

SAFETY DATA SHEET



HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

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

1.1 Product identifier

Product name	: HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions
Part no. (chemical kit)	: 5191-4066, 5191-4067 (RO)
Part no.	: HaloPlex Indexing 5190-8026
	Primer A01 - H06
	Hybridization Solution 5190-5951
	Wash Solution 5190-5953
	Capture Solution 5190-5954
	RE Buffer 5190-5956
	Enrichment Control DNA 5190-5957
	Primer 1 5190-5958
	Primer 2 5190-5959
	SSC Buffer 5190-5960
	Enzyme Strip 1 5190-5961
	Enzyme Strip 2 5190-5962
	BSA Solution 5190-5963
	Ligation Solution 5190-7832
	DNA Ligase 5190-7829
	HaloPlex Probe, 48 Reactions 5191-4070 / 5191-4071 (RO)

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

Identified uses	: <input checked="" type="checkbox"/> Analytical reagent. For research use only.	
	<input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	48 x 0.015 ml (48 reactions)
	Hybridization Solution	3.5 ml (48 reactions)
	Wash Solution	7 ml (48 reactions)
	Capture Solution	2.4 ml (48 reactions)
	RE Buffer	2.4 ml (48 reactions)
	Enrichment Control DNA	0.24 ml (48 reactions)
	Primer 1	0.068 ml (48 reactions)
	Primer 2	0.068 ml (48 reactions)
	SSC Buffer	8.15 ml (48 reactions)
	Enzyme Strip 1	0.368 ml (48 reactions)
	Enzyme Strip 2	0.368 ml (48 reactions)
	BSA Solution	0.058 ml (48 reactions)
	Ligation Solution	3.25 ml (48 reactions)
	DNA Ligase	0.17 ml (48 reactions)
	HaloPlex Probe, 48 Reactions	0.96 ml (48 reactions)

Uses advised against : Not for use in diagnostic procedures.

1.3 Details of the supplier of the safety data sheet

Agilent Technologies LDA UK Ltd.
5500 Lakeside Cheadle Royal Business Park,
Cheadle, Cheshire, SK8 3GR
United Kingdom
Tel: +44 (0) 345 712 5292
0800 603 1000

e-mail address of person responsible for this SDS : pdl-msds_author@agilent.com

1.4 Emergency telephone number

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

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

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

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition	:	HaloPlex Indexing Mixture
		Primer A01 - H06
		Hybridization Solution Mixture
		Wash Solution Mixture
		Capture Solution Mixture
		RE Buffer Mixture
		Enrichment Control DNA Mixture
		Primer 1 Mixture
		Primer 2 Mixture
		SSC Buffer Mixture
		Enzyme Strip 1 Mixture
		Enzyme Strip 2 Mixture
		BSA Solution Mixture
		Ligation Solution Mixture
		DNA Ligase Mixture
		HaloPlex Probe, 48 Reactions Mixture

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

Hybridization Solution

H351	CARCINOGENICITY	Category 2
H360D	REPRODUCTIVE TOXICITY	Category 1B
H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Category 2

Wash Solution

H351	CARCINOGENICITY	Category 2
H360D	REPRODUCTIVE TOXICITY	Category 1B
H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	Category 2

Ingredients of unknown toxicity

:	Hybridization Solution	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 10 - 30%
	Wash Solution	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	Capture Solution	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	Enzyme Strip 1	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
	Enzyme Strip 2	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%
	BSA Solution	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 1 - 10%
	DNA Ligase	Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 30 - 60%

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

SECTION 2: Hazards identification

	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Response	<input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	P308 + P313 - IF exposed or concerned: Get medical advice or attention.
	Wash Solution	P308 + P313 - IF exposed or concerned: Get medical advice or attention.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Storage	<input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Not applicable.
	Wash Solution	Not applicable.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Disposal	<input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Wash Solution	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.

SECTION 2: Hazards identification

	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Supplemental label elements	: <input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Not applicable.
	Wash Solution	Not applicable.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Safety data sheet available on request.
	Enzyme Strip 2	Safety data sheet available on request.
	BSA Solution	Safety data sheet available on request.
	Ligation Solution	Not applicable.
	DNA Ligase	Safety data sheet available on request.
	HaloPlex Probe, 48 Reactions	Not applicable.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: <input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Restricted to professional users.
	Wash Solution	Restricted to professional users.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Special packaging requirements		
Containers to be fitted with child-resistant fastenings	: <input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Not applicable.
	Wash Solution	Not applicable.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.

SECTION 2: Hazards identification

Tactile warning of danger	:	HaloPlex Indexing Primer A01 - H06	Not applicable.
		Hybridization Solution	Not applicable.
		Wash Solution	Not applicable.
		Capture Solution	Not applicable.
		RE Buffer	Not applicable.
		Enrichment Control DNA	Not applicable.
		Primer 1	Not applicable.
		Primer 2	Not applicable.
		SSC Buffer	Not applicable.
		Enzyme Strip 1	Not applicable.
		Enzyme Strip 2	Not applicable.
		BSA Solution	Not applicable.
		Ligation Solution	Not applicable.
		DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.	

2.3 Other hazards

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

:	HaloPlex Indexing Primer A01 - H06	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Hybridization Solution	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Wash Solution	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Capture Solution	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	RE Buffer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Enrichment Control DNA	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Primer 1	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Primer 2	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	SSC Buffer	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Enzyme Strip 1	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Enzyme Strip 2	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	BSA Solution	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	Ligation Solution	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	DNA Ligase	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.
	HaloPlex Probe, 48 Reactions	This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

:	HaloPlex Indexing Primer A01 - H06	None known.
	Hybridization Solution	None known.
	Wash Solution	None known.
	Capture Solution	None known.
	RE Buffer	None known.
	Enrichment Control DNA	None known.
	Primer 1	None known.
	Primer 2	None known.
	SSC Buffer	None known.
	Enzyme Strip 1	None known.
	Enzyme Strip 2	None known.
	BSA Solution	None known.

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 2: Hazards identification

Ligation Solution None known.
 DNA Ligase None known.
 HaloPlex Probe, 48 Reactions None known.

Substances identified as having endocrine disruptor properties :

Ingredient name	Impact
Ligation Solution Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Environment
DNA Ligase Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Environment

SECTION 3: Composition/information on ingredients

3.1 Substances : HaloPlex Indexing Primer A01 - Mixture
 H06
 Hybridization Solution Mixture
 Wash Solution Mixture
 Capture Solution Mixture
 RE Buffer Mixture
 Enrichment Control DNA Mixture
 Primer 1 Mixture
 Primer 2 Mixture
 SSC Buffer Mixture
 Enzyme Strip 1 Mixture
 Enzyme Strip 2 Mixture
 BSA Solution Mixture
 Ligation Solution Mixture
 DNA Ligase Mixture
 HaloPlex Probe, 48 Reactions Mixture

