

SAFETY DATA SHEET



SureSelect XT Fast Library Prep Kit, ILM 96 Reactions, Part Number
5500-0137

Section 1. Identification

Product identifier	: SureSelect XT Fast Library Prep Kit, ILM 96 Reactions, Part Number 5500-0137
Part No. (Chemical Kit)	: 5500-0137
Part No.	: 10X End Repair Buffer 5190-3609
	5X T4 DNA Ligase Buffer 5190-3610
	10x Klenow Polymerase Buffer 5190-3611
	T4 DNA Ligase 5190-3612
	Exo(-) Klenow 5190-3613
	T4 DNA Polymerase 5190-3614
	Klenow DNA Polymerase 5190-3615
	T4 Polynucleotide Kinase 5190-3616
	dATP 5190-3617
	SureSelect PCR Primer Mix 5190-8832
	100 mM dNTP Mix (25 mM each dNTP) 200415-51
	5X Herculase II Reaction Buffer 600675-52
	Herculase II Fusion DNA Polymerase 5190-7751
	SureSelect Pre-capture Indexed Adaptor Set A01-H12 5190-7945

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

Analytical reagent.

10X End Repair Buffer	1.428 ml (96 reactions)
5X T4 DNA Ligase Buffer	1.428 ml (96 reactions)
10x Klenow Polymerase Buffer	0.816 ml (96 reactions)
T4 DNA Ligase	0.214 ml (96 reactions)
Exo(-) Klenow	0.49 ml (96 reactions)
T4 DNA Polymerase	0.143 ml (96 reactions)
Klenow DNA Polymerase	0.286 ml (96 reactions)
T4 Polynucleotide Kinase	0.315 ml (96 reactions)
dATP	0.164 ml (96 reactions)
SureSelect PCR Primer Mix	0.47 ml (96 reactions)
100 mM dNTP Mix (25 mM each dNTP)	0.4 ml
5X Herculase II Reaction Buffer	2 x 1.5 ml
Herculase II Fusion DNA Polymerase	0.31 ml (192 reactions)
SureSelect Pre-capture Indexed Adaptor Set A01-H12	96 x 0.015 ml

Supplier/Manufacturer	: Agilent Technologies Australia Pty Ltd 679 Springvale Road Mulgrave Victoria 3170, Australia 1800 802 402
------------------------------	---

Emergency telephone number (with hours of operation)	: CHEMTREC®: +(61)-290372994
---	------------------------------

Section 2. Hazard(s) identification

Classification of the substance or mixture

5X T4 DNA Ligase Buffer H319	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A
--	---

Section 2. Hazard(s) identification

10X End Repair Buffer	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
5X T4 DNA Ligase Buffer	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 10 - 30%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
10x Klenow Polymerase Buffer	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
T4 DNA Ligase	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
Exo(-) Klenow	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
T4 DNA Polymerase	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
Klenow DNA Polymerase	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
T4 Polynucleotide Kinase	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
100 mM dNTP Mix (25 mM each dNTP)	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown oral toxicity: 1 - 10%
5X Herculase II Reaction Buffer	Percentage of the mixture consisting of ingredient(s) of unknown dermal toxicity: 1 - 10%
	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 1 - 10%
Herculase II Fusion DNA Polymerase	Percentage of the mixture consisting of ingredient(s) of unknown inhalation toxicity: 30 - 60%
10X End Repair Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 7.9%
5X T4 DNA Ligase Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 3.9%
10x Klenow Polymerase Buffer	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 7.9%
T4 DNA Polymerase	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2%
Klenow DNA Polymerase	Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 2%
T4 Polynucleotide Kinase	Percentage of the mixture consisting of ingredient(s)

Section 2. Hazard(s) identification

100 mM dNTP Mix (25 mM each dNTP)

of unknown hazards to the aquatic environment: 2%
Percentage of the mixture consisting of ingredient(s)
of unknown hazards to the aquatic environment: 5.7%

GHS label elements

Hazard pictograms

: 5X T4 DNA Ligase Buffer



Signal word

: 10X End Repair Buffer No signal word.
5X T4 DNA Ligase Buffer WARNING
10x Klenow Polymerase Buffer No signal word.
T4 DNA Ligase No signal word.
Exo(-) Klenow No signal word.
T4 DNA Polymerase No signal word.
Klenow DNA Polymerase No signal word.
T4 Polynucleotide Kinase No signal word.
dATP No signal word.
SureSelect PCR Primer Mix No signal word.
100 mM dNTP Mix (25 mM each dNTP) No signal word.
5X Herculase II Reaction Buffer No signal word.
Herculase II Fusion DNA Polymerase No signal word.
SureSelect Pre-capture Indexed Adaptor Set A01-H12 No signal word.

Hazard statements

: 10X End Repair Buffer No known significant effects or critical hazards.
5X T4 DNA Ligase Buffer H319 - Causes serious eye irritation.
10x Klenow Polymerase Buffer No known significant effects or critical hazards.
T4 DNA Ligase No known significant effects or critical hazards.
Exo(-) Klenow No known significant effects or critical hazards.
T4 DNA Polymerase No known significant effects or critical hazards.
Klenow DNA Polymerase No known significant effects or critical hazards.
T4 Polynucleotide Kinase No known significant effects or critical hazards.
dATP No known significant effects or critical hazards.
SureSelect PCR Primer Mix No known significant effects or critical hazards.
100 mM dNTP Mix (25 mM each dNTP) No known significant effects or critical hazards.
5X Herculase II Reaction Buffer No known significant effects or critical hazards.
Herculase II Fusion DNA Polymerase No known significant effects or critical hazards.
SureSelect Pre-capture Indexed Adaptor Set A01-H12 No known significant effects or critical hazards.

Precautionary statements

Prevention

: 10X End Repair Buffer Not applicable.
5X T4 DNA Ligase Buffer P280 - Wear eye or face protection.
P264 - Wash hands thoroughly after handling.
10x Klenow Polymerase Buffer Not applicable.
T4 DNA Ligase Not applicable.
Exo(-) Klenow Not applicable.
T4 DNA Polymerase Not applicable.
Klenow DNA Polymerase Not applicable.
T4 Polynucleotide Kinase Not applicable.

Section 2. Hazard(s) identification

	dATP	Not applicable.
	SureSelect PCR Primer Mix	Not applicable.
	100 mM dNTP Mix (25 mM each dNTP)	Not applicable.
	5X Herculase II Reaction Buffer	Not applicable.
	Herculase II Fusion DNA Polymerase	Not applicable.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not applicable.
Response	: 10X End Repair Buffer	Not applicable.
	5X T4 DNA Ligase Buffer	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical attention.
	10x Klenow Polymerase Buffer	Not applicable.
	T4 DNA Ligase	Not applicable.
	Exo(-) Klenow	Not applicable.
	T4 DNA Polymerase	Not applicable.
	Klenow DNA Polymerase	Not applicable.
	T4 Polynucleotide Kinase	Not applicable.
	dATP	Not applicable.
	SureSelect PCR Primer Mix	Not applicable.
	100 mM dNTP Mix (25 mM each dNTP)	Not applicable.
	5X Herculase II Reaction Buffer	Not applicable.
	Herculase II Fusion DNA Polymerase	Not applicable.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not applicable.
Storage	: 10X End Repair Buffer	Not applicable.
	5X T4 DNA Ligase Buffer	Not applicable.
	10x Klenow Polymerase Buffer	Not applicable.
	T4 DNA Ligase	Not applicable.
	Exo(-) Klenow	Not applicable.
	T4 DNA Polymerase	Not applicable.
	Klenow DNA Polymerase	Not applicable.
	T4 Polynucleotide Kinase	Not applicable.
	dATP	Not applicable.
	SureSelect PCR Primer Mix	Not applicable.
	100 mM dNTP Mix (25 mM each dNTP)	Not applicable.
	5X Herculase II Reaction Buffer	Not applicable.
	Herculase II Fusion DNA Polymerase	Not applicable.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not applicable.
Disposal	: 10X End Repair Buffer	Not applicable.
	5X T4 DNA Ligase Buffer	Not applicable.
	10x Klenow Polymerase Buffer	Not applicable.
	T4 DNA Ligase	Not applicable.
	Exo(-) Klenow	Not applicable.
	T4 DNA Polymerase	Not applicable.

