

Version 2.0

Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

### **SECTION 1. IDENTIFICATION**

Product name	:	KAPA Stranded RNA-Seq Kit f	for Illumina platforms
Product code	:	07962142001	
Manufacturer or supplier's of	deta	ails	
Company name of supplier	:	Roche Diagnostics	
Address	:	9115 Hague Road Indianapolis, IN 46250 USA	
Telephone Emergency telephone	:	1-800-428-5074	
In case of emergencies:	:	CHEMTREC	1-800-424-9300 (U.S. or Ca- nada) 1-703-527-3887 (Internatio- nal)

Recommended use of the chemical and restrictions on use

Restrictions on use	:	For professional users only.
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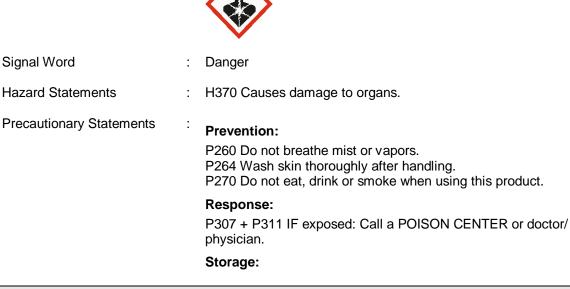
### **SECTION 2. HAZARDS IDENTIFICATION**

# GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

The product is a kit consisting of individual ingredients. The classification of the ingredients can be obtained from section 3. Section GHS Label elements contains the resulting labelling for the kit

### **GHS** label elements

Hazard pictograms





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P405 Store locked up.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

## KAPA Fragment, Prime and Elute Buffer (2X)

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
1,3-Propanediol, 2-amino-2-	77-86-1	>= 1 - < 5
(hydroxymethyl)-		
Potassium chloride (KCI)	7447-40-7	>= 1 - < 5

Actual concentration is withheld as a trade secret

## KAPA 1st Strand Synthesis Buffer

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

No hazardous ingredients

## KAPA Script

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 50 - < 70
A studie and a studie is with ball on a trade as and		

Actual concentration is withheld as a trade secret

### KAPA 2nd Strand Marking Buffer

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
1,3-Propanediol, 2-amino-2-	77-86-1	>= 1 - < 5
(hydroxymethyl)-		
Actual concentration is withheld a	s a trade secret	



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## KAPA 2nd Strand Synthesis Enzyme Mix

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 50 - < 70

Actual concentration is withheld as a trade secret

## Kapa A-Tailing Buffer (10X)

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
1,3-Propanediol, 2-amino-2-	77-86-1	>= 1 - < 5
(hydroxymethyl)-		

Actual concentration is withheld as a trade secret

## KAPA A-Tailing Enzyme

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 50 - < 70
DNA-dependent DNA polymerase	9012-90-2	< 0.1
Actual concentration is withheld as a trade secret		

Actual concentration is withheld as a trade secret

## Kapa Ligation Buffer (5X)

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Poly(oxy-1,2-ethanediyl), .alpha	25322-68-3	>= 30 - < 50
hydroomegahydroxy-		
1,3-Propanediol, 2-amino-2-	77-86-1	>= 1 - < 5
(hydroxymethyl)-		

Actual concentration is withheld as a trade secret

## KAPA Hyper Prep DNA Ligase



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### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 50 - < 70
Polynucleotide 5'-hydroxyl kinase	37211-65-7	>= 0.1 - < 1
Actual concentration is withhold on	trada agarat	

Actual concentration is withheld as a trade secret

## KAPA PEG/NaCl

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

Chemical name	CAS-No.	Concentration (% w/w)
Poly(oxy-1,2-ethanediyl), .alpha	25322-68-3	>= 20 - < 30
hydroomegahydroxy-		

Actual concentration is withheld as a trade secret

## KAPA Library Amplification Primer Premixes (10X)

### **GHS Classification**

Not a hazardous substance or mixture.

### Components

No hazardous ingredients

## KAPA HiFi HotStart ReadyMix (2X)

### **GHS Classification**

Specific target organ toxicity : Category 1 - single exposure

### Components

CAS-No.	Concentration (% w/w)
56-81-5	>= 10 - < 20
77-86-1	>= 1 - < 5
75-57-0	>= 1 - < 5
9012-90-2	< 0.1
	56-81-5           77-86-1           75-57-0

Actual concentration is withheld as a trade secret

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### **SECTION 4. FIRST AID MEASURES**

General advice

Move out of dangerous area.

Show this material safety data sheet to the doctor in atten-



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	dance. Do not leav	ve the victim unattended.
If inhaled	advice.	esh air. ous, place in recovery position and seek medical is persist, call a physician.
In case of skin contact	lf on skin, r	tion persists, call a physician. rinse well with water. s, remove clothes.
In case of eye contact	Remove co Protect un Keep eye v	ly flush eye(s) with plenty of water. ontact lenses. narmed eye. vide open while rinsing. tion persists, consult a specialist.
If swallowed	Keep respi Do not give Never give If symptom Take victim	th with water and drink afterwards plenty of water ratory tract clear. e milk or alcoholic beverages. anything by mouth to an unconscious person. is persist, call a physician. in immediately to hospital. th with water.
Most important symptoms and effects, both acute and elayed		/n.
Notes to physician		d procedure should be established in consultatior ctor responsible for industrial medicine.
SECTION 5. FIRE-FIGHTING	MEASURES	
Suitable extinguishing me	edia : Use exting	uishing measures that are appropriate to local cir

e ante an antigene and general and	-	cumstances and the surrounding environment.
Unsuitable extinguishing media	:	High volume water jet
Specific hazards during fire fighting	:	No information available.
Further information	:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- :	Use personal protective equipment.
tive equipment and emer-	Refer to protective measures listed in sections 7 and 8.