Product/ingredient name	Identifiers	%	Classification	Type
Hybridization Solution Formamide	EC: 200-842-0 CAS: 75-12-7	≥25 - ≤50	Carc. 2, H351 Repr. 1B, H360D STOT RE 2, H373 (blood) (oral)	[1] [2]
Wash Solution Formamide	EC: 200-842-0 CAS: 75-12-7	≥10 - ≤25	Carc. 2, H351 Repr. 1B, H360D STOT RE 2, H373 (blood) (oral)	[1] [2]
Enzyme Strip 1 Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[1]
Enzyme Strip 2 Glycerol	EC: 200-289-5 CAS: 56-81-5	≥50 - ≤75	Not classified.	[1]
BSA Solution Glycerol	EC: 200-289-5 CAS: 56-81-5	≤10	Not classified.	[1]
Ligation Solution Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	CAS: 9036-19-5	<0.25	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	[1] [2]

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 3: Composition/information on ingredients

<p>DNA Ligase Glycerol</p> <p>Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-</p>	<p>EC: 200-289-5 CAS: 56-81-5 CAS: 9036-19-5</p>	<p>≥50 - ≤75</p> <p><0.25</p>	<p>Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)</p> <p>Not classified.</p> <p>Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)</p> <p>See Section 16 for the full text of the H statements declared above.</p>	<p>[2]</p> <p>[1] [3]</p>
--	--	----------------------------------	---	---------------------------

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

Type

Hybridization Solution	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
Wash Solution	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit
Enzyme Strip 1	[1] Substance with a workplace exposure limit
Enzyme Strip 2	[1] Substance with a workplace exposure limit
BSA Solution	[1] Substance with a workplace exposure limit
Ligation Solution	[1] Substance classified with a health or environmental hazard [2] Substance of equivalent concern
DNA Ligase	[1] Substance classified with a health or environmental hazard [2] Substance with a workplace exposure limit [3] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid measures

Eye contact	: HaloPlex Indexing Primer A01 - H06	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.
	Hybridization Solution	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.
	Wash Solution	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.
	Capture Solution	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.
	RE 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.
	Enrichment Control DNA	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.
	Primer 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.

SECTION 4: First aid measures

Inhalation

Primer 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.
SSC 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.
Enzyme Strip 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.
Enzyme Strip 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.
BSA Solution	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
Ligation Solution	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.
DNA Ligase	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.
HaloPlex Probe, 48 Reactions	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.
: HaloPlex Indexing Primer A01 - H06	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Hybridization Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Wash Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Capture Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
RE Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Enrichment Control DNA	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Primer 1	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Primer 2	Remove victim to fresh air and keep at rest in a position

SECTION 4: First aid measures


	comfortable for breathing. Get medical attention if symptoms occur.
SSC Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Enzyme Strip 1	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Enzyme Strip 2	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
BSA Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
Ligation Solution	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
DNA Ligase	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.
HaloPlex Probe, 48 Reactions	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact

: HaloPlex Indexing Primer A01 - H06	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Hybridization Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Wash Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Capture Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
RE Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Enrichment Control DNA	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Primer 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Primer 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
SSC Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Enzyme Strip 1	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Enzyme Strip 2	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
BSA Solution	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if

SECTION 4: First aid measures

Ingestion

Ligation Solution	symptoms occur. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
DNA Ligase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
HaloPlex Probe, 48 Reactions	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
:  HaloPlex Indexing Primer A01 - H06	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.
Hybridization Solution	Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Wash Solution	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.
Capture Solution	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.
RE Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Enrichment Control DNA	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.
Primer 1	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Primer 2	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.
SSC Buffer	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of

SECTION 4: First aid measures

	water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Enzyme Strip 1	Wash out mouth with water. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
Enzyme Strip 2	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.
BSA Solution	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.
Ligation Solution	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.
DNA Ligase	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.
HaloPlex Probe, 48 Reactions	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.
Protection of first-aiders : HaloPlex Indexing Primer A01 - H06 Hybridization Solution	No action shall be taken involving any personal risk or without suitable training. No action shall be taken involving any personal risk or without suitable training. 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.
Wash Solution	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.
Capture Solution	No action shall be taken involving any personal risk or without suitable training.
RE Buffer	No action shall be taken involving any personal risk or without suitable training.
Enrichment Control DNA	No action shall be taken involving any personal risk or without suitable training.
Primer 1	No action shall be taken involving any personal risk or without suitable training.
Primer 2	No action shall be taken involving any personal risk or without suitable training.
SSC Buffer	No action shall be taken involving any personal risk or without suitable training.
Enzyme Strip 1	No action shall be taken involving any personal risk or without suitable training.
Enzyme Strip 2	No action shall be taken involving any personal risk or without

SECTION 4: First aid measures

BSA Solution	suitable training. No action shall be taken involving any personal risk or without suitable training.
Ligation Solution	No action shall be taken involving any personal risk or without suitable training.
DNA Ligase	No action shall be taken involving any personal risk or without suitable training.
HaloPlex Probe, 48 Reactions	No action shall be taken involving any personal risk or without suitable training.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact

: HaloPlex Indexing Primer A01 - H06	No specific data.
Hybridization Solution	No specific data.
Wash Solution	No specific data.
Capture Solution	No specific data.
RE Buffer	No specific data.
Enrichment Control DNA	No specific data.
Primer 1	No specific data.
Primer 2	No specific data.
SSC Buffer	No specific data.
Enzyme Strip 1	No specific data.
Enzyme Strip 2	No specific data.
BSA Solution	No specific data.
Ligation Solution	No specific data.
DNA Ligase	No specific data.
HaloPlex Probe, 48 Reactions	No specific data.

Inhalation

: HaloPlex Indexing Primer A01 - H06	No specific data.
Hybridization Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Wash Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Capture Solution	No specific data.
RE Buffer	No specific data.
Enrichment Control DNA	No specific data.
Primer 1	No specific data.
Primer 2	No specific data.
SSC Buffer	No specific data.
Enzyme Strip 1	No specific data.
Enzyme Strip 2	No specific data.
BSA Solution	No specific data.
Ligation Solution	No specific data.
DNA Ligase	No specific data.
HaloPlex Probe, 48 Reactions	No specific data.

Skin contact

: HaloPlex Indexing Primer A01 - H06	No specific data.
Hybridization Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Wash Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Capture Solution	No specific data.

SECTION 4: First aid measures

	RE Buffer	No specific data.
	Enrichment Control DNA	No specific data.
	Primer 1	No specific data.
	Primer 2	No specific data.
	SSC Buffer	No specific data.
	Enzyme Strip 1	No specific data.
	Enzyme Strip 2	No specific data.
	BSA Solution	No specific data.
	Ligation Solution	No specific data.
	DNA Ligase	No specific data.
	HaloPlex Probe, 48 Reactions	No specific data.
Ingestion	: HaloPlex Indexing Primer A01 - H06 Hybridization Solution	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Wash Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Capture Solution	No specific data.
	RE Buffer	No specific data.
	Enrichment Control DNA	No specific data.
	Primer 1	No specific data.
	Primer 2	No specific data.
	SSC Buffer	No specific data.
	Enzyme Strip 1	No specific data.
	Enzyme Strip 2	No specific data.
	BSA Solution	No specific data.
	Ligation Solution	No specific data.
	DNA Ligase	No specific data.
	HaloPlex Probe, 48 Reactions	No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician	: HaloPlex Indexing Primer A01 - H06 Hybridization Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Wash Solution	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.
	Capture Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	RE Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Enrichment Control DNA	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Primer 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Primer 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	SSC Buffer	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Enzyme Strip 1	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Enzyme Strip 2	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	BSA Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 4: First aid measures

Specific treatments	:	Ligation Solution	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		DNA Ligase	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		HaloPlex Probe, 48 Reactions	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
		HaloPlex Indexing Primer A01 - H06	No specific treatment.
		Hybridization Solution	No specific treatment.
		Wash Solution	No specific treatment.
		Capture Solution	No specific treatment.
		RE Buffer	No specific treatment.
		Enrichment Control DNA	No specific treatment.
		Primer 1	No specific treatment.
		Primer 2	No specific treatment.
		SSC Buffer	No specific treatment.
		Enzyme Strip 1	No specific treatment.
		Enzyme Strip 2	No specific treatment.
		BSA Solution	No specific treatment.
Ligation Solution	No specific treatment.		
DNA Ligase	No specific treatment.		
HaloPlex Probe, 48 Reactions	No specific treatment.		

