SAFETY DATA SHEET



Avida DNA Reagent Kit with 1-16 Index Primer Pairs for ILM, 16 Reactions, Part Number G9409A

Section 1. Identification

Product identifier

: Avida DNA Reagent Kit with 1-16 Index Primer Pairs for ILM, 16 Reactions, Part Number G9409A

Part no. (chemical kit)
Part no.

: G9409A

:	Avida DNA and Duo Reagent Box 2, 16	<u>5282-0141</u>
	reactions	
	Nuclease-Free Water	5271-0107
	Library Wash Buffer	5271-0103
	Hyb Wash Buffer 1	5271-0104
	Hyb Wash Buffer 2	5271-0105
	Resuspension Buffer	5271-0106
	Avida DNA Reagent Box 1, 16 Reactions	<u>5282-0139</u>
	End Prep Buffer	5271-0094
	End Prep Enzyme	5271-0095
	Ligation Buffer	5271-0096
	Ligation Enzyme	5271-0097
	Adapter for ILM	5271-0112
	Hyb Blocker	5271-0099
	Hyb Buffer	5271-0100
	Hyb Enhancer	5271-0101
	2X Amplification Mastermix	5271-0102
	Avida Beads Box, 16 Reactions	<u>5282-0143</u>
	Library Binding Beads	5271-0108
	Capture Beads	5271-0109
	Avida Index Primer Pairs 1-16 for ILM	<u>5280-0052</u>
	Index Primer Mix for ILM 1-8	5274-0075
	Index Primer Mix for ILM 9-16	5274-0076

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

Identified uses

: Analytical reagent. For research use only.

Nuclease-Free Water 0.88 ml (16 reactions) 6.336 ml (16 reactions) Library Wash Buffer 2 x 5.280 ml (16 reactions) Hyb Wash Buffer 1 Hyb Wash Buffer 2 2 x 2.64 ml (16 reactions) Resuspension Buffer 0.352 ml (16 reactions) **End Prep Buffer** 0.124 ml (16 reactions) End Prep Enzyme 0.053 ml (16 reactions) 0.44 ml (16 reactions) Ligation Buffer 0.106 ml (16 reactions) Ligation Enzyme 0.088 ml (16 reactions) Adapter for ILM Hyb Blocker 0.044 ml (16 reactions) Hyb Buffer 0.81 ml (16 reactions) Hyb Enhancer 0.132 ml (16 reactions) 0.44 ml (16 reactions) 2X Amplification Mastermix Library Binding Beads 1.532 ml (16 reactions) Capture Beads 0.141 ml (16 reactions)

Index Primer Mix for ILM 1-8 8 x 0.005 ml Index Primer Mix for ILM 9-16 8 x 0.005 ml

Uses advised against: Not for use in diagnostic procedures.

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Section 1. Identification

Supplier/Manufacturer

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

Emergency telephone number (with hours of

operation)

: CHEMTREC®: 1-800-424-9300

Section 2. Hazard identification

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 1

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

GHS label elements

Hazard pictograms : Hyb Buffer









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 II M No signal w

Adapter for ILM No signal word.

Hyb Blocker No signal word.

Hyb Buffer Danger

Hyb BufferDangerHyb EnhancerDanger

2X Amplification Mastermix No signal word. Library Binding Beads No signal word.

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Section 2. Hazard identification

Capture Beads

Index Primer Mix for ILM 1-8
Index Primer Mix for ILM

No signal word. No signal word. No signal word.

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Hazard statements

Nuclease-Free Water
 Library Wash Buffer
 Hyb Wash Buffer 1
 Hyb Wash Buffer 2
 Resuspension Buffer
 End Prep Buffer
 No known significant effects or critical hazards.
 No known sig

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)

2X Amplification Mastermix

Library Binding Beads Capture Beads

Index Primer Mix for ILM 1-8
Index Primer Mix for ILM

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

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.
 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

Hyb Enhancer

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

Not applicable. Not applicable. Not applicable.

Not applicable.

Not applicable.

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Section 2. Haz	ard identification	
Response	: Nuclease-Free Water	Not applicable.
	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1	Not applicable.
	Hyb Wash Buffer 2	Not applicable.
	Resuspension Buffer End Prep Buffer	Not applicable. Not applicable.
	End Prep Enzyme	P305 + P351 + P338 - IF IN EYES: Rinse cautiously
	End i Top Enzyme	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 or concerned: 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
	Llub Enhancen	water.
	Hyb Enhancer	P308 + P313 - IF exposed or concerned: Get medical advice or attention.
	2X Amplification Mastermix	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads	Not applicable.
	Index Primer Mix for ILM 1-8	Not applicable.
	Index Primer Mix for ILM	Not applicable.
	9-16	
Storage	: Nuclease-Free Water	Not applicable.
	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1 Hvb Wash Buffer 2	Not applicable. 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 Hyb Buffer	Not applicable. Not applicable.
	Hyb Enhancer	Not applicable.
	2X Amplification Mastermix	Not applicable.
	Library Binding Beads	Not applicable.
	Capture Beads	Not applicable.
	Index Primer Mix for ILM 1-8	Not applicable.
	Index Primer Mix for ILM 9-16	Not applicable.
Disposal	: Nuclease-Free Water	Not applicable.
-	Library Wash Buffer	Not applicable.
	Hyb Wash Buffer 1	Not applicable.
	Hyb Wash Buffer 2	Not applicable.
	Reguenancian Ruffer	Not applicable

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Not applicable.

international regulations.

P501 - Dispose of contents and container in accordance with all local, regional, national and

Resuspension Buffer

End Prep Buffer

Section 2. Hazard identification

End Prep Enzyme
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

international regulations.