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gency procedures			
Environmental precaut	tions :	Prevent further le	from entering drains. eakage or spillage if safe to do so. should be advised if significant spillages ned.
Methods and materials containment and clear		acid binder, univ	rt absorbent material (e.g. sand, silica gel, ersal binder, sawdust). closed containers for disposal.

### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
Advice on safe handling	:	Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area. Dispose of rinse water in accordance with local and national regulations.
Conditions for safe storage	:	Keep container tightly closed in a dry and well-ventilated pla- ce. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.
Further information on stor- age conditions	:	See label, package insert or internal guidelines
Further information on stor- age stability	:	No decomposition if stored and applied as directed.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## KAPA Fragment, Prime and Elute Buffer (2X)

Ingredients with workplace control parameters Contains no substances with occupational exposure limit values. KAPA 1st Strand Synthesis Buffer

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### **KAPA Script**

## Ingredients with workplace control parameters

Components CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
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glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m3	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m3	OSHA P0

## KAPA 2nd Strand Marking Buffer

Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### KAPA 2nd Strand Synthesis Enzyme Mix

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m3	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m3	OSHA P0

## Kapa A-Tailing Buffer (10X)

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

### KAPA A-Tailing Enzyme

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m3	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m3	OSHA P0
DNA-dependent DNA poly- merase	9012-90-2	IOEL	0.00006 mg/m3	Roche In- dustrial Hy- giene Com-



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mittee
(RIHC)

## Kapa Ligation Buffer (5X)

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Poly(oxy-1,2- ethanediyl), .alphahydro- .omegahydroxy-	25322-68-3	TWA (aero- sol)	10 mg/m3	US WEEL

### KAPA Hyper Prep DNA Ligase

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m3	OSHA Z-1
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m3	OSHA P0
		TWA (Mist - respirable fraction)	5 mg/m3	OSHA P0
Polynucleotide 5'-hydroxyl kinase	37211-65-7	IOEL	0.00006 mg/m3	Roche In- dustrial Hy- giene Com- mittee (RIHC)

## KAPA PEG/NaCl

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
Poly(oxy-1,2- ethanediyl), .alphahydro- .omegahydroxy-	25322-68-3	TWA (aero- sol)	10 mg/m3	US WEEL

## KAPA Library Amplification Primer Premixes (10X)

### Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

## KAPA HiFi HotStart ReadyMix (2X)

### Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
glycerol	56-81-5	TWA (mist,	5 mg/m3	OSHA Z-1



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	I	respirable	I	I
		fraction)		
		TWA (mist, total dust)	15 mg/m3	OSHA Z-1
		TWA (Mist -	10 mg/m3	OSHA P0
		total dust) TWA (Mist -	5 mg/m3	OSHA P0
		respirable fraction)		
DNA-dependent DNA poly- merase	9012-90-2	IOEL	0.00006 mg/m3	Roche In- dustrial Hy- giene Com- mittee (RIHC)
Engineering measures	: No data av	ailable		
Personal protective equipm	ent			
Respiratory protection	: In the case ved filter.	of vapor formatio	n use a respirator wi	th an appro-
Hand protection	1			
Material	: Nitrile rubb	contact through sp	lasning:	
Break through time	: > 30 min			
Glove thickness	: > 0.11 mm			
	In case of f	ull contact:		
Material	: butyl-rubbe	er		
Break through time Glove thickness	: > 480 min : > 0.4 mm			
Remarks			gloves to prevent ski	n contact.
Eye protection	: Eye wash b	rn or punctured glo pottle with pure wang safety goggles		
Skin and body protection	Choose bo	Impervious clothing Choose body protection according to the amount and con- centration of the dangerous substance at the work place.		
Hygiene measures	When using	g do not eat or drir g do not smoke. Is before breaks a	nk. nd at the end of worl	kday.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

## KAPA Fragment, Prime and Elute Buffer (2X)

Appearance	:	liquid

Color

: colorless



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Odor	:	odorless
Odor Threshold	:	No data available
рН	:	8.7
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.005 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive



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Oxidizing properties : The substance or mixture is not classified as oxidizing.

## KAPA 1st Strand Synthesis Buffer

Appearance	:	liquid
Color	:	colorless
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	8.7
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.00 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available

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Vapor pressure

Relative density

Density

Relative vapor density



# KAPA Stranded RNA-Seq Kit for Illumina platforms

KAPA Stranded RN	A-Seq Kit for illum	ina platforms
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Autoignition temperature	e : No data availabl	le
Decomposition tempera	ure : No data availabl	le
Viscosity Viscosity, dynamic	: No data availabl	le
Viscosity, kinematic	: No data availabl	le
Explosive properties	: Not explosive	
Oxidizing properties	: The substance of	or mixture is not classified as oxidizing
KAPA Script		
Appearance	: liquid	
Color	: colorless	
Odor	: odorless	
Odor Threshold	: No data availabl	le
рH	: 7.0	
Melting point/range	: No data availabl	le
Boiling point/boiling rang	e : No data availabl	le
Flash point	: does not flash	
Evaporation rate	: No data availabl	le
Flammability (liquids)	: Does not sustair	n combustion.
Self-ignition	: Not applicable	
Upper explosion limit / L flammability limit	pper : No data availabl	le
Lower explosion limit / L flammability limit	ower : No data availabl	le

: No data available

: No data available

: No data available

: 1.148 g/cm3



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Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

## KAPA 2nd Strand Marking Buffer

Appearance	:	liquid
Color	:	colorless
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	8.5
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available



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Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0.998 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

# KAPA 2nd Strand Synthesis Enzyme Mix

Appearance	:	liquid
Color	:	colorless
Odor	:	No data available
Odor Threshold	:	No data available
рН	:	7.4
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash

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Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.148 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

## Kapa A-Tailing Buffer (10X)

Appearance	: liquid
Color	: colorless
Odor	: odorless

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Odor Threshold	:	No data available
рН	:	8.0
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.040 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	No data available
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.