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media	:	HaloPlex Indexing Primer A01 - H06	Use an extinguishing agent suitable for the surrounding fire.
		Hybridization Solution	Use an extinguishing agent suitable for the surrounding fire.
		Wash Solution	Use an extinguishing agent suitable for the surrounding fire.
		Capture Solution	Use an extinguishing agent suitable for the surrounding fire.
		RE Buffer	Use an extinguishing agent suitable for the surrounding fire.
		Enrichment Control DNA	Use an extinguishing agent suitable for the surrounding fire.
		Primer 1	Use an extinguishing agent suitable for the surrounding fire.
		Primer 2	Use an extinguishing agent suitable for the surrounding fire.
		SSC Buffer	Use an extinguishing agent suitable for the surrounding fire.
		Enzyme Strip 1	Use an extinguishing agent suitable for the surrounding fire.
		Enzyme Strip 2	Use an extinguishing agent suitable for the surrounding fire.
		BSA Solution	Use an extinguishing agent suitable for the surrounding fire.
		Ligation Solution	Use an extinguishing agent suitable for the surrounding fire.
		DNA Ligase	Use an extinguishing agent suitable for the surrounding fire.
		HaloPlex Probe, 48 Reactions	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	HaloPlex Indexing Primer A01 - H06	None known.
		Hybridization Solution	None known.
		Wash Solution	None known.
		Capture Solution	None known.
		RE Buffer	None known.
		Enrichment Control DNA	None known.
		Primer 1	None known.
		Primer 2	None known.
		SSC Buffer	None known.
		Enzyme Strip 1	None known.
		Enzyme Strip 2	None known.
		BSA Solution	None known.
		Ligation Solution	None known.
		DNA Ligase	None known.
		HaloPlex Probe, 48 Reactions	None known.

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures


Hazards from the substance or mixture	:	<input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06 Hybridization Solution	In a fire or if heated, a pressure increase will occur and the container may burst. In a fire or if heated, a pressure increase will occur and the container may burst.	
		Wash Solution	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Capture Solution	In a fire or if heated, a pressure increase will occur and the container may burst.	
		RE Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Enrichment Control DNA	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Primer 1	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Primer 2	In a fire or if heated, a pressure increase will occur and the container may burst.	
		SSC Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Enzyme Strip 1	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Enzyme Strip 2	In a fire or if heated, a pressure increase will occur and the container may burst.	
		BSA Solution	In a fire or if heated, a pressure increase will occur and the container may burst.	
		Ligation Solution	In a fire or if heated, a pressure increase will occur and the container may burst.	
		DNA Ligase	In a fire or if heated, a pressure increase will occur and the container may burst.	
		HaloPlex Probe, 48 Reactions	In a fire or if heated, a pressure increase will occur and the container may burst.	
	Hazardous combustion products	:	<input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06 Hybridization Solution	No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
			Wash Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
		Capture Solution	Decomposition products may include the following materials: halogenated compounds metal oxide/oxides	
		RE Buffer	No specific data.	
		Enrichment Control DNA	No specific data.	
		Primer 1	No specific data.	
		Primer 2	No specific data.	
		SSC Buffer	No specific data.	
		Enzyme Strip 1	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
		Enzyme Strip 2	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
		BSA Solution	Decomposition products may include the following materials: carbon dioxide carbon monoxide	
		Ligation Solution DNA Ligase	No specific data. Decomposition products may include the following materials: carbon dioxide	

SECTION 5: Firefighting measures

HaloPlex Probe, 48 Reactions
 carbon monoxide
 No specific data.


5.3 Advice for firefighters

Special protective actions for fire-fighters

:  HaloPlex Indexing Primer A01 - H06
 Hybridization Solution
 Wash Solution
 Capture Solution
 RE Buffer
 Enrichment Control DNA
 Primer 1
 Primer 2
 SSC Buffer
 Enzyme Strip 1
 Enzyme Strip 2
 BSA Solution
 Ligation Solution
 DNA Ligase
 HaloPlex Probe, 48 Reactions

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters

:  HaloPlex Indexing Primer A01 - H06
 Hybridization Solution
 Wash Solution
 Capture Solution
 RE Buffer

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

SECTION 5: Firefighting measures

Enrichment Control DNA	and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive 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.
Primer 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Primer 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SSC Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Enzyme Strip 1	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Enzyme Strip 2	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
BSA Solution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Ligation Solution	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
DNA Ligase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
HaloPlex Probe, 48 Reactions	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures


For non-emergency personnel

: HaloPlex Indexing Primer A01 - H06	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
Hybridization Solution	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Wash Solution	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
Capture Solution	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
RE 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 spilt material. Put on appropriate

SECTION 6: Accidental release measures

	take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
RE Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enrichment Control DNA	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Primer 1	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Primer 2	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SSC Buffer	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enzyme Strip 1	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Enzyme Strip 2	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
BSA Solution	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
Ligation Solution	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
DNA Ligase	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
HaloPlex Probe, 48 Reactions	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

:  HaloPlex Indexing Primer A01 - H06	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Hybridization Solution	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Wash Solution	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Capture Solution	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution

SECTION 6: Accidental release measures

RE Buffer	(sewers, waterways, soil or air). Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Enrichment Control DNA	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Primer 1	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Primer 2	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SSC Buffer	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Enzyme Strip 1	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Enzyme Strip 2	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
BSA Solution	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
Ligation Solution	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
DNA Ligase	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
HaloPlex Probe, 48 Reactions	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and material for containment and cleaning up

Methods for cleaning up	: HaloPlex Indexing Primer A01 - H06	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.
	Hybridization Solution	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.
	Wash Solution	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.
	Capture Solution	Stop leak if without risk. Move containers from spill area.