Hyb Enhancer P501 - Dispose of contents and container in

accordance with all local, regional, national and

international regulations.

2X Amplification Mastermix
Library Binding Beads
Capture Beads
Index Primer Mix for ILM 1-8
Index Primer Mix for ILM
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.

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Supplemental label elements

: 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. Index Primer Mix for ILM 1-8 None known. Index Primer Mix for ILM None known.

Hyb Buffer Percentage of the mixture consisting of ingredient(s)

of unknown acute oral toxicity: 1 - 10%

Hyb Buffer Percentage of the mixture consisting of ingredient(s)

of unknown hazards to the aquatic environment: 3.4%

Other hazards which do not : Nuclease-Free Water result in classification : Library Wash Buffer

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. Index Primer Mix for ILM 1-8 None known. Index Primer Mix for ILM None known.

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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
	C., d. D., D.,	NAC at a second

Glycerol

End Prep Buffer Mixture End Prep Enzyme Mixture Mixture Ligation Buffer 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

Index Primer Mix for ILM 1-8 Mixture Index Primer Mix for ILM Mixture 9-16

Ingredient name **Synonyms** % (w/w) **CAS** number **Nuclease-Free Water** Water 100 water 7732-18-5 Hyb Wash Buffer 1 151-21-3 Sodium dodecyl sulphate Sodium dodecyl sulphate ≥0.1 - ≤1 Hyb Wash Buffer 2 Poly(oxy-1,2-ethanediyl), .alpha.-[Polyethylene glycol octaphenyl ether ≤0.1 9036-19-5 (1,1,3,3-tetramethylbutyl)phenyl]-. omega.-hydroxy-**End Prep Buffer** ≥1 - ≤5 7786-30-3 Magnesium chloride Magnesium chloride **End Prep Enzyme** Glycerol Glycerol ≥30 - ≤60 56-81-5 Ligation Enzyme

 Hyb Buffer
 tetramethylammonium chloride
 ≥10 - ≤30
 75-57-0

 Dextran sulfate sodium
 Dextran Sulfate
 ≥1 - ≤5
 9011-18-1

 Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.
 Polyethylene glycol octaphenyl ether
 ≤0.1
 9036-19-5

≥30 - ≤60

56-81-5

Glycerol

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Section 3. Composition/information on ingredients

omegahydroxy-			
Hyb Enhancer			
Formamide	Formamide	≥80	75-12-7
2X Amplification Mastermix			
Glycerol	Glycerol	≥5 - ≤10	56-81-5

Ranges if listed above for hazardous ingredient(s) are prescribed ranges. The actual concentration(s) or actual concentration range(s) are being withheld as a trade secret.

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

Description of	necessary first a	id maaeurae

Description of necessa	<u>rry first aid measures</u>	
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. Check for and remove any contact lenses. Get medical attention if irritation occurs.
	End Prep Buffer	Immediately flush eyes with plenty of water,

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.

Ligation Buffer Immediately flush eyes with plenty of water,

occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get

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.

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Adapter 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. Immediately flush eyes with plenty of water, Hyb Blocker occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, Hyb Buffer 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. Immediately flush eyes with plenty of water, 2X Amplification Mastermix occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, Library Binding Beads occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, Capture Beads occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Immediately flush eyes with plenty of water, Index Primer Mix for ILM 1-8 occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. Index Primer Mix for ILM Immediately flush eyes with plenty of water, 9-16 occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs. : Nuclease-Free Water Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Inhalation

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

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.

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

position comfortable for breathing. Get medical

attention if symptoms occur.

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

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

48 hours.

End Prep Enzyme Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if

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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 hours.

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.

Adapter for ILM

Remove victim to fresh air and keep at rest in a 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.

Hyb Buffer

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 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

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48 hours.

Remove victim to fresh air and keep at rest in a 2X Amplification Mastermix position comfortable for breathing. Get medical

attention if symptoms occur.

Remove victim to fresh air and keep at rest in a **Library Binding Beads**

position comfortable for breathing. Get medical

attention if symptoms occur.

Remove victim to fresh air and keep at rest in a Capture Beads

position comfortable for breathing. Get medical

attention if symptoms occur.

Index Primer Mix for ILM 1-8 Remove victim to fresh air and keep at rest in a

position comfortable for breathing. Get medical

attention if symptoms occur.

Index Primer Mix for ILM

9-16

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

attention if symptoms occur.

Flush contaminated skin with plenty of water. : Nuclease-Free 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.

End Prep Buffer 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. End Prep Enzyme

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

Ligation Buffer 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. 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.

Flush contaminated skin with plenty of water. Hyb Blocker

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Flush contaminated skin with plenty of water. Hyb Buffer

> 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.

Hyb Enhancer Flush contaminated skin with plenty of water.

> Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before

Skin contact

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. Flush contaminated skin with plenty of water.

2X Amplification Mastermix

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur. Flush contaminated skin with plenty of water. Library Binding Beads

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Capture Beads Flush contaminated skin with plenty of water.

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Index Primer Mix for ILM 1-8 Flush contaminated skin with plenty of water.

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Index Primer Mix for ILM

9-16

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 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 Hyb Wash Buffer 1

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. 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.

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

Ingestion

Library Wash Buffer

Hyb Wash Buffer 2

Resuspension Buffer

End Prep Buffer

End Prep Enzyme

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Ligation Buffer

Ligation Enzyme

Adapter for ILM

Hyb Blocker

Hyb Buffer

Hyb Enhancer

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 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 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 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. 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,

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.

2X Amplification Mastermix Wash out mouth with water. If material has been

belt or waistband.

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Library Binding Beads

Capture Beads

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.

swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce

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. 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.