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## KAPA A-Tailing Enzyme

Appearance	:	liquid
Color	:	colorless
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	6.0
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.148 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available

Vapor pressure

Relative density

Density

Relative vapor density



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Viscosity Viscosity, dynamic	:	No data availab	le	
Viscosity, kinematic	:	No data availab	le	
Explosive properties	:	Not explosive		
Oxidizing properties	:	The substance or mixture is not classified as oxidizi		
Kapa Ligation Buffer (	5X)			
Appearance	:	liquid		
Color	:	colorless		
Odor	:	odorless		
Odor Threshold	:	No data availab	le	
рН	:	7.6		
Melting point/range	:	No data availab	le	
Boiling point/boiling rang	ge :	No data availab	le	
Flash point	:	does not flash		
Evaporation rate	:	No data availab	le	
Flammability (liquids)	:	Does not sustai	n combustion.	
		The product is r	not flammable.	
Self-ignition	:	Not applicable		
Upper explosion limit / L flammability limit	Jpper :	No data availab	le	
Lower explosion limit / L flammability limit	.ower :	No data availab	le	

: No data available

: No data available

: No data available

: 1.040 g/cm3

## SAFETY DATA SHEET



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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	Solubility(ies) Water solubility	:	No data availab	le
	Solubility in other se	olvents :	No data availab	le
	Partition coefficient: n- octanol/water	:	No data availab	le
	Autoignition temperatu	ire :	No data availab	le
	Decomposition temper	ature :	No data availab	le
	Viscosity Viscosity, dynamic	:	No data availab	le
	Viscosity, kinematic	<b>;</b>	No data availab	le
	Explosive properties	:	Not explosive	
	Oxidizing properties	:	The substance of	or mixture is not classified as oxidizing.

# KAPA Hyper Prep DNA Ligase

Appearance	:	liquid
Color	:	colorless
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	6.5
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion.
		The product is not flammable.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available



RAPA Stranded RNA-Seq Kit for mumina platforms					
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	Vapor pressure	:		No data available	
	Relative vapor density	:		No data available	
	Relative density	:		No data available	
	Density	:		1.148 g/cm3	
	Solubility(ies) Water solubility	:		completely miscible	
	Solubility in other so	lvents :		No data available	
	Partition coefficient: n- octanol/water	:		No data available	
	Autoignition temperatur	e :		No data available	
	Decomposition tempera	ature :		No data available	
	Viscosity Viscosity, dynamic	:		No data available	
	Viscosity, kinematic	:		No data available	
	Explosive properties	:		Not explosive	
	Oxidizing properties	:		The substance or mixture is not classified as oxidizin	
KA	APA PEG/NaCl				
	Appearance	:		liquid	
	Color	:		colorless	
	Odor	:		odorless	
	Odor Threshold	:		No data available	
	рН	:		8.1	

- Melting point/range:No data availableBoiling point/boiling range:No data available
- Flash point : does not flash

## SAFETY DATA SHEET



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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Evaporation rate	:	No data availa	ble
Flammability (liquids)	:	Does not sust	ain combustion.
		The product is	not flammable.
Self-ignition	:	Not applicable	
Upper explosion limit / Upper explosion limit / Upper	er :	No data availa	ble
Lower explosion limit / Lower flammability limit	er :	No data availa	ble
Vapor pressure	:	No data availa	ble
Relative vapor density	:	No data availa	ble
Relative density	:	No data availa	ble
Density	:	1.120 g/cm3	
Solubility(ies) Water solubility	:	completely mi	scible
Solubility in other solver	nts :	No data availa	ble
Partition coefficient: n- octanol/water	:	No data availa	ble
Autoignition temperature	:	No data availa	ble
Decomposition temperature	ə :	No data availa	ble
Viscosity Viscosity, dynamic	:	No data availa	ble
Viscosity, kinematic	:	No data availa	ble
Explosive properties	:	Not explosive	
Oxidizing properties	:	The substance	e or mixture is not classified as oxidizin

# KAPA Library Amplification Primer Premixes (10X)

Appearance	:	liquid
Color	:	colorless
Odor	:	odorless

# SAFETY DATA SHEET



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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	Odor Threshold	:	No data available
	рН	:	7.7
	Melting point/range	:	No data available
	Boiling point/boiling ra	nge :	ca. 212 °F / 100 °C
	Flash point	:	does not flash
	Evaporation rate	:	No data available
	Flammability (solid, ga	is) :	Does not sustain combustion.
	Flammability (liquids)	:	Does not sustain combustion.
	Self-ignition	:	Not applicable
	Upper explosion limit / flammability limit	Upper :	No data available
	Lower explosion limit / flammability limit	Lower :	No data available
	Vapor pressure	:	No data available
	Relative vapor density	:	No data available
	Relative density	:	No data available
	Density	:	0.996 g/cm3
	Solubility(ies) Water solubility	:	completely miscible
	Solubility in other s	olvents :	No data available
	Partition coefficient: n- octanol/water	· :	No data available
	Autoignition temperatu	ire :	No data available
	Decomposition tempe	rature :	No data available
	Viscosity Viscosity, dynamic	:	No data available
	Viscosity, kinemati	c :	No data available
	Explosive properties	:	Not explosive
	Oxidizing properties	:	The substance or mixture is not classified as oxidizing



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## KAPA HiFi HotStart ReadyMix (2X)

Appearance	:	liquid
Color	:	colorless
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	8.7
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (solid, gas)	:	Does not sustain combustion.
Flammability (liquids)	:	Does not sustain combustion.
Self-ignition	:	Not applicable
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Vapor pressure	:	No data available
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	1.044 g/cm3
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	No data available
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available



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Viscosity Viscosity, dynamic	: No data availab	le
Viscosity, kinematic	: No data availab	le
Explosive properties	: Not explosive	
Oxidizing properties	: The substance of	or mixture is not classified as oxidizing.