Section 2. Hazard(s) identification

Klenow DNA Polymerase	Not applicable.
T4 Polynucleotide Kinase	Not applicable.
dATP	Not applicable.
SureSelect PCR Primer Mix	Not applicable.
100 mM dNTP Mix (25 mM each dNTP)	Not applicable.
5X Herculase II Reaction Buffer	Not applicable.
Herculase II Fusion DNA Polymerase	Not applicable.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not applicable.

Supplemental label elements

Additional warning phrases

: 10X End Repair Buffer	Not applicable.
5X T4 DNA Ligase Buffer	Not applicable.
10x Klenow Polymerase Buffer	Not applicable.
T4 DNA Ligase	Not applicable.
Exo(-) Klenow	Not applicable.
T4 DNA Polymerase	Not applicable.
Klenow DNA Polymerase	Not applicable.
T4 Polynucleotide Kinase	Not applicable.
dATP	Not applicable.
SureSelect PCR Primer Mix	Not applicable.
100 mM dNTP Mix (25 mM each dNTP)	Not applicable.
5X Herculase II Reaction Buffer	Not applicable.
Herculase II Fusion DNA Polymerase	Not applicable.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not applicable.

Other hazards which do not result in classification

: 10X End Repair Buffer	None known.
5X T4 DNA Ligase Buffer	None known.
10x Klenow Polymerase Buffer	None known.
T4 DNA Ligase	None known.
Exo(-) Klenow	None known.
T4 DNA Polymerase	None known.
Klenow DNA Polymerase	None known.
T4 Polynucleotide Kinase	None known.
dATP	None known.
SureSelect PCR Primer Mix	None known.
100 mM dNTP Mix (25 mM each dNTP)	None known.
5X Herculase II Reaction Buffer	None known.
Herculase II Fusion DNA Polymerase	None known.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	None known.

Section 3. Composition and ingredient information

Substance/mixture	:	10X End Repair Buffer	Mixture
		5X T4 DNA Ligase Buffer	Mixture
		10x Klenow Polymerase Buffer	Mixture
		T4 DNA Ligase	Mixture
		Exo(-) Klenow	Mixture
		T4 DNA Polymerase	Mixture
		Klenow DNA Polymerase	Mixture
		T4 Polynucleotide Kinase	Mixture
		dATP	Mixture
		SureSelect PCR Primer Mix	Mixture
		100 mM dNTP Mix (25 mM each dNTP)	Mixture
		5X Herculase II Reaction Buffer	Mixture
		Herculase II Fusion DNA Polymerase	Mixture
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Mixture

CAS number/other identifiers

Ingredient name	% (w/w)	CAS number
5X T4 DNA Ligase Buffer		
Polyethylene glycol	≥10 - ≤30	25322-68-3
2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	≤5	1185-53-1
T4 DNA Ligase		
Glycerol	≥30 - ≤60	56-81-5
Exo(-) Klenow		
Glycerol	≥30 - ≤60	56-81-5
T4 DNA Polymerase		
Glycerol	≥30 - ≤60	56-81-5
Klenow DNA Polymerase		
Glycerol	≥30 - ≤60	56-81-5
T4 Polynucleotide Kinase		
Glycerol	≥30 - ≤60	56-81-5
Herculase II Fusion DNA Polymerase		
Glycerol	≥30 - ≤60	56-81-5

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

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact	:	10X End Repair 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.
		5X T4 DNA Ligase Buffer	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue

Section 4. First aid measures

10x Klenow Polymerase Buffer	to rinse for at least 10 minutes. Get medical attention. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
T4 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.
Exo(-) Klenow	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.
T4 DNA Polymerase	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.
Klenow DNA Polymerase	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.
T4 Polynucleotide Kinase	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.
dATP	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureSelect PCR Primer Mix	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
100 mM dNTP Mix (25 mM each dNTP)	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.
5X Herculase II Reaction 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.
Herculase II Fusion DNA Polymerase	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	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.
Inhalation : 10X End Repair Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
5X T4 DNA Ligase Buffer	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery

Section 4. First aid measures

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.

10x Klenow Polymerase Buffer
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

T4 DNA Ligase
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Exo(-) Klenow
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

T4 DNA Polymerase
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Klenow DNA Polymerase
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

T4 Polynucleotide Kinase
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

dATP
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

SureSelect PCR Primer Mix
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

100 mM dNTP Mix (25 mM each dNTP)
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

5X Herculase II Reaction Buffer
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Herculase II Fusion DNA Polymerase
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

SureSelect Pre-capture Indexed Adaptor Set A01-H12
Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms occur.

Skin contact

: 10X End Repair Buffer
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.

5X T4 DNA Ligase Buffer
Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

10x Klenow Polymerase
Flush contaminated skin with plenty of water.

Section 4. First aid measures

	Buffer	Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	T4 DNA Ligase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Exo(-) Klenow	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	T4 DNA Polymerase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Klenow DNA Polymerase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	T4 Polynucleotide Kinase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	dATP	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect PCR Primer Mix	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	100 mM dNTP Mix (25 mM each dNTP)	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	5X Herculase II Reaction Buffer	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	Herculase II Fusion DNA Polymerase	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur.
Ingestion	: 10X End Repair Buffer	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
	5X T4 DNA Ligase Buffer	Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	10x Klenow Polymerase Buffer	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless

Section 4. First aid measures

	directed to do so by medical personnel. Get medical attention if symptoms occur.
T4 DNA Ligase	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
Exo(-) Klenow	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
T4 DNA Polymerase	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
Klenow DNA Polymerase	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
T4 Polynucleotide Kinase	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
dATP	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.
SureSelect PCR Primer Mix	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
100 mM dNTP Mix (25 mM each dNTP)	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.
5X Herculase II Reaction Buffer	Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless

Section 4. First aid measures

Herculase II Fusion DNA Polymerase

directed to do so by medical personnel. Get medical attention if symptoms occur.

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

SureSelect Pre-capture Indexed Adaptor Set A01-H12

Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

10X End Repair Buffer	No known significant effects or critical hazards.
5X T4 DNA Ligase Buffer	Causes serious eye irritation.
10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
T4 DNA Ligase	No known significant effects or critical hazards.
Exo(-) Klenow	No known significant effects or critical hazards.
T4 DNA Polymerase	No known significant effects or critical hazards.
Klenow DNA Polymerase	No known significant effects or critical hazards.
T4 Polynucleotide Kinase	No known significant effects or critical hazards.
dATP	No known significant effects or critical hazards.
SureSelect PCR Primer Mix	No known significant effects or critical hazards.
100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.