Index Primer Mix for ILM 1-8

Index Primer Mix for ILM

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

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 Hvb Buffer Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

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

No known significant effects or critical hazards. Causes eve 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

9-16

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

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Hyb Enhancer
2X Amplification Mastermix
Library Binding Beads
Capture Beads
Index Primer Mix for ILM 1-8
Index Primer Mix for ILM
9-16

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
Index Primer Mix for ILM 1-8
Index Primer Mix for ILM
9-16

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

Ingestion

: 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. Harmful if swallowed. Causes damage to organs following a single exposure if swallowed.

Hyb Enhancer
2X Amplification Mastermix
Library Binding Beads
Capture Beads
Index Primer Mix for ILM 1-8
Index Primer Mix for ILM
9-16

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

Over-exposure signs/symptoms

Eye contact

: Nuclease-Free Water
Library Wash Buffer
Hyb Wash Buffer 1
No specific data.

End Prep Enzyme Adverse symptoms may include the following:

irritation watering redness

Ligation Buffer No specific data.

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Ligation Enzyme Adverse symptoms may include the following:

irritation watering redness

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

Hyb Buffer Adverse symptoms may include the following:

pain or irritation watering

redness

Hyb Enhancer
2X Amplification Mastermix
Library Binding Beads
Capture Beads
Index Primer Mix for ILM 1-8
Index Primer Mix for ILM
No specific data.

9-16

Inhalation : Nuclease-Free Water No specific data.

No specific data. Library Wash Buffer Hyb Wash Buffer 1 No specific data. No specific data. Hyb Wash Buffer 2 No specific data. Resuspension Buffer **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 Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix
Library Binding Beads
Capture Beads
Skeletal malformations
No specific data.
No specific data.
No specific data.

Index Primer Mix for ILM 1-8 No specific data. Index Primer Mix for ILM No specific data.

9-16

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. No specific data. Resuspension Buffer No specific data. **End Prep Buffer** No specific data. End Prep Enzyme **Ligation Buffer** No specific data. No specific data. Ligation Enzyme 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
Library Binding Beads
Capture Beads
No specific data.
No specific data.
No specific data.

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Ingestion

Index Primer Mix for ILM 1-8 No specific data. Index Primer Mix for ILM No specific data.

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Hyb Buffer

: 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. Ligation Enzyme No specific data. Adapter for ILM No specific data. Hyb Blocker No specific data.

No specific data. Hyb Enhancer Adverse symptoms may include the following:

No specific data.

No specific data.

reduced fetal weight increase in fetal deaths skeletal malformations

2X Amplification Mastermix Library Binding Beads

Capture Beads No specific data. Index Primer Mix for ILM 1-8 No specific data. Index Primer Mix for ILM No specific data.

9-16

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

Notes to physician

: 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.

Treat symptomatically. Contact poison treatment Hyb Wash Buffer 1

specialist immediately if large quantities have been

ingested or inhaled.

Treat symptomatically. Contact poison treatment Hyb Wash Buffer 2

specialist immediately if large quantities have been

ingested or inhaled.

Treat symptomatically. Contact poison treatment Resuspension Buffer

specialist immediately if large quantities have been

ingested or inhaled.

In case of inhalation of decomposition products in a **End Prep Buffer**

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.

In case of inhalation of decomposition products in a Hyb Enhancer

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.

Treat symptomatically. Contact poison treatment Capture Beads

specialist immediately if large quantities have been

ingested or inhaled.

Index Primer Mix for ILM 1-8 Treat symptomatically. Contact poison treatment

specialist immediately if large quantities have been

ingested or inhaled.

Index Primer Mix for ILM

9-16

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

ingested or inhaled.

Specific treatments

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

Capture Beads

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

9-16

No specific treatment. No specific treatment. No specific treatment.

Protection of first-aiders

: Nuclease-Free Water No action shall be taken involving any personal risk

or without suitable training.

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

or without suitable training.

No action shall be taken involving any personal risk Hyb Wash Buffer 1

or without suitable training.

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

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.

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

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

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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.

Hyb Blocker No action shall be taken involving any personal risk

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.

Hyb Enhancer No action shall be taken involving any personal risk

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.

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

or without suitable training.

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

or without suitable training.

Capture Beads No action shall be taken involving any personal risk

or without suitable training.

Index Primer Mix for ILM 1-8 No action shall be taken involving any personal risk

or without suitable training.

Index Primer Mix for ILM

9-16

No action shall be taken involving any personal risk

or without suitable training.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media

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.

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

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surrounding fire. Hyb Buffer

Use an extinguishing agent suitable for the

surrounding fire.

Use an extinguishing agent suitable for the Hyb Enhancer

surrounding fire.

Use an extinguishing agent suitable for the 2X Amplification Mastermix

surrounding fire.

Use an extinguishing agent suitable for the Library Binding Beads

surrounding fire.

Capture Beads Use an extinguishing agent suitable for the

surrounding fire.

Use an extinguishing agent suitable for the Index Primer Mix for ILM 1-8

surrounding fire.

Use an extinguishing agent suitable for the Index Primer Mix for ILM

surrounding fire.

Unsuitable extinguishing media

Specific hazards arising

from the chemical

: 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.

Index Primer Mix for ILM 1-8 None known. Index Primer Mix for ILM

: Nuclease-Free Water

Hyb Wash Buffer 2

9-16

9-16

In a fire or if heated, a pressure increase will occur and the container may burst.

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

None known.

and the container may burst.

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

and the container may burst. In a fire or if heated, a pressure increase will occur

and the container may burst.

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

Resuspension Buffer

and the container may burst.

In a fire or if heated, a pressure increase will occur **End Prep Buffer**

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.

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

and the container may burst.