### SECTION 10. STABILITY AND REACTIVITY

Reactivity	:	No dangerous reaction known under conditions of normal use.
Chemical stability	:	Stable under normal conditions.
Possibility of hazardous reac- tions	:	No decomposition if stored and applied as directed.
Incompatible materials	:	Strong oxidizing agents
Hazardous decomposition products	:	No decomposition if stored and applied as directed.

### SECTION 11. TOXICOLOGICAL INFORMATION

## KAPA Fragment, Prime and Elute Buffer (2X)

### Acute toxicity

Not classified based on available information.

### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes
<b>Potassium chloride (KCI):</b> Acute oral toxicity	:	LD50 (Rat, female): 3,020 mg/kg GLP: No information available.

### Skin corrosion/irritation

Not classified based on available information.

### **Components:**

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species : Rabbit



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Exposure time Method Result GLP 4 h
OECD Test Guideline 404
No skin irritation
yes

### Potassium chloride (KCI):

Species	:	reconstructed human epidermis (RhE)
Exposure time	:	20 min
Method	:	OECD Test Guideline 439
Result	:	No skin irritation
GLP	:	yes

### Serious eye damage/eye irritation

Not classified based on available information.

### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	72 h
Method	:	OECD Test Guideline 405
GLP	:	yes

### Potassium chloride (KCI):

Result	:	No eye irritation
Exposure time	:	60 min
GLP	:	yes

### Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

### **Respiratory sensitization**

Not classified based on available information.

### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Test Type Assessment GLP Remarks	:	Direct Peptide Reactivity Assay (DPRA) Does not cause skin sensitization. yes Based on data from similar materials Expert judgment
Test Type Species Method GLP Remarks	:	Buehler Test Guinea pig OECD Test Guideline 406 no Based on data from similar materials
Test Type Species	:	Intracutaneous test Guinea pig



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GLP Remarks no Based on data from similar materials

### Germ cell mutagenicity

Not classified based on available information.

### Components:

1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:					
Genotoxicity in vitro :	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes				
	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: yes				
	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Remarks: Based on data from similar materials				
Potassium chloride (KCI):					
Genotoxicity in vitro :	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes				
	Test Type: In vitro mammalian cell gene mutation test Test system: mouse lymphoma cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: positive GLP: No information available.				
	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster lung cells Method: OECD Test Guideline 473 Result: positive GLP: No information available.				

### Carcinogenicity

Not classified based on available information.



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### **Components:**

Potassium chloride (KCI):					
Species Application Ro Exposure time GLP Remarks					
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.				
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.				
NTP	<b>NTP</b> No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.				

### **Reproductive toxicity**

Not classified based on available information.

### **Components:**

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Parent: NOAEL: > 1,000 mg/kg body weight General Toxicity F1: NOAEL: > 1,000 mg/kg body weight Method: OECD Test Guideline 421 Result: Animal testing did not show any effects on fertility. GLP: yes			
Effects on fetal development	:	Test Type: Pre-natal Species: Rat, female Strain: wistar Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Maternal: NOAEL: > 1,000 mg/kg body weight Developmental Toxicity: NOAEL: 1,000 mg/kg body weight Method: OECD Test Guideline 414 Result: No effects on fetal development. GLP: yes Remarks: Based on data from similar materials			

### Potassium chloride (KCl):

Effects on fetal development : Species: Rat, female Application Route: Oral Dose: 3.1, 14.4, 66.8, 310 mg/kg bw Duration of Single Treatment: 6 - 15 d General Toxicity Maternal: NOAEL: 310 mg/kg body weight



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Developmental Toxicity: NOAEL: 310 mg/kg body weight GLP: No information available.

### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

### Repeated dose toxicity

### **Components:**

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species :	Rat, male and female
NOAEL :	250 mg/kg
LOAEL :	1,000 mg/kg
Application Route :	Oral
Exposure time :	90 d
Number of exposures :	daily
Dose :	62.5, 250, 1000 mg/kg bw
Method :	OECD Test Guideline 408
GLP :	yes
Remarks :	Based on data from similar materials

### Potassium chloride (KCI):

Species	:	Rat, male
NOAEL	:	1,820 mg/kg
Application Route	:	Oral
Exposure time	:	2 у
Dose	:	110, 450, 1820 mg/kg bw/day
GLP	:	No information available.

### Aspiration toxicity

Not classified based on available information.

### KAPA 1st Strand Synthesis Buffer

### Acute toxicity

Not classified based on available information.

### Skin corrosion/irritation

Not classified based on available information.

### Serious eye damage/eye irritation

Not classified based on available information.

### Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

### **Respiratory sensitization**

Not classified based on available information.



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### Germ cell mutagenicity

Not classified based on available information.

### Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### **Reproductive toxicity**

Not classified based on available information.

### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.

### Aspiration toxicity

Not classified based on available information.

### KAPA Script

### Acute toxicity

Not classified based on available information.

### Components:

<b>glycerol:</b> Acute oral toxicity	:	LC50 (Mouse): 11,500 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male): 275000 mg/m3 Exposure time: 7 h Test atmosphere: vapor GLP: no Assessment: The component/mixture is minimally toxic after short term inhalation.
Acute dermal toxicity	:	LD50 (Guinea pig, male and female): 56,750 mg/kg GLP: no

### Skin corrosion/irritation

Not classified based on available information.