SECTION 6: Accidental release measures

	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.
RE 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.
Enrichment Control DNA	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.
Primer 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.
Primer 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.
SSC 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.
Enzyme Strip 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.
Enzyme Strip 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.
BSA Solution	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 Solution	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. May be harmful to the environment if released. Dispose of spillages under controlled conditions.
DNA Ligase	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. May be harmful to the environment if released. Dispose of spillages under controlled conditions.
HaloPlex Probe, 48 Reactions	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 6: Accidental release measures

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

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures	: HaloPlex Indexing Primer A01 - H06 Hybridization Solution	Put on appropriate personal protective equipment (see Section 8). Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour 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.
	Wash Solution	Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour 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.
	Capture Solution	Put on appropriate personal protective equipment (see Section 8).
	RE Buffer	Put on appropriate personal protective equipment (see Section 8).
	Enrichment Control DNA	Put on appropriate personal protective equipment (see Section 8).
	Primer 1	Put on appropriate personal protective equipment (see Section 8).
	Primer 2	Put on appropriate personal protective equipment (see Section 8).
	SSC Buffer	Put on appropriate personal protective equipment (see Section 8).
	Enzyme Strip 1	Put on appropriate personal protective equipment (see Section 8).
	Enzyme Strip 2	Put on appropriate personal protective equipment (see Section 8).
	BSA Solution	Put on appropriate personal protective equipment (see Section 8).
	Ligation Solution	Put on appropriate personal protective equipment (see Section 8).
	DNA Ligase	Put on appropriate personal protective equipment (see Section 8).
	HaloPlex Probe, 48 Reactions	Put on appropriate personal protective equipment (see Section 8).

SECTION 7: Handling and storage

Advice on general occupational hygiene


: HaloPlex Indexing Primer A01 - H06	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.
Hybridization Solution	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.
Wash Solution	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.
Capture Solution	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.
RE Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Enrichment Control DNA	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.
Primer 1	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.
Primer 2	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.
SSC Buffer	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
Enzyme Strip 1	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.
Enzyme Strip 2	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

SECTION 7: Handling and storage

BSA Solution	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.
Ligation Solution	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.
DNA Ligase	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.
HaloPlex Probe, 48 Reactions	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage

:  HaloPlex Indexing Primer A01 - H06	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Hybridization Solution	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Wash Solution	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Capture Solution	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

SECTION 7: Handling and storage

	opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
RE 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Enrichment Control DNA	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Primer 1	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Primer 2	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
SSC 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 unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Enzyme Strip 1	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials

SECTION 7: Handling and storage

Enzyme Strip 2	before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
BSA Solution	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
Ligation Solution	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
DNA Ligase	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
HaloPlex Probe, 48 Reactions	Storage temperature: -20°C (-4°F). Store in accordance with local regulations. Shelf life: 2 years. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

7.3 Specific end use(s)

Recommendations

: HaloPlex Indexing Primer A01 - H06	Industrial applications, Professional applications.
Hybridization Solution	Industrial applications, Professional applications.
Wash Solution	Industrial applications, Professional applications.
Capture Solution	Industrial applications, Professional applications.
RE Buffer	Industrial applications, Professional applications.
Enrichment Control DNA	Industrial applications, Professional applications.
Primer 1	Industrial applications, Professional applications.

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 7: Handling and storage

Primer 2	Industrial applications, Professional applications.
SSC Buffer	Industrial applications, Professional applications.
Enzyme Strip 1	Industrial applications, Professional applications.
Enzyme Strip 2	Industrial applications, Professional applications.
BSA Solution	Industrial applications, Professional applications.
Ligation Solution	Industrial applications, Professional applications.
DNA Ligase	Industrial applications, Professional applications.
HaloPlex Probe, 48 Reactions	Industrial applications, Professional applications.

Industrial sector specific solutions :

HaloPlex Indexing Primer A01 - H06	Not available.
Hybridization Solution	Not available.
Wash Solution	Not available.
Capture Solution	Not available.
RE Buffer	Not available.
Enrichment Control DNA	Not available.
Primer 1	Not available.
Primer 2	Not available.
SSC Buffer	Not available.
Enzyme Strip 1	Not available.
Enzyme Strip 2	Not available.
BSA Solution	Not available.
Ligation Solution	Not available.
DNA Ligase	Not available.
HaloPlex Probe, 48 Reactions	Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Hybridization Solution Formamide	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 56 mg/m ³ 15 minutes. STEL: 30 ppm 15 minutes. TWA: 37 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
Wash Solution Formamide	EH40/2005 WELs (United Kingdom (UK), 1/2020). STEL: 56 mg/m ³ 15 minutes. STEL: 30 ppm 15 minutes. TWA: 37 mg/m ³ 8 hours. TWA: 20 ppm 8 hours.
Enzyme Strip 1 Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
Enzyme Strip 2 Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
BSA Solution Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist
DNA Ligase Glycerol	EH40/2005 WELs (United Kingdom (UK), 1/2020). TWA: 10 mg/m ³ 8 hours. Form: Mist

SECTION 8: Exposure controls/personal protection

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
Hybridization Solution Formamide	DNEL	Long term Dermal	0.952 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	6.6 mg/m ³	Workers	Systemic
Wash Solution Formamide	DNEL	Long term Dermal	0.952 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	6.6 mg/m ³	Workers	Systemic
Enzyme Strip 1 Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic
Enzyme Strip 2 Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic
BSA Solution Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic
DNA Ligase Glycerol	DNEL	Long term Inhalation	33 mg/m ³	General population	Local
	DNEL	Long term Inhalation	56 mg/m ³	Workers	Local
	DNEL	Long term Oral	229 mg/kg bw/day	General population	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures

SECTION 8: Exposure controls/personal protection

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.
- Skin protection**
- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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

9.1 Information on basic physical and chemical properties

Appearance

Physical state	:	HaloPlex Indexing Primer A01 - H06 Hybridization Solution	Liquid.
		Wash Solution	Liquid.
		Capture Solution	Liquid.
		RE Buffer	Liquid.
		Enrichment Control DNA	Liquid.
		Primer 1	Liquid.
		Primer 2	Liquid.
		SSC Buffer	Liquid.
		Enzyme Strip 1	Liquid. [Clear.]
		Enzyme Strip 2	Liquid. [Clear.]
		BSA Solution	Liquid. [Clear.]
		Ligation Solution	Liquid.
		DNA Ligase	Liquid.
		HaloPlex Probe, 48 Reactions	Liquid.

SECTION 9: Physical and chemical properties

Colour	:	HaloPlex Indexing	Not available.
		Primer A01 - H06	
		Hybridization Solution	Not available.
		Wash Solution	Not available.
		Capture Solution	Not available.
		RE Buffer	Not available.
		Enrichment Control DNA	Not available.
		Primer 1	Not available.
		Primer 2	Not available.
		SSC Buffer	Not available.
		Enzyme Strip 1	Colourless.
		Enzyme Strip 2	Colourless.
		BSA Solution	Colourless.
		Ligation Solution	Not available.
		DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	Not available.	
Odour	:	HaloPlex Indexing	Not available.
		Primer A01 - H06	
		Hybridization Solution	Not available.
		Wash Solution	Not available.
		Capture Solution	Not available.
		RE Buffer	Not available.
		Enrichment Control DNA	Not available.
		Primer 1	Not available.
		Primer 2	Not available.
		SSC Buffer	Not available.
		Enzyme Strip 1	Odourless.
		Enzyme Strip 2	Odourless.
		BSA Solution	Odourless.
		Ligation Solution	Not available.
		DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	Not available.	
Odour threshold	:	HaloPlex Indexing	Not available.
		Primer A01 - H06	
		Hybridization Solution	Not available.
		Wash Solution	Not available.
		Capture Solution	Not available.
		RE Buffer	Not available.
		Enrichment Control DNA	Not available.
		Primer 1	Not available.
		Primer 2	Not available.
		SSC Buffer	Not available.
		Enzyme Strip 1	Not available.
		Enzyme Strip 2	Not available.
		BSA Solution	Not available.
		Ligation Solution	Not available.
		DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	Not available.	
Melting point/freezing point	:	HaloPlex Indexing	0°C
		Primer A01 - H06	
		Hybridization Solution	Not available.
		Wash Solution	Not available.
		Capture Solution	Not available.
		RE Buffer	0°C
		Enrichment Control DNA	0°C
		Primer 1	0°C
		Primer 2	0°C
		SSC Buffer	0°C
	Enzyme Strip 1	20°C	