Ligation 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 Adapter for ILM

and the container may burst.

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Hyb Blocker 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 Hyb Buffer

> 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.

In a fire or if heated, a pressure increase will occur **Library Binding Beads**

and the container may burst.

Capture 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 Index Primer Mix for ILM 1-8

and the container may burst.

Index Primer Mix for ILM

9-16

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

and the container may burst.

Hazardous thermal decomposition products : Nuclease-Free Water

No specific data. Library Wash Buffer 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.

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 No specific data.

Adapter for ILM Hyb Blocker No specific data. Hyb Buffer

Decomposition products may include the following

materials: carbon dioxide carbon monoxide

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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

Index Primer Mix for ILM 1-8
Index Primer Mix for ILM

9-16

No specific data. No specific data.

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

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

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Special protective

equipment for fire-fighters

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. Promptly isolate the scene by removing all persons Hyb Blocker 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. Promptly isolate the scene by removing all persons 2X Amplification Mastermix 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. Promptly isolate the scene by removing all persons Capture Beads from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Index Primer Mix for ILM 1-8 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. Index Primer Mix for ILM Promptly isolate the scene by removing all persons 9-16 from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. : Nuclease-Free Water Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective Library Wash Buffer equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective Hyb Wash Buffer 1 equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective Hyb Wash Buffer 2 equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Fire-fighters should wear appropriate protective Resuspension Buffer equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive

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End Prep Buffer

pressure mode.

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

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.

Index Primer Mix for ILM 1-8 Fire-fighters should wear appropriate protective

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

pressure mode.

Index Primer Mix for ILM

9-16

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive

pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

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For non-emergen	су
personnel	

: Nuclease-Free Water

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.

Library Wash Buffer

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.

Hyb Wash Buffer 1

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.

Hyb Wash Buffer 2

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.

Resuspension Buffer

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.

End Prep Buffer

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.

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. 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. 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

Ligation Buffer

Ligation Enzyme

Adapter for ILM

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Hyb Enhancer

2X Amplification Mastermix

Section 6. Accidental release measures

areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Put on appropriate personal

protective equipment.

Hyb Blocker 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.

Hyb Buffer 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

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 mict. Provide adequate ventilation. Wear

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.

Library Binding Beads 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.

Capture Beads 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.

Index Primer Mix for ILM 1-8 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.

Index Primer Mix for ILM No action sha

9-16

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.

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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

Library Binding Beads

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

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

spillage, take note of any information in Section 8 on

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".

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".

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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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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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Environmental precautions

: Nuclease-Free Water

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).

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.

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. 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

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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

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, waterways,

caused environmental pollution (sewers, 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).

Index Primer Mix for ILM 1-8 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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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).

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.

Stop leak if without risk. Move containers from spill 2X Amplification Mastermix

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.

Index Primer Mix for ILM 1-8 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.

Index Primer Mix for ILM

End Prep Buffer

End Prep Enzyme

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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

Precautions for safe handling

Protective measures

: Nuclease-Free Water Put on appropriate personal protective equipment

(see Section 8).

Put on appropriate personal protective equipment Library Wash Buffer

(see Section 8).

Hyb Wash Buffer 1 Put on appropriate personal protective equipment

(see Section 8).

Put on appropriate personal protective equipment Hyb Wash Buffer 2

(see Section 8).

Resuspension Buffer 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. 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.

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with

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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.

Ligation Buffer Put on appropriate personal protective equipment

(see Section 8).

Ligation 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 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 Hyb Enhancer

> (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.

2X Amplification Mastermix Put on appropriate personal protective equipment

(see Section 8).

Put on appropriate personal protective equipment Library Binding Beads

(see Section 8).

Capture Beads Put on appropriate personal protective equipment

(see Section 8).

Index Primer Mix for ILM 1-8 Put on appropriate personal protective equipment

(see Section 8).

Index Primer Mix for ILM Put on appropriate personal protective equipment

(see Section 8).

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Advice on general occupational hygiene : Nuclease-Free Water

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

Eating, drinking and smoking should be prohibited in

additional information on hygiene measures. 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

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before entering eating areas. See also Section 8 for additional information on hygiene measures.

End Prep Enzyme 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

Hyb Wash Buffer 1

Hyb Wash Buffer 2

Resuspension Buffer

End Prep Buffer

Ligation Buffer

Ligation Enzyme

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Adapter for ILM

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

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2X Amplification Mastermix 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 Library Binding Beads 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 Capture Beads 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.

Index Primer Mix for ILM 1-8 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

Hyb Blocker

Hyb Buffer

Hyb Enhancer

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areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, : Nuclease-Free Water including any incompatibilities

Library Wash Buffer

Hyb Wash Buffer 1

Hyb Wash Buffer 2

Resuspension Buffer

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 opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled

containers. Use appropriate containment to avoid

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End Prep Buffer

End Prep Enzyme

Ligation Buffer

Ligation Enzyme

Adapter for ILM

Hyb Blocker

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 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

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Hyb Buffer

Hyb Enhancer

2X Amplification Mastermix

Library Binding Beads

Capture Beads

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 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 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

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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.

Section 8. Exposure controls/personal protection

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Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
End Prep Enzyme	
Glycerol	CA Alberta Provincial (Canada, 6/2018). OEL: 10 mg/m³ 8 hours. Form: Mist CA Quebec Provincial (Canada, 6/2022). TWAEV: 10 mg/m³ 8 hours. Form: mist CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. Form: mist TWA: 10 mg/m³ 8 hours. Form: mist CA British Columbia Provincial (Canada, 6/2023). TWA: 3 mg/m³ 8 hours. Form: respirable mist TWA: 10 mg/m³ 8 hours. Form: total mist
Ligation Enzyme	
Glycerol	CA Alberta Provincial (Canada, 6/2018). OEL: 10 mg/m³ 8 hours. Form: Mist CA Quebec Provincial (Canada, 6/2022). TWAEV: 10 mg/m³ 8 hours. Form: mist CA Saskatchewan Provincial (Canada, 7/2013). STEL: 20 mg/m³ 15 minutes. Form: mist TWA: 10 mg/m³ 8 hours. Form: mist CA British Columbia Provincial (Canada, 6/2023).