### **Components:**

glycerol:		
Species	:	Rabbit
Exposure time	:	24 h
Result	:	No skin irritation



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GLP

: no

## Serious eye damage/eye irritation

Not classified based on available information.

### **Components:**

### glycerol:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	7 d
GLP	:	no
Exposure time	:	7 d

### Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

### **Respiratory sensitization**

Not classified based on available information.

### **Components:**

### glycerol:

Assessment

Mild eye irritant, Mild respiratory irritant, No skin irritation :

### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

### glycerol:

Genotoxicity in vitro	: Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative GLP: No information available.
	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

GLP: No information available.

### Carcinogenicity

Not classified based on available information.

#### Components: -

.

glycerol:		
Species	:	Rat, male and female
Application Route	:	Oral
Exposure time	:	2 Years
GLP	:	No information available.

Roche

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			unina plationns			
rsion )	Revision 03-22-20		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015			
Remarks	:	equal to 0.2	nt of this product present at levels greater than on the initial of this product present at levels greater than on the initial of the initial			
IARC			present at levels greater than or equal to 0.1% is e or confirmed human carcinogen by IARC.			
OSHA	No component o on OSHA's list o		present at levels greater than or equal to 0.1% is incinogens.			
NTP		No ingredient of this product present at levels greater than or equal to 0.1% is dentified as a known or anticipated carcinogen by NTP.				
Reproductive Not classified	<b>e toxicity</b> based on available	information.				
<u>Components</u>	<u>):</u>					
glycerol: Effects on fer	tility :	Species: Ra Application Dose: 2000	Two-generation study at, male and female Route: Oral mg/kg bw/day DAEL: 2,000 mg/kg body weight			
Effects on fet	al development :	Application Dose: 11.8 Duration of	abbit, female Route: Oral 54.8, 254.5, 1180 mg/kg bw/day Single Treatment: 29 d ntal Toxicity: NOAEL: 1,180 mg/kg bw/day			
STOT-single Not classified	<b>exposure</b> based on available	information.				
STOT-repeat	ed exposure					
	based on available	information.				
Repeated do	se toxicity					
<u>Components</u>	<u>s:</u>					
glycerol:		_				
Species NOAEL NOAEL Application R Exposure time Number of ex Dose GLP	e :	Rat, male a 4580 mg/kg 4,580 mg/k Oral 90 d daily 4580 - 25,8 no	)			

Species	: Rat, male and female
Application Route	: Inhalation
Test atmosphere	: dust/mist



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	ure time er of exposures	-	13 Weeks 6 hours/day, 5 da 33, 165 and 660 No information a	mg/m3
Expos	L		Rat 5040 mg/kg 5,040 mg/kg dermal 45 Weeks 8 hours/day, 5 da 0.5-4.0 ml/kg no	ays/week
Repea Asses	ted dose toxicity	/- :	Mild eye irritant,	Mild respiratory irritant, No skin irritation

### Aspiration toxicity

Not classified based on available information.

### KAPA 2nd Strand Marking Buffer

### Acute toxicity

Not classified based on available information.

### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

### Skin corrosion/irritation

Not classified based on available information.

### **Components:**

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Exposure time	:	4 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

### Serious eye damage/eye irritation

Not classified based on available information.



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### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	: Rabbit
Result	: No eye irritation
Exposure time	: 72 h
Method	: OECD Test Guideline 405
GLP	: yes

### Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

### **Respiratory sensitization**

Not classified based on available information.

### **Components:**

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

•	• •	
Test Type Assessment GLP Remarks	:	Direct Peptide Reactivity Assay (DPRA) Does not cause skin sensitization. yes Based on data from similar materials Expert judgment
Test Type Species Method GLP Remarks		Buehler Test Guinea pig OECD Test Guideline 406 no Based on data from similar materials
Test Type Species GLP Remarks	:	Intracutaneous test Guinea pig no Based on data from similar materials

### Germ cell mutagenicity

Not classified based on available information.

### **Components:**

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 Result: negative GLP: yes
		Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: yes



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Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Remarks: Based on data from similar materials

### Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

### Reproductive toxicity

Not classified based on available information.

### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Parent: NOAEL: > 1,000 mg/kg body weight General Toxicity F1: NOAEL: > 1,000 mg/kg body weight Method: OECD Test Guideline 421 Result: Animal testing did not show any effects on fertility. GLP: yes
Effects on fetal development	:	Test Type: Pre-natal

Lifeolo un relai development	
	Species: Rat, female
	Strain: wistar
	Application Route: Oral
	Dose: 100, 300, 1000 mg/kg bw/day
	General Toxicity Maternal: NOAEL: > 1,000 mg/kg body weight
	Developmental Toxicity: NOAEL: 1,000 mg/kg body weight
	Method: OECD Test Guideline 414
	Result: No effects on fetal development.
	GLP: yes
	Remarks: Based on data from similar materials

### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Not classified based on available information.



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### Repeated dose toxicity

### Components:

### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species NOAEL LOAEL Application Route Exposure time Number of exposures Dose Method GLP		Rat, male and female 250 mg/kg 1,000 mg/kg Oral 90 d daily 62.5, 250, 1000 mg/kg bw OECD Test Guideline 408 yes
GLP Remarks	:	yes Based on data from similar materials

### Aspiration toxicity

Not classified based on available information.

## KAPA 2nd Strand Synthesis Enzyme Mix

### Acute toxicity

Not classified based on available information.

### Components:

### glycerol:

Acute oral toxicity	: LC50 (Mouse): 11,500 mg/kg
Acute inhalation toxicity	: LC50 (Rat, male): 275000 mg/m3 Exposure time: 7 h Test atmosphere: vapor GLP: no Assessment: The component/mixture is minimally toxic after short term inhalation.
Acute dermal toxicity	: LD50 (Guinea pig, male and female): 56,750 mg/kg GLP: no

### Skin corrosion/irritation

Not classified based on available information.

