2 Not applicable. Resuspension Buffer Not applicable. End Prep Buffer Not applicable.

End Prep Enzyme EYE IRRITATION - Category 2B
Ligation Buffer Not applicable.
Ligation Enzyme EYE IRRITATION - Category 2B

Adapter for ILM Not applicable. Hyb Blocker Not applicable.

Hyb Buffer ACUTE TOXICITY (oral) - Category 4

SKIN IRRITATION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) -

Category 1

Hyb Enhancer CARCINOGENICITY - Category 2

TOXIC TO REPRODUCTION - Category 1B

SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) - Category 2

2X Amplification Mastermix
Library Binding Beads
Capture Beads
Avida Index Primer Pairs 97-192 for ILM
Not applicable.
Not applicable.
Not applicable.

Composition/information on ingredients

Name	%	Classification
End Prep Enzyme Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
Ligation Enzyme Glycerol	≥50 - ≤75	EYE IRRITATION - Category 2B
Hyb Buffer tetramethylammonium chloride Dextran sulfate sodium	≥10 - <15 ≤3	ACUTE TOXICITY (oral) - Category 2 ACUTE TOXICITY (dermal) - Category 3 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 SKIN IRRITATION - Category 2
		EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
Hyb Enhancer Formamide	≥90	CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
2X Amplification Mastermix Glycerol	<10	EYE IRRITATION - Category 2B

SARA 313

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Section 15. Regulatory information

	Product name	CAS number	%
Supplier notification	Hyb Enhancer Formamide	75-12-7	≥90

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: GLYCERINE MIST; FORMAMIDE

New York : None of the components are listed.

New Jersey : The following components are listed: GLYCERIN; FORMAMIDE

Pennsylvania: The following components are listed: 1,2,3-PROPANETRIOL; FORMAMIDE

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

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.

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.

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Section 16. Other information

Procedure used to derive the classification

Classification	Justification	
End Prep Buffer AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method	
End Prep Enzyme EYE IRRITATION - Category 2B	Calculation method	
Ligation Enzyme EYE IRRITATION - Category 2B	Calculation method	
Hyb Buffer ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3	Calculation method Calculation method Calculation method Calculation method	
Hyb Enhancer CARCINOGENICITY - Category 2 TOXIC TO REPRODUCTION - Category 1B SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method Calculation method Calculation method	

History

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revision

Date of previous issue : 02/23/2024

Version : 1.1

Key to abbreviations : ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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