SECTION 9: Physical and chemical properties

	Enzyme Strip 2	20°C
	BSA Solution	20°C
	Ligation Solution	0°C
	DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	0°C
Initial boiling point and boiling range	: HaloPlex Indexing Primer A01 - H06	100°C
	Hybridization Solution	Not available.
	Wash Solution	Not available.
	Capture Solution	Not available.
	RE Buffer	100°C
	Enrichment Control DNA	100°C
	Primer 1	100°C
	Primer 2	100°C
	SSC Buffer	100°C
	Enzyme Strip 1	182°C
	Enzyme Strip 2	182°C
	BSA Solution	182°C
	Ligation Solution	100°C
	DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	100°C
Flammability	: HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Not applicable.
	Wash Solution	Not applicable.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Upper/lower flammability or explosive limits	: HaloPlex Indexing Primer A01 - H06	Not available.
	Hybridization Solution	Not available.
	Wash Solution	Not available.
	Capture Solution	Not available.
	RE Buffer	Not available.
	Enrichment Control DNA	Not available.
	Primer 1	Not available.
	Primer 2	Not available.
	SSC Buffer	Not available.
	Enzyme Strip 1	Not available.
	Enzyme Strip 2	Not available.
	BSA Solution	Not available.
	Ligation Solution	Not available.
	DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	Not available.

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 9: Physical and chemical properties

Flash point : HaloPlex Indexing Not available.
 Primer A01 - H06
 Hybridization Solution Not available.
 Wash Solution Not available.
 Capture Solution Not available.
 RE Buffer Not available.
 Enrichment Control DNA Not available.
 Primer 1 Not available.
 Primer 2 Not available.
 SSC Buffer Not available.
 Enzyme Strip 1 Closed cup: 160°C
 Enzyme Strip 2 Closed cup: 160°C
 BSA Solution Closed cup: 160°C
 Ligation Solution Not available.
 DNA Ligase Not available.
 HaloPlex Probe, 48 Not available.
 Reactions

Ingredient name	Closed cup		Open cup	
	°C	Method	°C	Method
Hybridization Solution				
Formamide			152	DIN EN ISO 2592
Wash Solution				
Formamide			152	DIN EN ISO 2592
DNA Ligase				
Glycerol			177	

Auto-ignition temperature : HaloPlex Indexing Not available.
 Primer A01 - H06
 Hybridization Solution Not available.
 Wash Solution Not available.
 Capture Solution Not available.
 RE Buffer Not available.
 Enrichment Control DNA Not available.
 Primer 1 Not available.
 Primer 2 Not available.
 SSC Buffer Not available.
 Enzyme Strip 1 370°C
 Enzyme Strip 2 370°C
 BSA Solution 370°C
 Ligation Solution Not available.
 DNA Ligase Not available.
 HaloPlex Probe, 48 Not available.
 Reactions

Ingredient name	°C	Method
Hybridization Solution		
Formamide	>500	ASTM D 2155-66
Wash Solution		
Formamide	>500	ASTM D 2155-66

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 9: Physical and chemical properties

DNA Ligase		
Glycerol	370	

Decomposition temperature :

HaloPlex Indexing Primer A01 - H06	Not available.
Hybridization Solution	Not available.
Wash Solution	Not available.
Capture Solution	Not available.
RE Buffer	Not available.
Enrichment Control DNA	Not available.
Primer 1	Not available.
Primer 2	Not available.
SSC Buffer	Not available.
Enzyme Strip 1	Not available.
Enzyme Strip 2	Not available.
BSA Solution	Not available.
Ligation Solution	Not available.
DNA Ligase	Not available.
HaloPlex Probe, 48 Reactions	Not available.

pH :

HaloPlex Indexing Primer A01 - H06	Not available.
Hybridization Solution	7.5
Wash Solution	7.5
Capture Solution	Not available.
RE Buffer	7.9
Enrichment Control DNA	Not available.
Primer 1	Not available.
Primer 2	Not available.
SSC Buffer	Not available.
Enzyme Strip 1	Not available.
Enzyme Strip 2	Not available.
BSA Solution	Not available.
Ligation Solution	Not available.
DNA Ligase	7.4
HaloPlex Probe, 48 Reactions	Not available.

Viscosity :

HaloPlex Indexing Primer A01 - H06	Not available.
Hybridization Solution	Not available.
Wash Solution	Not available.
Capture Solution	Not available.
RE Buffer	Not available.
Enrichment Control DNA	Not available.
Primer 1	Not available.
Primer 2	Not available.
SSC Buffer	Not available.
Enzyme Strip 1	Not available.
Enzyme Strip 2	Not available.
BSA Solution	Not available.
Ligation Solution	Not available.
DNA Ligase	Not available.
HaloPlex Probe, 48 Reactions	Not available.

SECTION 9: Physical and chemical properties

Solubility(ies)	Media	Result
	HaloPlex Indexing Primer A01 - H06 water	Soluble
	Hybridization Solution water	Soluble
	Wash Solution water	Soluble
	Capture Solution water	Soluble
	RE Buffer water	Soluble
	Enrichment Control DNA water	Soluble
	Primer 1 water	Soluble
	Primer 2 water	Soluble
	SSC Buffer water	Soluble
	Enzyme Strip 1 water	Soluble
	Enzyme Strip 2 water	Soluble
	BSA Solution water	Soluble
	Ligation Solution water	Soluble
	DNA Ligase water	Soluble
	HaloPlex Probe, 48 Reactions water	Soluble
Partition coefficient: n-octanol/water	HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Not applicable.
	Wash Solution	Not applicable.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.
Vapour pressure	HaloPlex Indexing Primer A01 - H06	Not available.
	Hybridization Solution	Not available.
	Wash Solution	Not available.
	Capture Solution	Not available.
	RE Buffer	Not available.
	Enrichment Control DNA	Not available.
	Primer 1	Not available.
	Primer 2	Not available.
	SSC Buffer	Not available.

SECTION 9: Physical and chemical properties

Enzyme Strip 1	<0.13 kPa (<1 mm Hg)
Enzyme Strip 2	<0.13 kPa (<1 mm Hg)
BSA Solution	<0.13 kPa (<1 mm Hg)
Ligation Solution	Not available.
DNA Ligase	Not available.
HaloPlex Probe, 48 Reactions	Not available.