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Section 8. Exposure controls/personal protection

TWA: 3 mg/m³ 8 hours. Form: respirable

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

Hyb Enhancer

Formamide

CA Alberta Provincial (Canada, 6/2018). Absorbed through skin.

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

CA British Columbia Provincial (Canada, 6/2023). Absorbed through skin.

TWA: 10 ppm 8 hours.

CA Ontario Provincial (Canada, 6/2019). Absorbed through skin.

TWA: 10 ppm 8 hours.

CA Quebec Provincial (Canada, 6/2022). Absorbed through skin.

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

CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin.

STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.

2X Amplification Mastermix

Glycerol

CA Alberta Provincial (Canada, 6/2018).

OEL: 10 mg/m³ 8 hours. Form: Mist CA Quebec Provincial (Canada, 6/2022). TWAEV: 10 mg/m³ 8 hours. Form: mist CA Saskatchewan Provincial (Canada, 7/2013).

STEL: 20 mg/m³ 15 minutes. Form: mist TWA: 10 mg/m³ 8 hours. Form: mist CA British Columbia Provincial (Canada, 6/2023).

TWA: 3 mg/m³ 8 hours. Form: respirable

mist

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

Biological exposure indices

No exposure indices known.

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.

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Section 8. Exposure controls/personal protection

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection

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

Body protection

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

Other skin protection

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

Respiratory protection

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

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

Phy	/sic	al s	tate	
-----	------	------	------	--

: Nuclease-Free Water Liquid. Library Wash Buffer Liquid. Hyb Wash Buffer 1 Liquid. Liquid. Hyb Wash Buffer 2 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. Index Primer Mix for ILM 1-8 Liquid. Index Primer Mix for ILM Liquid. 9-16

Color

: Nuclease-Free Water
Library Wash Buffer
Hyb Wash Buffer 1
Hyb Wash Buffer 2
Resuspension Buffer
End Prep Buffer
End Prep Enzyme

Colorless.
Not available.
Not available.
Not available.
Not available.

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Ligation Buffer Not available. Ligation Enzyme Not available. Adapter for ILM Not available. Hyb Blocker Not available. Hvb Buffer Not available. Hvb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Index Primer Mix for ILM 1-8 Not available. Index Primer Mix for ILM Not available.

9-16

: Nuclease-Free Water Odor Odorless.

9-16

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. Index Primer Mix for ILM 1-8 Not available. Index Primer Mix for ILM Not available.

Odor threshold

pH

: 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. Index Primer Mix for ILM 1-8 Not available.

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: Nuclease-Free Water

Index Primer Mix for ILM

Library Wash Buffer Not available. Hyb Wash Buffer 1 7.2 to 7.6 Hyb Wash Buffer 2 7.2 to 7.6 Resuspension Buffer 8 8

End Prep Buffer End Prep Enzyme 7.5

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Not available.

Ligation Buffer 8
Ligation Enzyme 7.5
Adapter for ILM 8
Hyb Blocker 8
Hyb Buffer 7.5

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

Library Binding Beads 8

Capture Beads Not available.

Index Primer Mix for ILM 1-8 8 Index Primer Mix for ILM 8

9-16

Melting point/freezing point

: Nuclease-Free Water 0°C (32°F) Library Wash Buffer Not available. Hyb Wash Buffer 1 0°C (32°F) 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) Hyb Blocker 0°C (32°F) Hyb Buffer Not available. Hyb Enhancer Not available. 2X Amplification Mastermix Not available. Library Binding Beads Not available. Capture Beads Not available. Index Primer Mix for ILM 1-8 0°C (32°F) Index Primer Mix for ILM 0°C (32°F) 9-16

Boiling point, initial boiling point, and boiling range

: Nuclease-Free Water 100°C (212°F) Library Wash Buffer Not available. Hyb Wash Buffer 1 100°C (212°F) Hvb Wash Buffer 2 100°C (212°F) Resuspension Buffer 100°C (212°F) End Prep Buffer Not available. End Prep Enzyme Not available. **Ligation Buffer** Not available. Ligation Enzyme Not available. Adapter for ILM 100°C (212°F) 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. Index Primer Mix for ILM 1-8 100°C (212°F) Index Primer Mix for ILM 100°C (212°F)

9-16

Flash point

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		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	
Formamide	150	302	-	152	305.6	ISO 2592	
2X Amplification Mastermix							
Glycerol	_	-	-	177	350.6	-	

Evaporation rate

: 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. Index Primer Mix for ILM 1-8 Not available. Index Primer Mix for ILM Not available. 9-16

Flammability

: 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.