### Components:

### glycerol:

Species	:	Rabbit
Exposure time	:	24 h
Result	:	No skin irritation
GLP	:	no

### Serious eye damage/eye irritation

Not classified based on available information.



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## Components:

### glycerol:

rritation

### Respiratory or skin sensitization

### Skin sensitization

Not classified based on available information.

### **Respiratory sensitization**

Not classified based on available information.

### **Components:**

### glycerol:

Assessment

Mild eye irritant, Mild respiratory irritant, No skin irritation

### Germ cell mutagenicity

Not classified based on available information.

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### Components:

### glycerol:

Genotoxicity in vitro	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative GLP: No information available.
		Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative

GLP: No information available.

### Carcinogenicity

Not classified based on available information.

### Components:

glycerol:	
Species	: Rat, male and female
Application Route	: Oral
Exposure time	: 2 Years
GLP	: No information available.
Remarks	<ul> <li>No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</li> </ul>

IARC

No ingredient of this product present at levels greater than or equal to 0.1% is



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	identified as prol	bable, possible or	confirmed human carcinogen by IARC.				
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.						
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.						
Reproductive Not classified	e toxicity based on available	e information.					
<u>Components</u>	<u>:</u>						
glycerol:							
Effects on fer	tility :	Species: Rat, m Application Rou Dose: 2000 mg/	te: Oral				
Effects on feta	al development :	Application Rou Dose: 11.8, 54.8 Duration of Sing					
STOT-single Not classified	exposure based on available	e information.					
STOT-repeat							
-	based on available	e information.					
Repeated do	se toxicity						
Components	<u>::</u>						
glycerol:							
Species NOAEL NOAEL Application R Exposure time Number of ex Dose GLP	e :	Rat, male and fe 4580 mg/kg 4,580 mg/kg Oral 90 d daily 4580 - 25,800 m no					
Species Application R Test atmosph Exposure time Number of ex Dose GLP	ere : e :	Rat, male and fe Inhalation dust/mist 13 Weeks 6 hours/day, 5 d 33, 165 and 660 No information a	lays/week ) mg/m3				



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Species NOAEL NOAEL Application Route Exposure time Number of exposures Dose GLP		Rat 5040 mg/kg 5,040 mg/kg dermal 45 Weeks 8 hours/day, 5 days/week 0.5-4.0 ml/kg no
Repeated dose toxicity - Assessment	:	Mild eye irritant, Mild respiratory irritant, No skin irritation

## Aspiration toxicity

Not classified based on available information.

# Kapa A-Tailing Buffer (10X)

## Acute toxicity

Not classified based on available information.

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

#### Skin corrosion/irritation

Not classified based on available information.

## **Components:**

## 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Exposure time	:	4 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

## Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	: Rabbit	
Result	: No eye irritation	
Exposure time	: 72 h	
Method	: OECD Test Guideline 408	5
GLP	: yes	



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#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

## **Respiratory sensitization**

Not classified based on available information.

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Test Type Assessment GLP Remarks	: : :	Direct Peptide Reactivity Assay (DPRA) Does not cause skin sensitization. yes Based on data from similar materials Expert judgment
Test Type Species Method GLP Remarks		Buehler Test Guinea pig OECD Test Guideline 406 no Based on data from similar materials
Test Type Species GLP Remarks	:	Intracutaneous test Guinea pig no Based on data from similar materials

#### Germ cell mutagenicity

Not classified based on available information.

#### **Components:**

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Genotoxicity in vitro Test Type: Chromosome aberration test in vitro • Test system: Chinese hamster lung cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 473 **Result:** negative GLP: yes Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 **Result:** negative GLP: yes Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Remarks: Based on data from similar materials



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## Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### **Reproductive toxicity**

Not classified based on available information.

# Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

·,• · · • • • • • • • • • • • • • • • •		
Effects on fertility	:	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Parent: NOAEL: > 1,000 mg/kg body weight General Toxicity F1: NOAEL: > 1,000 mg/kg body weight Method: OECD Test Guideline 421 Result: Animal testing did not show any effects on fertility. GLP: yes
Effects on fetal development	:	Test Type: Pre-natal Species: Rat, female Strain: wistar Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Maternal: NOAEL: > 1,000 mg/kg body weight Developmental Toxicity: NOAEL: 1,000 mg/kg body weight Method: OECD Test Guideline 414 Result: No effects on fetal development. GLP: yes Remarks: Based on data from similar materials

#### STOT-single exposure

Not classified based on available information.

## STOT-repeated exposure

Not classified based on available information.

#### Repeated dose toxicity

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rat, male and female
NOAEL	:	250 mg/kg
LOAEL	:	1,000 mg/kg



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Application Route Exposure time Number of exposures Dose Method GLP Remarks	: OECD Te : yes	, 1000 mg/kg bw st Guideline 408 data from similar materials

#### Aspiration toxicity

Not classified based on available information.

## KAPA A-Tailing Enzyme

# Acute toxicity

Not classified based on available information.

## Components:

$\sim$	lyoorol	
u	lycerol	-
J	.,	-

Acute oral toxicity	:	LC50 (Mouse): 11,500 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male): 275000 mg/m3 Exposure time: 7 h Test atmosphere: vapor GLP: no Assessment: The component/mixture is minimally toxic after short term inhalation.
Acute dermal toxicity	:	LD50 (Guinea pig, male and female): 56,750 mg/kg GLP: no

#### Skin corrosion/irritation

Not classified based on available information.

## Components:

#### glycerol:

:	Rabbit
:	24 h
:	No skin irritation
:	no
	:

## Serious eye damage/eye irritation

Not classified based on available information.