Inhalation

10X End Repair Buffer	No known significant effects or critical hazards.
5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
T4 DNA Ligase	No known significant effects or critical hazards.
Exo(-) Klenow	No known significant effects or critical hazards.
T4 DNA Polymerase	No known significant effects or critical hazards.
Klenow DNA Polymerase	No known significant effects or critical hazards.
T4 Polynucleotide Kinase	No known significant effects or critical hazards.
dATP	No known significant effects or critical hazards.
SureSelect PCR Primer Mix	No known significant effects or critical hazards.
100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.

Section 4. First aid measures

Skin contact	:	10X End Repair Buffer	No known significant effects or critical hazards.
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.
		Ingestion	:
5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.		
10x Klenow Polymerase Buffer	No known significant effects or critical hazards.		
T4 DNA Ligase	No known significant effects or critical hazards.		
Exo(-) Klenow	No known significant effects or critical hazards.		
T4 DNA Polymerase	No known significant effects or critical hazards.		
Klenow DNA Polymerase	No known significant effects or critical hazards.		
T4 Polynucleotide Kinase	No known significant effects or critical hazards.		
dATP	No known significant effects or critical hazards.		
SureSelect PCR Primer Mix	No known significant effects or critical hazards.		
100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.		
5X Herculase II Reaction Buffer	No known significant effects or critical hazards.		
Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.		
SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.		

Over-exposure signs/symptoms

Eye contact	:	10X End Repair Buffer	No specific data.
		5X T4 DNA Ligase Buffer	Adverse symptoms may include the following: pain or irritation watering redness
		10x Klenow Polymerase Buffer	No specific data.
		T4 DNA Ligase	No specific data.
		Exo(-) Klenow	No specific data.
		T4 DNA Polymerase	No specific data.
		Klenow DNA Polymerase	No specific data.
		T4 Polynucleotide Kinase	No specific data.
		dATP	No specific data.
		SureSelect PCR Primer Mix	No specific data.
		100 mM dNTP Mix (25 mM each dNTP)	No specific data.
		5X Herculase II Reaction Buffer	No specific data.
		Herculase II Fusion DNA Polymerase	No specific data.
		SureSelect Pre-capture	No specific data.

Section 4. First aid measures

	Indexed Adaptor Set A01-H12	
Inhalation	: 10X End Repair Buffer	No specific data.
	5X T4 DNA Ligase Buffer	No specific data.
	10x Klenow Polymerase Buffer	No specific data.
	T4 DNA Ligase	No specific data.
	Exo(-) Klenow	No specific data.
	T4 DNA Polymerase	No specific data.
	Klenow DNA Polymerase	No specific data.
	T4 Polynucleotide Kinase	No specific data.
	dATP	No specific data.
	SureSelect PCR Primer Mix	No specific data.
	100 mM dNTP Mix (25 mM each dNTP)	No specific data.
	5X Herculase II Reaction Buffer	No specific data.
	Herculase II Fusion DNA Polymerase	No specific data.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific data.
Skin contact	: 10X End Repair Buffer	No specific data.
	5X T4 DNA Ligase Buffer	No specific data.
	10x Klenow Polymerase Buffer	No specific data.
	T4 DNA Ligase	No specific data.
	Exo(-) Klenow	No specific data.
	T4 DNA Polymerase	No specific data.
	Klenow DNA Polymerase	No specific data.
	T4 Polynucleotide Kinase	No specific data.
	dATP	No specific data.
	SureSelect PCR Primer Mix	No specific data.
	100 mM dNTP Mix (25 mM each dNTP)	No specific data.
	5X Herculase II Reaction Buffer	No specific data.
	Herculase II Fusion DNA Polymerase	No specific data.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific data.
Ingestion	: 10X End Repair Buffer	No specific data.
	5X T4 DNA Ligase Buffer	No specific data.
	10x Klenow Polymerase Buffer	No specific data.
	T4 DNA Ligase	No specific data.
	Exo(-) Klenow	No specific data.
	T4 DNA Polymerase	No specific data.
	Klenow DNA Polymerase	No specific data.
	T4 Polynucleotide Kinase	No specific data.
	dATP	No specific data.
	SureSelect PCR Primer Mix	No specific data.
	100 mM dNTP Mix (25 mM each dNTP)	No specific data.
	5X Herculase II Reaction Buffer	No specific data.
	Herculase II Fusion DNA Polymerase	No specific data.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific data.

Section 4. First aid measures

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

Notes to physician	:	<p>10X End Repair Buffer</p> <p>5X T4 DNA Ligase Buffer</p> <p>10x Klenow Polymerase Buffer</p> <p>T4 DNA Ligase</p> <p>Exo(-) Klenow</p> <p>T4 DNA Polymerase</p> <p>Klenow DNA Polymerase</p> <p>T4 Polynucleotide Kinase</p> <p>dATP</p> <p>SureSelect PCR Primer Mix</p> <p>100 mM dNTP Mix (25 mM each dNTP)</p> <p>5X Herculase II Reaction Buffer</p> <p>Herculase II Fusion DNA Polymerase</p> <p>SureSelect Pre-capture Indexed Adaptor Set A01-H12</p>	<p>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.</p> <p>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.</p> <p>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.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>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.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>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.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>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.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p> <p>Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.</p>
Specific treatments	:	<p>10X End Repair Buffer</p> <p>5X T4 DNA Ligase Buffer</p> <p>10x Klenow Polymerase Buffer</p> <p>T4 DNA Ligase</p> <p>Exo(-) Klenow</p> <p>T4 DNA Polymerase</p> <p>Klenow DNA Polymerase</p> <p>T4 Polynucleotide Kinase</p> <p>dATP</p> <p>SureSelect PCR Primer Mix</p> <p>100 mM dNTP Mix (25 mM</p>	<p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p> <p>No specific treatment.</p>

Section 4. First aid measures

	each dNTP)	
	5X Herculase II Reaction Buffer	No specific treatment.
	Herculase II Fusion DNA Polymerase	No specific treatment.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific treatment.
Protection of first-aiders	: 10X End Repair Buffer	No action shall be taken involving any personal risk or without suitable training.
	5X T4 DNA Ligase Buffer	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	10x Klenow Polymerase Buffer	No action shall be taken involving any personal risk or without suitable training.
	T4 DNA Ligase	No action shall be taken involving any personal risk or without suitable training.
	Exo(-) Klenow	No action shall be taken involving any personal risk or without suitable training.
	T4 DNA Polymerase	No action shall be taken involving any personal risk or without suitable training.
	Klenow DNA Polymerase	No action shall be taken involving any personal risk or without suitable training.
	T4 Polynucleotide Kinase	No action shall be taken involving any personal risk or without suitable training.
	dATP	No action shall be taken involving any personal risk or without suitable training.
	SureSelect PCR Primer Mix	No action shall be taken involving any personal risk or without suitable training.
	100 mM dNTP Mix (25 mM each dNTP)	No action shall be taken involving any personal risk or without suitable training.
	5X Herculase II Reaction Buffer	No action shall be taken involving any personal risk or without suitable training.
	Herculase II Fusion DNA Polymerase	No action shall be taken involving any personal risk or without suitable training.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable extinguishing media	: 10X End Repair Buffer	Use an extinguishing agent suitable for the surrounding fire.
	5X T4 DNA Ligase Buffer	Use an extinguishing agent suitable for the surrounding fire.
	10x Klenow Polymerase Buffer	Use an extinguishing agent suitable for the surrounding fire.
	T4 DNA Ligase	Use an extinguishing agent suitable for the surrounding fire.
	Exo(-) Klenow	Use an extinguishing agent suitable for the surrounding fire.
	T4 DNA Polymerase	Use an extinguishing agent suitable for the surrounding fire.
	Klenow DNA Polymerase	Use an extinguishing agent suitable for the surrounding fire.
	T4 Polynucleotide Kinase	Use an extinguishing agent suitable for the surrounding fire.
	dATP	Use an extinguishing agent suitable for the surrounding fire.