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Capture Beads Not applicable. Index Primer Mix for ILM 1-8 Not applicable. Index Primer Mix for ILM Not applicable. 9-16

Lower and upper explosion limit/flammability limit

: 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. Index Primer Mix for ILM 1-8 Not available. Index Primer Mix for ILM Not available. 9-16

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 Buffer							
water	17.5	2.3	-	92.258	12.3	-	
End Prep Buffer							
water	17.5	2.3	-	92.258	12.3	-	
	<u> </u>						

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End Prep Enzyme						
water	17.5	2.3	-	92.258	12.3	-
Glycerol	0.000075	0.00001	-	0.0025	0.00033	-
Ligation Buffer	4				40.0	
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	-
A day to y for U.M.						
Adapter for ILM	47.5	0.0		00.050	40.0	
water	17.5	2.3	-	92.258	12.3	-
Hyb Blocker						
water	17.5	2.3	-	92.258	12.3	-
II. I. B. W.						
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	-
l						
Library Binding Beads						
water	17.5	2.3	-	92.258	12.3	-
Capture Beads						
water	17.5	2.3	-	92.258	12.3	-
Index Primer Mix for ILM 1-8						

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	water	17.5	2.3	-	92.258	12.3	-	
	Index Primer Mix for ILM 9-16							
	water	17.5	2.3	-	92.258	12.3	-	
Relative vapor density :	Nuclease-Free Wate	r	0.62 [Air					
	Library Wash Buffer Hyb Wash Buffer 1		Not avail Not avail					
	Hyb Wash Buffer 2		Not avail					
	Resuspension Buffer		Not avail					
	End Prep Buffer		Not avail					
	End Prep Enzyme Ligation Buffer		Not avail Not avail					
	Ligation Enzyme		Not avail					
	Adapter for ILM		Not avail					
	Hyb Blocker		Not avail					
	Hyb Buffer Hyb Enhancer		Not avail Not avail					
	2X Amplification Mas	termix	Not avail					
	Library Binding Bead	s	Not avail					
	Capture Beads Index Primer Mix for	II N 1 1 0	Not available. Not available.					
	Index Primer Mix for		Not avail					
	9-16							
Relative density :	Nuclease-Free Wate	r	1					
	Library Wash Buffer		Not available. Not available.					
	Hyb Wash Buffer 1 Hyb Wash Buffer 2		Not available.					
	Resuspension Buffer	•	Not available.					
	End Prep Buffer		Not available.					
	End Prep Enzyme		Not available. Not available.					
	Ligation Buffer Ligation Enzyme		Not available.					
	Adapter for ILM		Not available.					
	Hyb Blocker		Not avail					
	Hyb Buffer Hyb Enhancer		Not available. Not available.					
	2X Amplification Mas	termix	Not available.					
	Library Binding Bead	s	Not available.					
	Capture Beads Index Primer Mix for	II M 1 Ω	Not available.					
	Index Primer Mix for		Not avail					
	9-16							
Solubility(ies) :	Media			Result				
	Nuclease-Free Water	er						
	water Library Wash Buffer			Soluble				
	water			Soluble				
	Hyb Wash Buffer 1	Colubic						
	water		Soluble					
	Hyb Wash Buffer 2 water	Soluble						
	Resuspension Buff	er	Soluple					
	water •			Soluble				
	1			<u> </u>				

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End Prep Buffer Soluble water **End Prep Enzyme** water Soluble Ligation Buffer Soluble water Ligation Enzyme Soluble water Adapter for ILM Soluble water Hyb Blocker water Soluble Hyb Buffer water Soluble Hyb Enhancer water Soluble Library Binding Beads Soluble Capture Beads water Soluble Index Primer Mix for ILM 1-8 Soluble water Index Primer Mix for ILM 9-16 Soluble water

Partition coefficient: noctanol/water

-1.38 : Nuclease-Free Water 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. End Prep Enzyme Not applicable. Not applicable. Ligation Buffer Ligation Enzyme Not applicable. Adapter for ILM Not applicable. Not applicable. Hyb Blocker Hyb Buffer Not applicable. Hyb Enhancer Not applicable. 2X Amplification Mastermix Not applicable. Not applicable. Library Binding Beads Not applicable. Capture Beads Index Primer Mix for ILM 1-8 Not applicable. Index Primer Mix for ILM Not applicable. 9-16

Auto-ignition temperature

Ingredient name	°C	°F	Method	
End Prep Enzyme				
Glycerol	370	698	-	
Ligation Enzyme				
Glycerol	370	698	-	
Hyb Enhancer				

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on an a otto notice				
	Formamide	>500	>932	ASTM D 2155-66
	2X Amplification Mastermix			
	Glycerol	370	698	-
Decomposition temperature :	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 Index Primer Mix for ILM 1-8	Not available.	698	
Viscosity :	9-16 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 Index Primer Mix for ILM 1-8	Not available.		
Particle characteristics				
Median particle size :	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	Not applicable		

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Not applicable.

Hyb Buffer

Hyb Enhancer Not applicable. Not applicable. 2X Amplification Mastermix Not applicable. Library Binding Beads Capture Beads Index Primer Mix for ILM 1-8

Index Primer Mix for ILM

Hyb Wash Buffer 1

Not applicable. Not applicable. Not applicable.

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Section 10. Stability and reactivity

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 for Library Wash Buffer

this product or its ingredients.

No specific test data related to reactivity available for

this product or its ingredients. No specific test data related to reactivity available for Hyb Wash Buffer 2

this product or its ingredients.

No specific test data related to reactivity available for Resuspension Buffer

this product or its ingredients.

No specific test data related to reactivity available for **End Prep Buffer**

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 for Ligation Buffer

this product or its ingredients.

Ligation Enzyme No specific test data related to reactivity available for

this product or its ingredients.

Adapter for ILM No specific test data related to reactivity available for

this product or its ingredients.

Hyb Blocker No specific test data related to reactivity available for

this product or its ingredients.

No specific test data related to reactivity available for Hyb Buffer

this product or its ingredients.

No specific test data related to reactivity available for Hyb Enhancer

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 for Library Binding Beads

this product or its ingredients.

Capture Beads No specific test data related to reactivity available for

this product or its ingredients.

Index Primer Mix for ILM 1-8 No specific test data related to reactivity available for

this product or its ingredients.