## **Components:**

#### glycerol:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	7 d
GLP	:	no



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#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

#### Components:

## glycerol:

Assessment

: Mild eye irritant, Mild respiratory irritant, No skin irritation

#### Germ cell mutagenicity

Not classified based on available information.

## Components:

#### glycerol:

Genotoxicity in vitro :	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activat Result: negative GLP: No information available.		
		Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: No information available.		

#### Carcinogenicity

Not classified based on available information.

#### Components:

<b>glycerol:</b> Species Application Ro Exposure time GLP Remarks			
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.		
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.		
NTP	No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.		



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## **Reproductive toxicity**

Not classified based on available information.

#### **Components:**

#### glycerol:

Effects on fertility :	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Dose: 2000 mg/kg bw/day Fertility: NOAEL: 2,000 mg/kg body weight GLP: no
Effects on fetal development :	Species: Rabbit, female Application Route: Oral Dose: 11.8, 54.8, 254.5, 1180 mg/kg bw/day Duration of Single Treatment: 29 d Developmental Toxicity: NOAEL: 1,180 mg/kg bw/day GLP: no

#### STOT-single exposure

Not classified based on available information.

#### Components:

#### **DNA-dependent DNA polymerase:**

Assessment

: The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### STOT-repeated exposure

Not classified based on available information.

#### Components:

#### **DNA-dependent DNA polymerase:**

Assessment

: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### Repeated dose toxicity

## Components:

#### glycerol:

Species NOAEL NOAEL Application Route Exposure time Number of exposures Dose GLP		Rat, male and female 4580 mg/kg 4,580 mg/kg Oral 90 d daily 4580 - 25,800 mg/kg/day no
Species Application Route Test atmosphere	:	Rat, male and female Inhalation dust/mist



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Exposure time Number of exposures Dose GLP	: 13 Weeks : 6 hours/day : 33, 165 and : No informat	660 mg/m3
Species NOAEL NOAEL Application Route Exposure time Number of exposures Dose GLP	: Rat : 5040 mg/kg : 5,040 mg/kg : dermal : 45 Weeks : 8 hours/day : 0.5-4.0 ml/k : no	, 5 days/week
Repeated dose toxicit	y - : Mild eye irrit	ant, Mild respiratory irritant, No skin irritation

# Aspiration toxicity

Not classified based on available information.

## Components:

#### **DNA-dependent DNA polymerase:**

No data available

# Kapa Ligation Buffer (5X)

#### Acute toxicity

Not classified based on available information.

## Components:

## Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Acute oral toxicity	:	LD50 Oral (Rat): 28,000 mg/kg
Acute inhalation toxicity	:	Acute toxicity estimate: 5.1 mg/l Test atmosphere: dust/mist Method: Expert judgment
Acute dermal toxicity	:	LD50 Dermal (Rabbit): 20,000 mg/kg
1,3-Propanediol, 2-amino-2-(h	ny	droxymethyl)-:
Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: yes
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes

#### Skin corrosion/irritation

Not classified based on available information.



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## Components:

# 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Exposure time	:	4 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	72 h
Method	:	OECD Test Guideline 405
GLP	:	yes

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

#### **Components:**

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

· •	
Test Type Assessment GLP Remarks	<ul> <li>Direct Peptide Reactivity Assay (DPRA)</li> <li>Does not cause skin sensitization.</li> <li>yes</li> <li>Based on data from similar materials Expert judgment</li> </ul>
Test Type Species Method GLP Remarks	<ul> <li>Buehler Test</li> <li>Guinea pig</li> <li>OECD Test Guideline 406</li> <li>no</li> <li>Based on data from similar materials</li> </ul>
Test Type Species GLP Remarks	<ul> <li>Intracutaneous test</li> <li>Guinea pig</li> <li>no</li> <li>Based on data from similar materials</li> </ul>

#### Germ cell mutagenicity

Not classified based on available information.

#### Components:

1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:



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Genotoxicity in vitro	-	Test Type: Chromosome aberration test in vitro Test system: Chinese hamster lung cells Aetabolic activation: with and without metabolic activation Aethod: OECD Test Guideline 473 Result: negative GLP: yes
	-	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Aetabolic activation: with and without metabolic activation Aethod: OECD Test Guideline 476 Result: negative GLP: yes
	-	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 471 Result: negative GLP: yes Remarks: Based on data from similar materials

## Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### **Reproductive toxicity**

Not classified based on available information.

## Components:

## 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Effects on fertility :	Test Type: reproductive and developmental toxicity study Species: Rat, male and female Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Parent: NOAEL: > 1,000 mg/kg body weight General Toxicity F1: NOAEL: > 1,000 mg/kg body weight Method: OECD Test Guideline 421 Result: Animal testing did not show any effects on fertility. GLP: yes
Effects on fetal development :	Test Type: Pre-natal Species: Rat, female Strain: wistar Application Route: Oral Dose: 100, 300, 1000 mg/kg bw/day General Toxicity Maternal: NOAEL: > 1,000 mg/kg body



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weight Developmental Toxicity: NOAEL: 1,000 mg/kg body weight Method: OECD Test Guideline 414 Result: No effects on fetal development. GLP: yes Remarks: Based on data from similar materials

#### STOT-single exposure

Not classified based on available information.

#### STOT-repeated exposure

Not classified based on available information.

#### **Repeated dose toxicity**

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

#### Aspiration toxicity

Not classified based on available information.

# KAPA Hyper Prep DNA Ligase

#### Acute toxicity

Not classified based on available information.

#### **Components:**

## glycerol:

Acute oral toxicity	:	LC50 (Mouse): 11,500 mg/kg
Acute inhalation toxicity	:	LC50 (Rat, male): 275000 mg/m3 Exposure time: 7 h Test atmosphere: vapor GLP: no Assessment: The component/mixture is minimally toxic after short term inhalation.
Acute dermal toxicity	:	LD50 (Guinea pig, male and female): 56,750 mg/kg GLP: no

#### Skin corrosion/irritation

Not classified based on available information.