Section 5. Firefighting measures

	SureSelect PCR Primer Mix	Use an extinguishing agent suitable for the surrounding fire.
	100 mM dNTP Mix (25 mM each dNTP)	Use an extinguishing agent suitable for the surrounding fire.
	5X Herculase II Reaction Buffer	Use an extinguishing agent suitable for the surrounding fire.
	Herculase II Fusion DNA Polymerase	Use an extinguishing agent suitable for the surrounding fire.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	10X End Repair Buffer	None known.
	5X T4 DNA Ligase Buffer	None known.
	10x Klenow Polymerase Buffer	None known.
	T4 DNA Ligase	None known.
	Exo(-) Klenow	None known.
	T4 DNA Polymerase	None known.
	Klenow DNA Polymerase	None known.
	T4 Polynucleotide Kinase	None known.
	dATP	None known.
	SureSelect PCR Primer Mix	None known.
	100 mM dNTP Mix (25 mM each dNTP)	None known.
	5X Herculase II Reaction Buffer	None known.
	Herculase II Fusion DNA Polymerase	None known.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	None known.
Specific hazards arising from the chemical	10X End Repair Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	5X T4 DNA Ligase Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	10x Klenow Polymerase Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	T4 DNA Ligase	In a fire or if heated, a pressure increase will occur and the container may burst.
	Exo(-) Klenow	In a fire or if heated, a pressure increase will occur and the container may burst.
	T4 DNA Polymerase	In a fire or if heated, a pressure increase will occur and the container may burst.
	Klenow DNA Polymerase	In a fire or if heated, a pressure increase will occur and the container may burst.
	T4 Polynucleotide Kinase	In a fire or if heated, a pressure increase will occur and the container may burst.
	dATP	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureSelect PCR Primer Mix	In a fire or if heated, a pressure increase will occur and the container may burst.
	100 mM dNTP Mix (25 mM each dNTP)	In a fire or if heated, a pressure increase will occur and the container may burst.
	5X Herculase II Reaction Buffer	In a fire or if heated, a pressure increase will occur and the container may burst.
	Herculase II Fusion DNA Polymerase	In a fire or if heated, a pressure increase will occur and the container may burst.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	In a fire or if heated, a pressure increase will occur and the container may burst.

Section 5. Firefighting measures

Hazardous thermal decomposition products	: 10X End Repair Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides halogenated compounds metal oxide/oxides
	5X T4 DNA Ligase Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	10x Klenow Polymerase Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides halogenated compounds metal oxide/oxides
	T4 DNA Ligase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Exo(-) Klenow	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	T4 DNA Polymerase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	Klenow DNA Polymerase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	T4 Polynucleotide Kinase	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
	dATP SureSelect PCR Primer Mix 100 mM dNTP Mix (25 mM each dNTP)	No specific data. No specific data. Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides
	5X Herculase II Reaction Buffer	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides sulfur oxides metal oxide/oxides
	Herculase II Fusion DNA Polymerase	Decomposition products may include the following materials: carbon dioxide carbon monoxide
	SureSelect Pre-capture	No specific data.

Section 5. Firefighting measures

Indexed Adaptor Set
A01-H12

Special protective actions for fire-fighters

: 10X End Repair Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
5X T4 DNA Ligase Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
10x Klenow Polymerase Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
T4 DNA Ligase	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.
Exo(-) Klenow	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.
T4 DNA Polymerase	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.
Klenow DNA Polymerase	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.
T4 Polynucleotide Kinase	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.
dATP	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect PCR Primer Mix	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
100 mM dNTP Mix (25 mM each dNTP)	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.
5X Herculase II Reaction Buffer	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
Herculase II Fusion DNA Polymerase	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Section 5. Firefighting measures

Special protective equipment for fire-fighters

: 10X End Repair Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
5X T4 DNA Ligase Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
10x Klenow Polymerase Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
T4 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.
Exo(-) Klenow	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
T4 DNA Polymerase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Klenow DNA Polymerase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
T4 Polynucleotide Kinase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
dATP	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureSelect PCR Primer Mix	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
100 mM dNTP Mix (25 mM each dNTP)	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
5X Herculase II Reaction Buffer	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Herculase II Fusion DNA Polymerase	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: 10X End Repair 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 personal protective equipment.
5X T4 DNA Ligase 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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
10x Klenow Polymerase 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 personal protective equipment.
T4 DNA Ligase	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.
Exo(-) Klenow	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.
T4 DNA Polymerase	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.
Klenow DNA Polymerase	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.
T4 Polynucleotide Kinase	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.
dATP	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
SureSelect PCR Primer Mix	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.

Section 6. Accidental release measures

100 mM dNTP Mix (25 mM each dNTP)	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.
5X Herculase II Reaction 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 personal protective equipment.
Herculase II Fusion DNA Polymerase	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Put on appropriate personal protective equipment.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	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.
For emergency responders : 10X End Repair 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".
5X T4 DNA Ligase 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".
10x Klenow Polymerase 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".
T4 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".
Exo(-) Klenow	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".
T4 DNA Polymerase	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".
Klenow DNA Polymerase	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".
T4 Polynucleotide Kinase	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".
dATP	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureSelect PCR Primer Mix	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the

Section 6. Accidental release measures

100 mM dNTP Mix (25 mM each dNTP)	information in "For non-emergency personnel". 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".
5X Herculase II Reaction 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".
Herculase II Fusion DNA Polymerase	If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".
SureSelect Pre-capture Indexed Adaptor Set A01-H12	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".

Environmental precautions : 10X End Repair 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).
5X T4 DNA Ligase 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).
10x Klenow Polymerase 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).
T4 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).
Exo(-) Klenow	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).
T4 DNA Polymerase	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).
Klenow DNA Polymerase	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).
T4 Polynucleotide Kinase	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).
dATP	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).

Section 6. Accidental release measures

SureSelect PCR Primer Mix	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
100 mM dNTP Mix (25 mM each dNTP)	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).
5X Herculase II Reaction 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).
Herculase II Fusion DNA Polymerase	Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).
SureSelect Pre-capture Indexed Adaptor Set A01-H12	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).

Methods and material for containment and cleaning up

Methods for cleaning up : 10X End Repair 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.

5X T4 DNA Ligase 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.

10x Klenow Polymerase 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.

T4 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. Dispose of via a licensed waste disposal contractor.

Exo(-) Klenow

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.