No specific test data related to reactivity available for Index Primer Mix for ILM

The product is stable.

this product or its ingredients.

Chemical stability

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

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Section 10. Stability and reactivity

Hyb Buffer Hyb Enhancer

2X Amplification Mastermix Library Binding Beads Capture Beads

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

9-16

The product is stable. The product is stable.

The product is stable. The product is stable.

The product is stable. The product is stable.

The product is stable.

Possibility of hazardous reactions

: 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

Library Binding Beads

2X Amplification Mastermix

Capture Beads

Index Primer Mix for ILM 1-8

Index Primer Mix for ILM

9-16

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur. Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use, hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Under normal conditions of storage and use.

hazardous reactions will not occur.

Under normal conditions of storage and use,

hazardous reactions will not occur.

Conditions to avoid

: 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. Hvb Buffer No specific data. Hyb Enhancer No specific data.

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2X Amplification Mastermix Library Binding Beads Capture Beads

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16 No specific data. No specific data. No specific data. No specific data.

No specific data.

Incompatible materials

: 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

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16

May react or be incompatible with oxidizing materials. May react or be incompatible with oxidizing materials.

Hazardous decomposition products

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

hazardous decomposition products should not be

produced.

Library Wash Buffer Under normal conditions of storage and use,

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.

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

hazardous decomposition products should not be

produced.

Resuspension Buffer Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

End Prep Buffer Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

End Prep Enzyme Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Ligation Buffer Under normal conditions of storage and use,

hazardous decomposition products should not be

produced.

Ligation Enzyme Under normal conditions of storage and use,

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

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Section 10. Stability and reactivity

produced. Under normal conditions of storage and use, Hyb Buffer hazardous decomposition products should not be Under normal conditions of storage and use, Hyb Enhancer hazardous decomposition products should not be produced. Under normal conditions of storage and use, 2X Amplification Mastermix hazardous decomposition products should not be produced. Library Binding Beads Under normal conditions of storage and use, hazardous decomposition products should not be Under normal conditions of storage and use, Capture Beads hazardous decomposition products should not be produced. Index Primer Mix for ILM 1-8 Under normal conditions of storage and use, hazardous decomposition products should not be produced. Index Primer Mix for ILM Under normal conditions of storage and use, hazardous decomposition products should not be 9-16 produced.

Section 11. Toxicological information

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-				
End Prep Buffer				
Magnesium chloride	LD50 Dermal	Rat - Male,	>2000 mg/kg	-
	LD50 Oral	Female Rat	2800 mg/kg	
	LD30 Olai	Ital	2000 Hig/kg	_
End Prep Enzyme				
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/	
chloride	LD30 Deliliai	Female	kg	_
	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	-
(1,1,3,3-tetramethylbutyl)				
phenyl]omegahydroxy-				
Hyb Enhancer				
Hyb Enhancer	<u> </u>	<u> </u>		

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Formamide	LC50 Inhalation Dusts and mists	Rat - Male	>21 mg/l	4 hours
	LD50 Dermal	Rabbit	17 g/kg	-
	LD50 Oral	Rat	5570 mg/kg	-
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 Eyes - Moderate irritant	Rabbit Rabbit	-	250 ug 10 mg 24 hours 100	-
	Eyes - Moderate irritant	Rabbit	-	mg	-
	Skin - Mild irritant	Guinea pig	-	24 hours 25 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 50 mg	-
	Skin - Moderate irritant	Mouse	-	24 hours 25 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 25 mg	-
Hyb Wash Buffer 2 Poly(oxy-1,2-ethanediyl), . alpha[(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
End Prep Enzyme					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 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), . alpha[(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
2X Amplification Mastermix					
Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-

Sensitization

Not available.

Mutagenicity

Conclusion/Summary: Not available.

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Carcinogenicity

Conclusion/Summary

: Not available.

Classification

Product/ingredient name	IARC	NTP	ACGIH
Hyb Enhancer Formamide	-	-	A3

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	,	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.
 Not available.
 Not available.
 Not available.

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

Eves.

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

Eyes.

Ligation Buffer Not available.

Ligation Enzyme Routes of entry anticipated: Oral, Dermal, Inhalation,

Eves.

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.

2X Amplification Mastermix
Library Binding Beads
Capture Beads
Not available.
Not available.

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Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16

Not available. Not available.

Potential acute health effects

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 Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16

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 Hvb 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 Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16

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

Hvb Enhancer 2X Amplification Mastermix Library Binding Beads

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Capture Beads

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

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

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. No known significant effects or critical hazards. **Ligation Buffer** 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.

Hyb Enhancer

2X Amplification Mastermix Library Binding Beads Capture Beads

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

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

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Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

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

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. Index Primer Mix for ILM 1-8 No specific data. Index Primer Mix for ILM No specific data.

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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 Adapter for ILM	No specific data. No specific data.
	Hyb Blocker	No specific data.
	Hyb Blocker Hyb Buffer	No specific data.
	Hyb Enhancer	Adverse symptoms may include the following:
	Tryb Emianoei	reduced fetal weight
		increase in fetal deaths
		skeletal malformations
	2X Amplification Mastermix	
	Library Binding Beads	No specific data.
	Capture Beads	No specific data.
	Index Primer Mix for ILM 1-	No specific data.
	Index Primer Mix for ILM	No specific data.
	9-16	·
Skin contact	: Nuclease-Free Water	No specific data.
	Library Wash Buffer	No specific data.
	Hyb Ŵash 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
	Hyb Enhancer	redness Adverse symptoms may include the following:
	Tryb Ellilancei	reduced fetal weight
		increase in fetal deaths
		skeletal malformations
	2X Amplification Mastermix	
	Library Binding Beads	No specific data.
	Capture Beads	No specific data.
	Index Primer Mix for ILM 1-	
	Index Primer Mix for ILM 9-16	No specific data.
Innetien		No apposition data
Ingestion	: Nuclease-Free Water	No specific data.
	Library Wash Buffer Hyb Wash Buffer 1	No specific data. 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.
	Hyb Enhancer	Adverse symptoms may include the following:
	-	reduced fetal weight

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reduced fetal weight

skeletal malformations 2X Amplification Mastermix Library Binding Beads

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

No specific data. No specific data. No specific data. No specific data. No specific data.

increase in fetal deaths

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

Short term exposure

Potential immediate

effects

: Not available.