Ingredient name	Vapour Pressure at 20° C			Vapour pressure at 50° C		
	mm Hg	kPa	Method	mm Hg	kPa	Method
HaloPlex Indexing Primer A01 - H06						
water	23.8	3.2		92.258	12.3	
Hybridization Solution						
water	23.8	3.2		92.258	12.3	
Formamide	0.05	0.0067				
Wash Solution						
water	23.8	3.2		92.258	12.3	
Formamide	0.05	0.0067				
Capture Solution						
water	23.8	3.2		92.258	12.3	
RE Buffer						
water	23.8	3.2		92.258	12.3	
Enrichment Control DNA						
water	23.8	3.2		92.258	12.3	
Primer 1						
water	23.8	3.2		92.258	12.3	
Primer 2						
water	23.8	3.2		92.258	12.3	
SSC Buffer						
water	23.8	3.2		92.258	12.3	
Ligation Solution						

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 9: Physical and chemical properties

water	23.8	3.2		92.258	12.3
DNA Ligase					
water	23.8	3.2		92.258	12.3
Glycerol	0.000075	0.00001		0.0025	0.00033
HaloPlex Probe, 48 Reactions					
water	23.8	3.2		92.258	12.3

Evaporation rate : HaloPlex Indexing Primer A01 - H06 Not available.
 Hybridization Solution Not available.
 Wash Solution Not available.
 Capture Solution Not available.
 RE Buffer Not available.
 Enrichment Control DNA Not available.
 Primer 1 Not available.
 Primer 2 Not available.
 SSC Buffer Not available.
 Enzyme Strip 1 Not available.
 Enzyme Strip 2 Not available.
 BSA Solution Not available.
 Ligation Solution Not available.
 DNA Ligase Not available.
 HaloPlex Probe, 48 Reactions Not available.

Relative density : HaloPlex Indexing Primer A01 - H06 Not available.
 Hybridization Solution Not available.
 Wash Solution Not available.
 Capture Solution Not available.
 RE Buffer Not available.
 Enrichment Control DNA Not available.
 Primer 1 Not available.
 Primer 2 Not available.
 SSC Buffer Not available.
 Enzyme Strip 1 1.262
 Enzyme Strip 2 1.262
 BSA Solution 1.262
 Ligation Solution Not available.
 DNA Ligase Not available.
 HaloPlex Probe, 48 Reactions Not available.

Vapour density : HaloPlex Indexing Primer A01 - H06 Not available.
 Hybridization Solution Not available.
 Wash Solution Not available.
 Capture Solution Not available.
 RE Buffer Not available.
 Enrichment Control DNA Not available.
 Primer 1 Not available.
 Primer 2 Not available.
 SSC Buffer Not available.
 Enzyme Strip 1 3.1 [Air = 1]
 Enzyme Strip 2 3.1 [Air = 1]
 BSA Solution 3.1 [Air = 1]
 Ligation Solution Not available.
 DNA Ligase Not available.

SECTION 9: Physical and chemical properties

	HaloPlex Probe, 48 Reactions	Not available.
Explosive properties	: HaloPlex Indexing Primer A01 - H06	Not available.
	Hybridization Solution	Not available.
	Wash Solution	Not available.
	Capture Solution	Not available.
	RE Buffer	Not available.
	Enrichment Control DNA	Not available.
	Primer 1	Not available.
	Primer 2	Not available.
	SSC Buffer	Not available.
	Enzyme Strip 1	Not available.
	Enzyme Strip 2	Not available.
	BSA Solution	Not available.
	Ligation Solution	Not available.
	DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	Not available.
Oxidising properties	: HaloPlex Indexing Primer A01 - H06	Not available.
	Hybridization Solution	Not available.
	Wash Solution	Not available.
	Capture Solution	Not available.
	RE Buffer	Not available.
	Enrichment Control DNA	Not available.
	Primer 1	Not available.
	Primer 2	Not available.
	SSC Buffer	Not available.
	Enzyme Strip 1	Not available.
	Enzyme Strip 2	Not available.
	BSA Solution	Not available.
	Ligation Solution	Not available.
	DNA Ligase	Not available.
	HaloPlex Probe, 48 Reactions	Not available.
Particle characteristics		
Median particle size	: HaloPlex Indexing Primer A01 - H06	Not applicable.
	Hybridization Solution	Not applicable.
	Wash Solution	Not applicable.
	Capture Solution	Not applicable.
	RE Buffer	Not applicable.
	Enrichment Control DNA	Not applicable.
	Primer 1	Not applicable.
	Primer 2	Not applicable.
	SSC Buffer	Not applicable.
	Enzyme Strip 1	Not applicable.
	Enzyme Strip 2	Not applicable.
	BSA Solution	Not applicable.
	Ligation Solution	Not applicable.
	DNA Ligase	Not applicable.
	HaloPlex Probe, 48 Reactions	Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

Primer 2	reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
SSC Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
Enzyme Strip 1	Under normal conditions of storage and use, hazardous reactions will not occur.
Enzyme Strip 2	Under normal conditions of storage and use, hazardous reactions will not occur.
BSA Solution	Under normal conditions of storage and use, hazardous reactions will not occur.
Ligation Solution	Under normal conditions of storage and use, hazardous reactions will not occur.
DNA Ligase	Under normal conditions of storage and use, hazardous reactions will not occur.
HaloPlex Probe, 48 Reactions	Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid	:	<ul style="list-style-type: none"> ▶ HaloPlex Indexing Primer A01 - H06 Hybridization Solution Wash Solution Capture Solution RE Buffer Enrichment Control DNA Primer 1 Primer 2 SSC Buffer Enzyme Strip 1 Enzyme Strip 2 BSA Solution Ligation Solution DNA Ligase HaloPlex Probe, 48 Reactions 	<ul style="list-style-type: none"> No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data. No specific data.
---------------------------------	---	--	--

10.5 Incompatible materials	:	<ul style="list-style-type: none"> ▶ HaloPlex Indexing Primer A01 - H06 Hybridization Solution Wash Solution Capture Solution RE Buffer Enrichment Control DNA Primer 1 Primer 2 SSC Buffer Enzyme Strip 1 Enzyme Strip 2 BSA Solution Ligation Solution DNA Ligase HaloPlex Probe, 48 Reactions 	<ul style="list-style-type: none"> May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials. May react or be incompatible with oxidising materials.
------------------------------------	---	--	--

10.6 Hazardous decomposition products	:	<ul style="list-style-type: none"> ▶ HaloPlex Indexing Primer A01 - H06 Hybridization Solution Wash Solution Capture Solution 	<ul style="list-style-type: none"> Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.
--	---	--	--

SECTION 10: Stability and reactivity

RE Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Enrichment Control DNA	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Primer 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Primer 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
SSC Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Enzyme Strip 1	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Enzyme Strip 2	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
BSA Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
Ligation Solution	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
DNA Ligase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
HaloPlex Probe, 48 Reactions	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hybridization Solution Formamide	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rat - Male Rabbit Rat	>21 mg/l 17 g/kg 4000 mg/kg	4 hours - -
Wash Solution Formamide	LC50 Inhalation Dusts and mists LD50 Dermal LD50 Oral	Rat - Male Rabbit Rat	>21 mg/l 17 g/kg 4000 mg/kg	4 hours - -
Enzyme Strip 1 Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Enzyme Strip 2 Glycerol	LD50 Oral	Rat	12600 mg/kg	-
BSA Solution Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Ligation Solution Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-
DNA Ligase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	LD50 Oral	Rat	2800 mg/kg	-