T4 DNA Polymerase

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

Klenow DNA Polymerase	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.
T4 Polynucleotide Kinase	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.
dATP	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureSelect PCR Primer Mix	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
100 mM dNTP Mix (25 mM each dNTP)	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.
5X Herculase II Reaction 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.
Herculase II Fusion DNA Polymerase	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

10X End Repair Buffer	Put on appropriate personal protective equipment (see Section 8).
5X T4 DNA Ligase Buffer	Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
10x Klenow Polymerase	Put on appropriate personal protective equipment

Section 7. Handling and storage

Buffer	(see Section 8).
T4 DNA Ligase	Put on appropriate personal protective equipment (see Section 8).
Exo(-) Klenow	Put on appropriate personal protective equipment (see Section 8).
T4 DNA Polymerase	Put on appropriate personal protective equipment (see Section 8).
Klenow DNA Polymerase	Put on appropriate personal protective equipment (see Section 8).
T4 Polynucleotide Kinase	Put on appropriate personal protective equipment (see Section 8).
dATP	Put on appropriate personal protective equipment (see Section 8).
SureSelect PCR Primer Mix	Put on appropriate personal protective equipment (see Section 8).
100 mM dNTP Mix (25 mM each dNTP)	Put on appropriate personal protective equipment (see Section 8).
5X Herculase II Reaction Buffer	Put on appropriate personal protective equipment (see Section 8).
Herculase II Fusion DNA Polymerase	Put on appropriate personal protective equipment (see Section 8).
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Put on appropriate personal protective equipment (see Section 8).
Advice on general occupational hygiene : 10X End Repair 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.
5X T4 DNA Ligase 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.
10x Klenow Polymerase 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.
T4 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.
Exo(-) Klenow	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.
T4 DNA Polymerase	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

Section 7. Handling and storage

Klenow DNA Polymerase	contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
T4 Polynucleotide Kinase	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.
dATP	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureSelect PCR Primer Mix	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
100 mM dNTP Mix (25 mM each dNTP)	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.
5X Herculase II Reaction 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.
Herculase II Fusion DNA Polymerase	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	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.

Section 7. Handling and storage

Conditions for safe storage, including any incompatibilities : 10X End Repair 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.

5X T4 DNA Ligase 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.

10x Klenow Polymerase 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.

T4 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.

Exo(-) Klenow

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.

T4 DNA Polymerase

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

Section 7. Handling and storage

Klenow DNA Polymerase	containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use. Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
T4 Polynucleotide Kinase	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.
dATP	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
SureSelect PCR Primer Mix	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.
100 mM dNTP Mix (25 mM each dNTP)	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.
5X Herculase II Reaction 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

Section 7. Handling and storage

Herculase II Fusion DNA Polymerase

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

SureSelect Pre-capture Indexed Adaptor Set A01-H12

Section 8. Exposure controls and personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
5X T4 DNA Ligase Buffer Polyethylene glycol	DFG MAC-values list (Germany, 7/2015). PEAK: 8000 mg/m ³ , 4 times per shift, 15 minutes. Form: Inhalable fraction TWA: 1000 mg/m ³ 8 hours. Form: Inhalable fraction
T4 DNA Ligase Glycerol	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours.
Exo(-) Klenow Glycerol	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours.
T4 DNA Polymerase Glycerol	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours.
Klenow DNA Polymerase Glycerol	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours.
T4 Polynucleotide Kinase Glycerol	Safe Work Australia (Australia, 1/2014). TWA: 10 mg/m ³ 8 hours.

Section 8. Exposure controls and personal protection

Herculase II Fusion DNA Polymerase
Glycerol

Safe Work Australia (Australia, 1/2014).
TWA: 10 mg/m³ 8 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with 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.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

Appearance

- Physical state** :
- | | |
|--|---------|
| 10X End Repair Buffer | Liquid. |
| 5X T4 DNA Ligase Buffer | Liquid. |
| 10x Klenow Polymerase Buffer | Liquid. |
| T4 DNA Ligase | Liquid. |
| Exo(-) Klenow | Liquid. |
| T4 DNA Polymerase | Liquid. |
| Klenow DNA Polymerase | Liquid. |
| T4 Polynucleotide Kinase | Liquid. |
| dATP | Liquid. |
| SureSelect PCR Primer Mix | Liquid. |
| 100 mM dNTP Mix (25 mM each dNTP) | Liquid. |
| 5X Herculase II Reaction Buffer | Liquid. |
| Herculase II Fusion DNA Polymerase | Liquid. |
| SureSelect Pre-capture Indexed Adaptor Set A01-H12 | Liquid. |

Section 9. Physical and chemical properties

Colour	:	<ul style="list-style-type: none"> 10X End Repair Buffer 5X T4 DNA Ligase Buffer 10x Klenow Polymerase Buffer T4 DNA Ligase Exo(-) Klenow T4 DNA Polymerase Klenow DNA Polymerase T4 Polynucleotide Kinase dATP SureSelect PCR Primer Mix 100 mM dNTP Mix (25 mM each dNTP) 5X Herculase II Reaction Buffer Herculase II Fusion DNA Polymerase SureSelect Pre-capture Indexed Adaptor Set A01-H12 	<ul style="list-style-type: none"> Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
Odour	:	<ul style="list-style-type: none"> 10X End Repair Buffer 5X T4 DNA Ligase Buffer 10x Klenow Polymerase Buffer T4 DNA Ligase Exo(-) Klenow T4 DNA Polymerase Klenow DNA Polymerase T4 Polynucleotide Kinase dATP SureSelect PCR Primer Mix 100 mM dNTP Mix (25 mM each dNTP) 5X Herculase II Reaction Buffer Herculase II Fusion DNA Polymerase SureSelect Pre-capture Indexed Adaptor Set A01-H12 	<ul style="list-style-type: none"> Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
Odour threshold	:	<ul style="list-style-type: none"> 10X End Repair Buffer 5X T4 DNA Ligase Buffer 10x Klenow Polymerase Buffer T4 DNA Ligase Exo(-) Klenow T4 DNA Polymerase Klenow DNA Polymerase T4 Polynucleotide Kinase dATP SureSelect PCR Primer Mix 100 mM dNTP Mix (25 mM each dNTP) 5X Herculase II Reaction Buffer Herculase II Fusion DNA Polymerase SureSelect Pre-capture Indexed Adaptor Set A01-H12 	<ul style="list-style-type: none"> Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available. Not available.
pH	:		

Section 9. Physical and chemical properties

10X End Repair Buffer	7 to 8
5X T4 DNA Ligase Buffer	7 to 8
10x Klenow Polymerase Buffer	7 to 8
T4 DNA Ligase	7 to 8
Exo(-) Klenow	6.5 to 7.5
T4 DNA Polymerase	6 to 7
Klenow DNA Polymerase	6.5 to 7.5
T4 Polynucleotide Kinase	6.9 to 7.9
dATP	7 to 8
SureSelect PCR Primer Mix	7 to 8
100 mM dNTP Mix (25 mM each dNTP)	6.9 to 7.9
5X Herculase II Reaction Buffer	9.5 to 10.5
Herculase II Fusion DNA Polymerase	7.5 to 8.7
SureSelect Pre-capture Indexed Adaptor Set A01-H12	7 to 8