Capture Beads

Potential delayed effects : Not available.

Long term exposure

Carcinogenicity

Potential immediate

: Not available.

effects

: Not available. Potential delayed effects

Potential chronic health effects

General

: 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

Index Primer Mix for ILM 1-8 Index Primer Mix for ILM

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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

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

repeated 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. 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. Index Primer Mix for ILM 1-8 No known significant effects or critical hazards.

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Mutagenicity

Index Primer Mix for ILM 9-16

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 Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16 : Nuclease-Free Water

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

Reproductive toxicity

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 Hvb Buffer Hyb Enhancer 2X Amplification Mastermix Library Binding Beads Capture Beads Index Primer Mix for ILM 1-8 Index Primer Mix for ILM 9-16

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.

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/l)
Library Wash Buffer					
Library Wash Buffer	37635.4	N/A	N/A	N/A	N/A
Hyb Wash Buffer 1					
Hyb Wash Buffer 1	171428.6	N/A	N/A	N/A	N/A
Sodium dodecyl sulphate	1288	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

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End Prep Buffer					
End Prep Buffer	229323.3	204752.9	N/A	N/A	N/A
Magnesium chloride	2800	2500	N/A	N/A	N/A
End Prep Enzyme					
Glycerol	12600	N/A	N/A	N/A	N/A
	12000		1077	1077	14/7
Ligation Enzyme					
Glycerol	12600	N/A	N/A	N/A	N/A
Hyb Buffer	450.0	0707.0			
Hyb Buffer	450.2	2737.2	N/A	N/A	N/A
tetramethylammonium chloride Dextran sulfate sodium	50 20600	300 N/A	N/A N/A	N/A N/A	N/A N/A
Poly(oxy-1,2-ethanediyl), .alpha[500	N/A N/A	N/A N/A	N/A N/A	N/A N/A
(1,1,3,3-tetramethylbutyl)phenyl]omegahydroxy-	300	IN/A	IN/A	IN/A	IN/A
(1,1,5,5-tetrametry)buty/priemyjomegamydroxy-					
Hyb Enhancer					
Formamide	5570	17000	N/A	N/A	N/A
2X Amplification Mastermix					
Glycerol	12600	N/A	N/A	N/A	N/A
Library Binding Boods					
Library Binding Beads	47055.0	N1/A	N1/A	N1/A	NI/A
Library Binding Beads	17855.8	N/A	N/A	N/A	N/A

Other information

: End Prep Buffer Adverse symptoms may include the following: May

cause skin sensitization.

Adapter for ILM 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

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 - Cirrhinus mrigala - 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[(1,1,3,3-tetramethylbutyl)	Acute EC50 210 μg/l Fresh water	Algae - Selenastrum sp.	96 hours
phenyl]omegahydroxy-	Acute LC50 10800 μg/l Marine water	Crustaceans - Pandalus	48 hours

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<u> </u>			1
		<i>montagui</i> - Adult	
	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
Ligation Enzyme Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Siyosi oi	Thouse 2000 04000 mg/11 real water	1 1011 Oncornynenae myklee	JO HOUIS
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)	Acute EC50 210 μg/l Fresh water	Algae - Selenastrum sp.	96 hours
phenyl]omegahydroxy-	Acute LC50 10800 μg/l Marine water	Crustaceans - <i>Pandalus</i> montagui - Adult	48 hours
	Acute LC50 2.518 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Hyb Enhancer			
Formamide	Acute EC50 >500 mg/l Fresh water	Algae	72 hours
	Acute EC50 >500 mg/l Fresh water	Daphnia	48 hours
	Acute LC50 6569 mg/l Fresh water	Fish	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			
Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

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	93 % - 30 days	-	-

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	Biodegradability - Closed Bottle Test			
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	-	-

	I I		
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

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), . alpha[(1,1,3,3-tetramethylbutyl) phenyl]omegahydroxy-	2.7	78.67	Low
End Prep Enzyme Glycerol	-1.76	-	Low
Ligation Enzyme Glycerol	-1.76	-	Low
Hyb Buffer			

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tetramethylammonium chloride	<-1.6	-	Low
Poly(oxy-1,2-ethanediyl), . alpha[2.7	78.67	Low
(1,1,3,3-tetramethylbutyl)			
phenyl]omegahydroxy-			
Hyb Enhancer Formamide	-0.82		Low
		-	LOW
2X Amplification Mastermix			
Glycerol	-1.76	-	Low

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects : N

: No known significant effects or critical hazards.

Section 13. Disposal considerations

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.

Section 14. Transport information

TDG / IMDG / IATA : Not regulated.

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

Canadian lists

Canadian NPRI : None of the components are listed.

CEPA Toxic substances : None of the components are listed.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

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Section 15. Regulatory information

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

Canada : Not determined.
United States : Not determined.

Section 16. Other information

History

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Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

HPR = Hazardous Products Regulations 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

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 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method Calculation method Calculation method

Indicates information that has changed from previously issued version.

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Section 16. Other information

Notice to reader

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

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