Acute toxicity estimates

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Hybridization Solution Formamide	4000	17000	N/A	N/A	N/A
Wash Solution Formamide	4000	17000	N/A	N/A	N/A
Enzyme Strip 1 Glycerol	12600	N/A	N/A	N/A	N/A
Enzyme Strip 2 Glycerol	12600	N/A	N/A	N/A	N/A
BSA Solution Glycerol	12600	N/A	N/A	N/A	N/A
Ligation Solution Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	500	N/A	N/A	N/A	N/A
DNA Ligase Glycerol	12600	N/A	N/A	N/A	N/A
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	500	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Hybridization Solution Formamide	Eyes - Severe irritant	Rabbit	-	100 mg	-
Wash Solution Formamide	Eyes - Severe irritant	Rabbit	-	100 mg	-
Enzyme Strip 1 Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Enzyme Strip 2 Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
BSA Solution Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
Ligation Solution Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Eyes - Severe irritant	Rabbit	-	1 %	-
DNA Ligase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 mg	-

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 11: Toxicological information

Poly(oxy-1,2-ethanediyl), . alpha.-[(1,1,3,3-tetramethylbutyl) phenyl]-.omega.-hydroxy-	Skin - Mild irritant	Rabbit	-	mg 24 hours 500	-
	Eyes - Severe irritant	Rabbit	-	mg 1 %	-

Sensitiser

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Hybridization Solution Formamide	Category 2	oral	blood
Wash Solution Formamide	Category 2	oral	blood

Aspiration hazard

Not available.

Information on likely routes of exposure

HyaloPlex Indexing Primer A01 - H06	Not available.
Hybridization Solution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Wash Solution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Capture Solution	Not available.
RE Buffer	Not available.
Enrichment Control DNA	Not available.
Primer 1	Not available.
Primer 2	Not available.
SSC Buffer	Not available.
Enzyme Strip 1	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
Enzyme Strip 2	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
BSA Solution	Not available.
Ligation Solution	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
DNA Ligase	Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.
HaloPlex Probe, 48 Reactions	Not available.

Potential acute health effects

Inhalation	HyaloPlex Indexing Primer A01 - H06	No known significant effects or critical hazards.
	Hybridization Solution	No known significant effects or critical hazards.
	Wash Solution	No known significant effects or critical hazards.
	Capture Solution	No known significant effects or critical hazards.
	RE Buffer	No known significant effects or critical hazards.
	Enrichment Control DNA	No known significant effects or critical hazards.
	Primer 1	No known significant effects or critical hazards.
	Primer 2	No known significant effects or critical hazards.

SECTION 11: Toxicological information

	SSC Buffer	No known significant effects or critical hazards.
	Enzyme Strip 1	No known significant effects or critical hazards.
	Enzyme Strip 2	No known significant effects or critical hazards.
	BSA Solution	No known significant effects or critical hazards.
	Ligation Solution	No known significant effects or critical hazards.
	DNA Ligase	No known significant effects or critical hazards.
	HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards.
Ingestion	: HaloPlex Indexing Primer A01 - H06	No known significant effects or critical hazards.
	Hybridization Solution	No known significant effects or critical hazards.
	Wash Solution	No known significant effects or critical hazards.
	Capture Solution	No known significant effects or critical hazards.
	RE Buffer	No known significant effects or critical hazards.
	Enrichment Control DNA Primer 1	No known significant effects or critical hazards.
	Primer 2	No known significant effects or critical hazards.
	SSC Buffer	No known significant effects or critical hazards.
	Enzyme Strip 1	No known significant effects or critical hazards.
	Enzyme Strip 2	No known significant effects or critical hazards.
	BSA Solution	No known significant effects or critical hazards.
	Ligation Solution	No known significant effects or critical hazards.
	DNA Ligase	No known significant effects or critical hazards.
	HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards.
Skin contact	: HaloPlex Indexing Primer A01 - H06	No known significant effects or critical hazards.
	Hybridization Solution	No known significant effects or critical hazards.
	Wash Solution	No known significant effects or critical hazards.
	Capture Solution	No known significant effects or critical hazards.
	RE Buffer	No known significant effects or critical hazards.
	Enrichment Control DNA Primer 1	No known significant effects or critical hazards.
	Primer 2	No known significant effects or critical hazards.
	SSC Buffer	No known significant effects or critical hazards.
	Enzyme Strip 1	No known significant effects or critical hazards.
	Enzyme Strip 2	No known significant effects or critical hazards.
	BSA Solution	No known significant effects or critical hazards.
	Ligation Solution	No known significant effects or critical hazards.
	DNA Ligase	No known significant effects or critical hazards.
	HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards.
Eye contact	: HaloPlex Indexing Primer A01 - H06	No known significant effects or critical hazards.
	Hybridization Solution	No known significant effects or critical hazards.
	Wash Solution	No known significant effects or critical hazards.
	Capture Solution	No known significant effects or critical hazards.
	RE Buffer	No known significant effects or critical hazards.
	Enrichment Control DNA Primer 1	No known significant effects or critical hazards.
	Primer 2	No known significant effects or critical hazards.
	SSC Buffer	No known significant effects or critical hazards.
	Enzyme Strip 1	No known significant effects or critical hazards.
	Enzyme Strip 2	No known significant effects or critical hazards.
	BSA Solution	No known significant effects or critical hazards.
	Ligation Solution	No known significant effects or critical hazards.
	DNA Ligase	No known significant effects or critical hazards.
	HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

SECTION 11: Toxicological information

Inhalation	: HaloPlex Indexing Primer A01 - H06 Hybridization Solution	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Wash Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Capture Solution	No specific data.
	RE Buffer	No specific data.
	Enrichment Control DNA	No specific data.
	Primer 1	No specific data.
	Primer 2	No specific data.
	SSC Buffer	No specific data.
	Enzyme Strip 1	No specific data.
	Enzyme Strip 2	No specific data.
	BSA Solution	No specific data.
	Ligation Solution	No specific data.
	DNA Ligase	No specific data.
	HaloPlex Probe, 48 Reactions	No specific data.
Ingestion	: HaloPlex Indexing Primer A01 - H06 Hybridization Solution	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Wash Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Capture Solution	No specific data.
	RE Buffer	No specific data.
	Enrichment Control DNA	No specific data.
	Primer 1	No specific data.
	Primer 2	No specific data.
	SSC Buffer	No specific data.
	Enzyme Strip 1	No specific data.
	Enzyme Strip 2	No specific data.
	BSA Solution	No specific data.
	Ligation Solution	No specific data.
	DNA Ligase	No specific data.
	HaloPlex Probe, 48 Reactions	No specific data.
Skin contact	: HaloPlex Indexing Primer A01 - H06 Hybridization Solution	No specific data. Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Wash Solution	Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
	Capture Solution	No specific data.
	RE Buffer	No specific data.
	Enrichment Control DNA	No specific data.
	Primer 1	No specific data.
	Primer 2	No specific data.
	SSC Buffer	No specific data.
	Enzyme Strip 1	No specific data.