Melting point

10X End Repair Buffer	Not available.
5X T4 DNA Ligase Buffer	Not available.
10x Klenow Polymerase Buffer	Not available.
T4 DNA Ligase	Not available.
Exo(-) Klenow	Not available.
T4 DNA Polymerase	Not available.
Klenow DNA Polymerase	Not available.
T4 Polynucleotide Kinase	Not available.
dATP	0°C (32°F)
SureSelect PCR Primer Mix	0°C (32°F)
100 mM dNTP Mix (25 mM each dNTP)	Not available.
5X Herculase II Reaction Buffer	Not available.
Herculase II Fusion DNA Polymerase	Not available.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	0°C (32°F)

Boiling point

10X End Repair Buffer	Not available.
5X T4 DNA Ligase Buffer	Not available.
10x Klenow Polymerase Buffer	Not available.
T4 DNA Ligase	Not available.
Exo(-) Klenow	Not available.
T4 DNA Polymerase	Not available.
Klenow DNA Polymerase	Not available.
T4 Polynucleotide Kinase	Not available.
dATP	100°C (212°F)
SureSelect PCR Primer Mix	100°C (212°F)
100 mM dNTP Mix (25 mM each dNTP)	Not available.
5X Herculase II Reaction Buffer	Not available.
Herculase II Fusion DNA Polymerase	Not available.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	100°C (212°F)

Section 9. Physical and chemical properties

Flash point	:	10X End Repair Buffer	Not available.
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.
		Herculase II Fusion DNA Polymerase	Not available.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
	Evaporation rate	:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.
		Herculase II Fusion DNA Polymerase	Not available.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
Flammability (solid, gas)		:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	Not applicable.
		10x Klenow Polymerase Buffer	Not applicable.
		T4 DNA Ligase	Not applicable.
		Exo(-) Klenow	Not applicable.
		T4 DNA Polymerase	Not applicable.
		Klenow DNA Polymerase	Not applicable.
		T4 Polynucleotide Kinase	Not applicable.
		dATP	Not applicable.
		SureSelect PCR Primer Mix	Not applicable.
		100 mM dNTP Mix (25 mM each dNTP)	Not applicable.
		5X Herculase II Reaction Buffer	Not applicable.
		Herculase II Fusion DNA Polymerase	Not applicable.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not applicable.

Section 9. Physical and chemical properties

Lower and upper explosive (flammable) limits	:	10X End Repair Buffer	Not available.
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.
		Herculase II Fusion DNA Polymerase	Not available.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
Vapour pressure	:	10X End Repair Buffer	Not available.
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.
		Herculase II Fusion DNA Polymerase	Not available.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
Vapour density	:	10X End Repair Buffer	Not available.
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.
		Herculase II Fusion DNA Polymerase	Not available.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.

Section 9. Physical and chemical properties

Relative density	:	10X End Repair Buffer	Not available.
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.
		Herculase II Fusion DNA Polymerase	Not available.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
	Solubility	:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	Easily soluble in the following materials: cold water and hot water.
		10x Klenow Polymerase Buffer	Easily soluble in the following materials: cold water and hot water.
		T4 DNA Ligase	Soluble in the following materials: cold water and hot water.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Soluble in the following materials: cold water and hot water.
		Klenow DNA Polymerase	Soluble in the following materials: cold water and hot water.
		T4 Polynucleotide Kinase	Soluble in the following materials: cold water and hot water.
		dATP	Easily soluble in the following materials: cold water and hot water.
		SureSelect PCR Primer Mix	Easily soluble in the following materials: cold water and hot water.
		100 mM dNTP Mix (25 mM each dNTP)	Easily soluble in the following materials: cold water and hot water.
		5X Herculase II Reaction Buffer	Easily soluble in the following materials: cold water and hot water.
		Herculase II Fusion DNA Polymerase	Soluble in the following materials: cold water and hot water.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	Easily soluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/water		:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	Not available.
		10x Klenow Polymerase Buffer	Not available.
		T4 DNA Ligase	Not available.
		Exo(-) Klenow	Not available.
		T4 DNA Polymerase	Not available.
		Klenow DNA Polymerase	Not available.
		T4 Polynucleotide Kinase	Not available.
		dATP	Not available.
		SureSelect PCR Primer Mix	Not available.
		100 mM dNTP Mix (25 mM each dNTP)	Not available.
		5X Herculase II Reaction Buffer	Not available.

Section 9. Physical and chemical properties

	Herculase II Fusion DNA Polymerase	Not available.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
Auto-ignition temperature	: 10X End Repair Buffer	Not available.
	5X T4 DNA Ligase Buffer	Not available.
	10x Klenow Polymerase Buffer	Not available.
	T4 DNA Ligase	Not available.
	Exo(-) Klenow	Not available.
	T4 DNA Polymerase	Not available.
	Klenow DNA Polymerase	Not available.
	T4 Polynucleotide Kinase	Not available.
	dATP	Not available.
	SureSelect PCR Primer Mix	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
	5X Herculase II Reaction Buffer	Not available.
	Herculase II Fusion DNA Polymerase	Not available.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
Decomposition temperature	: 10X End Repair Buffer	Not available.
	5X T4 DNA Ligase Buffer	Not available.
	10x Klenow Polymerase Buffer	Not available.
	T4 DNA Ligase	Not available.
	Exo(-) Klenow	Not available.
	T4 DNA Polymerase	Not available.
	Klenow DNA Polymerase	Not available.
	T4 Polynucleotide Kinase	Not available.
	dATP	Not available.
	SureSelect PCR Primer Mix	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
	5X Herculase II Reaction Buffer	Not available.
	Herculase II Fusion DNA Polymerase	Not available.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.
Viscosity	: 10X End Repair Buffer	Not available.
	5X T4 DNA Ligase Buffer	Not available.
	10x Klenow Polymerase Buffer	Not available.
	T4 DNA Ligase	Not available.
	Exo(-) Klenow	Not available.
	T4 DNA Polymerase	Not available.
	Klenow DNA Polymerase	Not available.
	T4 Polynucleotide Kinase	Not available.
	dATP	Not available.
	SureSelect PCR Primer Mix	Not available.
	100 mM dNTP Mix (25 mM each dNTP)	Not available.
	5X Herculase II Reaction Buffer	Not available.
	Herculase II Fusion DNA Polymerase	Not available.

Section 9. Physical and chemical properties

SureSelect Pre-capture Indexed Adaptor Set A01-H12 Not available.

Section 10. Stability and reactivity

Reactivity	: 10X End Repair Buffer	No specific test data related to reactivity available for this product or its ingredients.
	5X T4 DNA Ligase Buffer	No specific test data related to reactivity available for this product or its ingredients.
	10x Klenow Polymerase Buffer	No specific test data related to reactivity available for this product or its ingredients.
	T4 DNA Ligase	No specific test data related to reactivity available for this product or its ingredients.
	Exo(-) Klenow	No specific test data related to reactivity available for this product or its ingredients.
	T4 DNA Polymerase	No specific test data related to reactivity available for this product or its ingredients.
	Klenow DNA Polymerase	No specific test data related to reactivity available for this product or its ingredients.
	T4 Polynucleotide Kinase	No specific test data related to reactivity available for this product or its ingredients.
	dATP	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect PCR Primer Mix	No specific test data related to reactivity available for this product or its ingredients.
	100 mM dNTP Mix (25 mM each dNTP)	No specific test data related to reactivity available for this product or its ingredients.
	5X Herculase II Reaction Buffer	No specific test data related to reactivity available for this product or its ingredients.
	Herculase II Fusion DNA Polymerase	No specific test data related to reactivity available for this product or its ingredients.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: 10X End Repair Buffer	The product is stable.
	5X T4 DNA Ligase Buffer	The product is stable.
	10x Klenow Polymerase Buffer	The product is stable.
	T4 DNA Ligase	The product is stable.
	Exo(-) Klenow	The product is stable.
	T4 DNA Polymerase	The product is stable.
	Klenow DNA Polymerase	The product is stable.
	T4 Polynucleotide Kinase	The product is stable.
	dATP	The product is stable.
	SureSelect PCR Primer Mix	The product is stable.
	100 mM dNTP Mix (25 mM each dNTP)	The product is stable.
	5X Herculase II Reaction Buffer	The product is stable.
	Herculase II Fusion DNA Polymerase	The product is stable.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	The product is stable.

Section 10. Stability and reactivity

Possibility of hazardous reactions	: 10X End Repair Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	5X T4 DNA Ligase Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	10x Klenow Polymerase Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	T4 DNA Ligase	Under normal conditions of storage and use, hazardous reactions will not occur.
	Exo(-) Klenow	Under normal conditions of storage and use, hazardous reactions will not occur.
	T4 DNA Polymerase	Under normal conditions of storage and use, hazardous reactions will not occur.
	Klenow DNA Polymerase	Under normal conditions of storage and use, hazardous reactions will not occur.
	T4 Polynucleotide Kinase	Under normal conditions of storage and use, hazardous reactions will not occur.
	dATP	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect PCR Primer Mix	Under normal conditions of storage and use, hazardous reactions will not occur.
	100 mM dNTP Mix (25 mM each dNTP)	Under normal conditions of storage and use, hazardous reactions will not occur.
	5X Herculase II Reaction Buffer	Under normal conditions of storage and use, hazardous reactions will not occur.
	Herculase II Fusion DNA Polymerase	Under normal conditions of storage and use, hazardous reactions will not occur.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Under normal conditions of storage and use, hazardous reactions will not occur.
	Conditions to avoid	: 10X End Repair Buffer
5X T4 DNA Ligase Buffer		No specific data.
10x Klenow Polymerase Buffer		No specific data.
T4 DNA Ligase		No specific data.
Exo(-) Klenow		No specific data.
T4 DNA Polymerase		No specific data.
Klenow DNA Polymerase		No specific data.
T4 Polynucleotide Kinase		No specific data.
dATP		No specific data.
SureSelect PCR Primer Mix		No specific data.
100 mM dNTP Mix (25 mM each dNTP)		No specific data.
5X Herculase II Reaction Buffer		No specific data.
Herculase II Fusion DNA Polymerase		No specific data.
SureSelect Pre-capture Indexed Adaptor Set A01-H12		No specific data.
Incompatible materials		: 10X End Repair Buffer
	5X T4 DNA Ligase Buffer	May react or be incompatible with oxidising materials.
	10x Klenow Polymerase Buffer	May react or be incompatible with oxidising materials.
	T4 DNA Ligase	May react or be incompatible with oxidising materials.
	Exo(-) Klenow	May react or be incompatible with oxidising materials.
	T4 DNA Polymerase	May react or be incompatible with oxidising materials.
	Klenow DNA Polymerase	May react or be incompatible with oxidising materials.
	T4 Polynucleotide Kinase	May react or be incompatible with oxidising materials.
	dATP	May react or be incompatible with oxidising materials.
	SureSelect PCR Primer Mix	May react or be incompatible with oxidising materials.
100 mM dNTP Mix (25 mM	May react or be incompatible with oxidising materials.	

Section 10. Stability and reactivity

	each dNTP)	
	5X Herculase II Reaction Buffer	May react or be incompatible with oxidising materials.
	Herculase II Fusion DNA Polymerase	May react or be incompatible with oxidising materials.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	May react or be incompatible with oxidising materials.
Hazardous decomposition products	: 10X End Repair Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	5X T4 DNA Ligase Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	10x Klenow Polymerase Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	T4 DNA Ligase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Exo(-) Klenow	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	T4 DNA Polymerase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Klenow DNA Polymerase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	T4 Polynucleotide Kinase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	dATP	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect PCR Primer Mix	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	100 mM dNTP Mix (25 mM each dNTP)	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	5X Herculase II Reaction Buffer	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	Herculase II Fusion DNA Polymerase	Under normal conditions of storage and use, hazardous decomposition products should not be produced.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

[Information on toxicological effects](#)

[Acute toxicity](#)

Section 11. Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
T4 DNA Ligase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Exo(-) Klenow Glycerol	LD50 Oral	Rat	12600 mg/kg	-
T4 DNA Polymerase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Klenow DNA Polymerase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
T4 Polynucleotide Kinase Glycerol	LD50 Oral	Rat	12600 mg/kg	-
Herculase II Fusion DNA Polymerase Glycerol	LD50 Oral	Rat	12600 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
5X T4 DNA Ligase Buffer Polyethylene glycol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Eyes - Mild irritant	Rabbit	-	500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
T4 DNA Ligase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Exo(-) Klenow Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
T4 DNA Polymerase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
Klenow DNA Polymerase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
T4 Polynucleotide Kinase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Section 11. Toxicological information

Herculase II Fusion DNA Polymerase Glycerol	Eyes - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
5X T4 DNA Ligase Buffer 2-Amino-2-(hydroxymethyl)propane-1,3-diol hydrochloride	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes of exposure

10X End Repair Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
5X T4 DNA Ligase Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
10x Klenow Polymerase Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
T4 DNA Ligase	Routes of entry anticipated: Oral, Dermal, Inhalation.
Exo(-) Klenow	Routes of entry anticipated: Oral, Dermal, Inhalation.
T4 DNA Polymerase	Routes of entry anticipated: Oral, Dermal, Inhalation.
Klenow DNA Polymerase	Routes of entry anticipated: Oral, Dermal, Inhalation.
T4 Polynucleotide Kinase	Routes of entry anticipated: Oral, Dermal, Inhalation.
dATP	Not available.
SureSelect PCR Primer Mix	Not available.
100 mM dNTP Mix (25 mM each dNTP)	Not available.
5X Herculase II Reaction Buffer	Routes of entry anticipated: Oral, Dermal, Inhalation.
Herculase II Fusion DNA Polymerase	Routes of entry anticipated: Oral, Dermal, Inhalation.
SureSelect Pre-capture Indexed Adaptor Set A01-H12	Not available.