SECTION 11: Toxicological information

	Enzyme Strip 2	No specific data.
	BSA Solution	No specific data.
	Ligation Solution	No specific data.
	DNA Ligase	No specific data.
	HaloPlex Probe, 48 Reactions	No specific data.
Eye contact	: HaloPlex Indexing Primer A01 - H06	No specific data.
	Hybridization Solution	No specific data.
	Wash Solution	No specific data.
	Capture Solution	No specific data.
	RE Buffer	No specific data.
	Enrichment Control DNA Primer 1	No specific data.
	Primer 2	No specific data.
	SSC Buffer	No specific data.
	Enzyme Strip 1	No specific data.
	Enzyme Strip 2	No specific data.
	BSA Solution	No specific data.
	Ligation Solution	No specific data.
	DNA Ligase	No specific data.
	HaloPlex Probe, 48 Reactions	No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: HaloPlex Indexing Primer A01 - H06	No known significant effects or critical hazards.
	Hybridization Solution	May cause damage to organs through prolonged or repeated exposure.
	Wash Solution	May cause damage to organs through prolonged or repeated exposure.
	Capture Solution	No known significant effects or critical hazards.
	RE Buffer	No known significant effects or critical hazards.
	Enrichment Control DNA Primer 1	No known significant effects or critical hazards.
	Primer 2	No known significant effects or critical hazards.
	SSC Buffer	No known significant effects or critical hazards.
	Enzyme Strip 1	No known significant effects or critical hazards.
	Enzyme Strip 2	No known significant effects or critical hazards.
	BSA Solution	No known significant effects or critical hazards.
	Ligation Solution	No known significant effects or critical hazards.
	DNA Ligase	No known significant effects or critical hazards.
	HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards.

SECTION 11: Toxicological information

Carcinogenicity	: <input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06 Hybridization Solution Wash Solution Capture Solution RE Buffer Enrichment Control DNA Primer 1 Primer 2 SSC Buffer Enzyme Strip 1 Enzyme Strip 2 BSA Solution Ligation Solution DNA Ligase HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. Suspected of causing cancer. Risk of cancer depends on duration and level of exposure. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: <input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06 Hybridization Solution Wash Solution Capture Solution RE Buffer Enrichment Control DNA Primer 1 Primer 2 SSC Buffer Enzyme Strip 1 Enzyme Strip 2 BSA Solution Ligation Solution DNA Ligase HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
Reproductive toxicity	: <input checked="" type="checkbox"/> HaloPlex Indexing Primer A01 - H06 Hybridization Solution Wash Solution Capture Solution RE Buffer Enrichment Control DNA Primer 1 Primer 2 SSC Buffer Enzyme Strip 1 Enzyme Strip 2 BSA Solution Ligation Solution DNA Ligase HaloPlex Probe, 48 Reactions	No known significant effects or critical hazards. May damage the unborn child. May damage 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. 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.

SECTION 12: Ecological information

12.1 Toxicity

SECTION 12: Ecological information

Product/ingredient name	Result	Species	Exposure
Enzyme Strip 1 Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours
Enzyme Strip 2 Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours
BSA Solution Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours
Ligation Solution Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Acute EC50 210 µg/l Fresh water	Algae - Green algae - Selenastrum sp.	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - Aesop shrimp - Pandalus montagui - Adult	48 hours
	Acute LC50 8600 µg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours
DNA Ligase Glycerol Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	Acute LC50 54000 mg/l Fresh water	Fish - Trout - Oncorhynchus mykiss	96 hours
	Acute EC50 210 µg/l Fresh water	Algae - Green algae - Selenastrum sp.	96 hours
	Acute LC50 10800 µg/l Marine water	Crustaceans - Aesop shrimp - Pandalus montagui - Adult	48 hours
	Acute LC50 8600 µg/l Fresh water	Daphnia - Water flea - Daphnia magna - Neonate	48 hours
	Acute LC50 7200 µg/l Fresh water	Fish - Rainbow trout,donaldson trout - Oncorhynchus mykiss	96 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hybridization Solution Formamide	OECD 301A Ready Biodegradability - DOC Die-Away Test	99 % - Readily - 28 days	-	-
Wash Solution Formamide	OECD 301A Ready Biodegradability - DOC Die-Away Test	99 % - Readily - 28 days	-	-
Enzyme Strip 1 Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

HaloPlex 1-500kb with 15000-20000 Probes - ILM - Box 1 - 48 Reactions

SECTION 12: Ecological information

Enzyme Strip 2 Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
BSA Solution Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
DNA Ligase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hybridization Solution Formamide	-	-	Readily
Wash Solution Formamide	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Hybridization Solution Formamide	-0.82	-	low
Wash Solution Formamide	-0.82	-	low
Enzyme Strip 1 Glycerol	-1.76	-	low
Enzyme Strip 2 Glycerol	-1.76	-	low
BSA Solution Glycerol	-1.76	-	low
Ligation Solution Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	2.7	78.67	low
DNA Ligase Glycerol	-1.76	-	low
Poly(oxy-1,2-ethanediyl), .alpha.-[(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy-	2.7	78.67	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.
Mobility : Not available.

SECTION 12: Ecological information

12.5 Results of PBT and vPvB assessment

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

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

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

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

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

Packaging

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

Special precautions : Dispose of material(s) and residues under controlled conditions. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

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

Additional information

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

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

SECTION 15: Regulatory information

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

UK (GB)/REACH

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Hybridization Solution Toxic to reproduction	formamide	Candidate	-	6/18/2012
Wash Solution Toxic to reproduction	formamide	Candidate	-	6/18/2012
Ligation Solution Substance of equivalent concern for environment	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated covering well-defined substances and UVCB substances, polymers and homologues	Candidate	-	12/19/2012
DNA Ligase Substance of equivalent concern for environment	4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated covering well-defined substances and UVCB substances, polymers and homologues	Candidate	-	12/19/2012

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

Ingredient name	CAS no.	Status
Hybridization Solution Hybridization Solution		30
Wash Solution Wash Solution		30

Label : HaloPlex Indexing Primer A01 - H06 Not applicable.

- H06
- Hybridization Solution Restricted to professional users.
- Wash Solution Restricted to professional users.
- Capture Solution Not applicable.
- RE Buffer Not applicable.
- Enrichment Control DNA Not applicable.
- Primer 1 Not applicable.
- Primer 2 Not applicable.
- SSC Buffer Not applicable.
- Enzyme Strip 1 Not applicable.
- Enzyme Strip 2 Not applicable.
- BSA Solution Not applicable.
- Ligation Solution Not applicable.
- DNA Ligase Not applicable.

SECTION 15: Regulatory information

HaloPlex Probe, 48 Reactions Not applicable.

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

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

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

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

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

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

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms	: ATE = Acute Toxicity Estimate CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008] DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = CLP-specific Hazard statement N/A = Not available
-----------------------------------	--

SECTION 16: Other information

PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Hybridization Solution Carc. 2, H351 Repr. 1B, H360D STOT RE 2, H373 Wash Solution Carc. 2, H351 Repr. 1B, H360D STOT RE 2, H373	Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

Hybridization Solution	
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Wash Solution	
H351	Suspected of causing cancer.
H360D	May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
Ligation Solution	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
DNA Ligase	
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

Full text of classifications

Hybridization Solution	
Carc. 2	CARCINOGENICITY - Category 2
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
Wash Solution	
Carc. 2	CARCINOGENICITY - Category 2
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
Ligation Solution	
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

SECTION 16: Other information

DNA Ligase

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2

Date of issue/ Date of revision : 16/12/2022

Date of previous issue : 23/02/2021

Version : 3

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.