Potential acute health effects

Section 11. Toxicological information

Ingestion	:	10X End Repair Buffer	No known significant effects or critical hazards.
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	:	10X End Repair Buffer	No specific data.
		5X T4 DNA Ligase Buffer	Adverse symptoms may include the following: pain or irritation watering redness
		10x Klenow Polymerase Buffer	No specific data.
		T4 DNA Ligase	No specific data.
		Exo(-) Klenow	No specific data.
		T4 DNA Polymerase	No specific data.
		Klenow DNA Polymerase	No specific data.
		T4 Polynucleotide Kinase	No specific data.
		dATP	No specific data.
		SureSelect PCR Primer Mix	No specific data.
		100 mM dNTP Mix (25 mM each dNTP)	No specific data.
		5X Herculase II Reaction Buffer	No specific data.
		Herculase II Fusion DNA Polymerase	No specific data.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific data.
	Inhalation	:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	No specific data.
		10x Klenow Polymerase Buffer	No specific data.
		T4 DNA Ligase	No specific data.
		Exo(-) Klenow	No specific data.
		T4 DNA Polymerase	No specific data.
		Klenow DNA Polymerase	No specific data.
		T4 Polynucleotide Kinase	No specific data.
		dATP	No specific data.
		SureSelect PCR Primer Mix	No specific data.
		100 mM dNTP Mix (25 mM each dNTP)	No specific data.
		5X Herculase II Reaction Buffer	No specific data.
		Herculase II Fusion DNA Polymerase	No specific data.

Section 11. Toxicological information

	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific data.
Skin contact	: 10X End Repair Buffer	No specific data.
	5X T4 DNA Ligase Buffer	No specific data.
	10x Klenow Polymerase Buffer	No specific data.
	T4 DNA Ligase	No specific data.
	Exo(-) Klenow	No specific data.
	T4 DNA Polymerase	No specific data.
	Klenow DNA Polymerase	No specific data.
	T4 Polynucleotide Kinase	No specific data.
	dATP	No specific data.
	SureSelect PCR Primer Mix	No specific data.
	100 mM dNTP Mix (25 mM each dNTP)	No specific data.
	5X Herculase II Reaction Buffer	No specific data.
	Herculase II Fusion DNA Polymerase	No specific data.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	No specific data.
Ingestion	: 10X End Repair Buffer	No specific data.
	5X T4 DNA Ligase Buffer	No specific data.
	10x Klenow Polymerase Buffer	No specific data.
	T4 DNA Ligase	No specific data.
	Exo(-) Klenow	No specific data.
	T4 DNA Polymerase	No specific data.
	Klenow DNA Polymerase	No specific data.
	T4 Polynucleotide Kinase	No specific data.
	dATP	No specific data.
	SureSelect PCR Primer Mix	No specific data.
	100 mM dNTP Mix (25 mM each dNTP)	No specific data.
	5X Herculase II Reaction Buffer	No specific data.
	Herculase II Fusion DNA Polymerase	No specific data.
	SureSelect Pre-capture Indexed Adaptor Set A01-H12	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

Not available.

Section 11. Toxicological information

General	:	10X End Repair Buffer	No known significant effects or critical hazards.
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.
	Carcinogenicity	:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.
Mutagenicity		:	10X End Repair Buffer
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.

Section 11. Toxicological information

Teratogenicity	:	10X End Repair Buffer	No known significant effects or critical hazards.
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.
Developmental effects	:	10X End Repair Buffer	No known significant effects or critical hazards.
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.
Fertility effects	:	10X End Repair Buffer	No known significant effects or critical hazards.
		5X T4 DNA Ligase Buffer	No known significant effects or critical hazards.
		10x Klenow Polymerase Buffer	No known significant effects or critical hazards.
		T4 DNA Ligase	No known significant effects or critical hazards.
		Exo(-) Klenow	No known significant effects or critical hazards.
		T4 DNA Polymerase	No known significant effects or critical hazards.
		Klenow DNA Polymerase	No known significant effects or critical hazards.
		T4 Polynucleotide Kinase	No known significant effects or critical hazards.
		dATP	No known significant effects or critical hazards.
		SureSelect PCR Primer Mix	No known significant effects or critical hazards.
		100 mM dNTP Mix (25 mM each dNTP)	No known significant effects or critical hazards.
		5X Herculase II Reaction Buffer	No known significant effects or critical hazards.
		Herculase II Fusion DNA Polymerase	No known significant effects or critical hazards.
		SureSelect Pre-capture Indexed Adaptor Set A01-H12	No known significant effects or critical hazards.

Numerical measures of toxicity

Section 11. Toxicological information

Acute toxicity estimates

Route	ATE value
10X End Repair Buffer Oral	32467.5 mg/kg

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
5X T4 DNA Ligase Buffer Polyethylene glycol	Acute LC50 >1000000 µg/l Fresh water	Fish - Salmo salar - Parr	96 hours
T4 DNA Ligase Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Exo(-) Klenow Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
T4 DNA Polymerase Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Klenow DNA Polymerase Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
T4 Polynucleotide Kinase Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours
Herculase II Fusion DNA Polymerase Glycerol	Acute LC50 54000 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
14 DNA Ligase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Exo(-) Klenow Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
T4 DNA Polymerase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Klenow DNA Polymerase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Section 12. Ecological information

T4 Polynucleotide Kinase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-
Herculase II Fusion DNA Polymerase Glycerol	301D Ready Biodegradability - Closed Bottle Test	93 % - 30 days	-	-

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
5X T4 DNA Ligase Buffer Polyethylene glycol	-	3.2	low
T4 DNA Ligase Glycerol	-1.76	-	low
Exo(-) Klenow Glycerol	-1.76	-	low
T4 DNA Polymerase Glycerol	-1.76	-	low
Klenow DNA Polymerase Glycerol	-1.76	-	low
T4 Polynucleotide Kinase Glycerol	-1.76	-	low
Herculase II Fusion DNA Polymerase Glycerol	-1.76	-	low

Mobility in soil

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

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

Section 13. Disposal considerations

Disposal methods : 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. 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

ADG / IMDG / IATA : Not regulated as Dangerous Goods according to the ADG Code .

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

Transport in bulk according to Annex II of Marpol and the IBC Code : Not available.

Section 15. Regulatory information

Standard Uniform Schedule of Medicine and Poisons

Not regulated.

Model Work Health and Safety Regulations - Scheduled Substances

No listed substance

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

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	: <input checked="" type="checkbox"/> Not determined.
Canada	: <input checked="" type="checkbox"/> Not determined.
China	: <input checked="" type="checkbox"/> Not determined.
Europe	: <input checked="" type="checkbox"/> Not determined.
Japan	: <input checked="" type="checkbox"/> Japan inventory (ENCS): Not determined. Japan inventory (ISHL): Not determined.
Malaysia	: <input checked="" type="checkbox"/> Not determined.
New Zealand	: <input checked="" type="checkbox"/> Not determined.
Philippines	: Not determined.
Republic of Korea	: Not determined.
Taiwan	: <input checked="" type="checkbox"/> All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: <input checked="" type="checkbox"/> Not determined.
United States	: <input checked="" type="checkbox"/> Not determined.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

Section 16. Any other relevant information

History

Date of issue/Date of revision : 17/11/2017

Date of previous issue : No previous validation

Version : 2

Key to abbreviations

: ADG = Australian Dangerous Goods
 ATE = Acute Toxicity Estimate
 BCF = Bioconcentration Factor
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals
 IATA = International Air Transport Association
 IBC = Intermediate Bulk Container
 IMDG = International Maritime Dangerous Goods
 LogPow = logarithm of the octanol/water partition coefficient
 MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
 NOHSC = National Occupational Health and Safety Commission
 SUSMP = Standard Uniform Schedule of Medicine and Poisons
 UN = United Nations

Procedure used to derive the classification

Classification	Justification
5X T4 DNA Ligase Buffer Eye Irrit. 2A, H319	Expert judgment

References : Not available.

✔ Indicates information that has changed from previously issued version.

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.