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# Components:

#### glycerol:

Species Exposure time Result GLP Rabbit 24 h No skin irritation no

## Serious eye damage/eye irritation

Not classified based on available information.

#### **Components:**

#### glycerol:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	7 d
GLP	:	no

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

## Components:

glycerol:

Assessment

: Mild eye irritant, Mild respiratory irritant, No skin irritation

#### Germ cell mutagenicity

Not classified based on available information.

#### Components:

#### glycerol:

Genotoxicity in vitro	<ul> <li>Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative GLP: No information available.</li> </ul>
	Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: No information available.

#### Carcinogenicity

Not classified based on available information.



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## Components:

glycerol:	
Species	: Rat, male and female
Application Route	: Oral
Exposure time	: 2 Years
GLP	: No information available.
Remarks	<ul> <li>No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.</li> </ul>

#### Polynucleotide 5'-hydroxyl kinase:

Remarks	: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### **Reproductive toxicity**

Not classified based on available information.

#### **Components:**

glycerol:

Effects on fertility	:	Test Type: Two-generation study Species: Rat, male and female Application Route: Oral Dose: 2000 mg/kg bw/day Fertility: NOAEL: 2,000 mg/kg body weight GLP: no
Effects on fetal development	:	Species: Rabbit, female Application Route: Oral Dose: 11.8, 54.8, 254.5, 1180 mg/kg bw/day Duration of Single Treatment: 29 d Developmental Toxicity: NOAEL: 1,180 mg/kg bw/day GLP: no

#### STOT-single exposure

Not classified based on available information.

#### Components:

#### Polynucleotide 5'-hydroxyl kinase:

Assessment

: The substance or mixture is not classified as specific target organ toxicant, single exposure.



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## STOT-repeated exposure

Not classified based on available information.

#### **Components:**

#### Polynucleotide 5'-hydroxyl kinase:

Assessment

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **Repeated dose toxicity**

#### **Components:**

glycerol:		
NOAEL NOAEL Application Route Exposure time	:	Rat, male and female 4580 mg/kg 4,580 mg/kg Oral 90 d daily 4580 - 25,800 mg/kg/day no
Test atmosphere Exposure time Number of exposures	:	Rat, male and female Inhalation dust/mist 13 Weeks 6 hours/day, 5 days/week 33, 165 and 660 mg/m3 No information available.
Exposure time Number of exposures	:	Rat 5040 mg/kg 5,040 mg/kg dermal 45 Weeks 8 hours/day, 5 days/week 0.5-4.0 ml/kg no
Repeated dose toxicity - Assessment		Mild eye irritant, Mild respiratory irritant, No skin irritation

#### Aspiration toxicity

Not classified based on available information.

#### **Components:**

**Polynucleotide 5'-hydroxyl kinase:** No data available

# KAPA PEG/NaCl



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#### Acute toxicity

Not classified based on available information.

#### **Components:**

#### Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Acute oral toxicity	:	LD50 Oral (Rat): > 50,000 mg/kg
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l Test atmosphere: dust/mist Method: Expert judgment
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 20,000 mg/kg

#### Skin corrosion/irritation

Not classified based on available information.

#### **Components:**

#### Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Remarks : This information is not available.

## Serious eye damage/eye irritation

Not classified based on available information.

#### Components:

Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Remarks : This information is not available.

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

- **IARC** No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
- **NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### **Reproductive toxicity**

Not classified based on available information.



# KAPA Stranded RNA-Seg Kit for Illumina platforms

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#### STOT-single exposure

Not classified based on available information.

#### **Components:**

#### Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-: ÷

Assessment

The substance or mixture is not classified as specific target organ toxicant, single exposure.

#### **STOT-repeated exposure**

Not classified based on available information.

#### Components:

#### Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Assessment

: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

## Aspiration toxicity

Not classified based on available information.

#### **Components:**

Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-: No data available

# KAPA Library Amplification Primer Premixes (10X)

#### Acute toxicity

Not classified based on available information.

#### Skin corrosion/irritation

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.

#### Germ cell mutagenicity

Not classified based on available information.

#### Carcinogenicity

Not classified based on available information.

- IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- **OSHA** No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.



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**NTP** No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

#### **Reproductive toxicity**

Not classified based on available information.

#### STOT-single exposure

Not classified based on available information.

#### **STOT-repeated exposure**

Not classified based on available information.

#### Aspiration toxicity

Not classified based on available information.

# KAPA HiFi HotStart ReadyMix (2X)

#### Acute toxicity

Not classified based on available information.

#### Components:

glycerol:					
Acute oral toxicity	:	LC50 (Mouse): 11,500 mg/kg			
Acute inhalation toxicity	:	LC50 (Rat, male): 275000 mg/m3 Exposure time: 7 h Test atmosphere: vapor GLP: no Assessment: The component/mixture is minimally toxic after short term inhalation.			
Acute dermal toxicity	:	LD50 (Guinea pig, male and female): 56,750 mg/kg GLP: no			
1,3-Propanediol, 2-amino-2-(I	hyo	droxymethyl)-:			
Acute oral toxicity	:	LD50 (Rat, female): > 5,000 mg/kg Method: OECD Test Guideline 425 GLP: yes			
Acute dermal toxicity	:	LD50 (Rat, male and female): > 5,000 mg/kg Method: OECD Test Guideline 402 GLP: yes			
Methanaminium, N,N,N-trimethyl-, chloride (1:1):					
Acute oral toxicity	:	LD50 Oral (Rat): 47 mg/kg Method: OECD Test Guideline 401 GLP: no			
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 200 - < 500 mg/kg Method: OECD Test Guideline 402 GLP: yes			



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## Skin corrosion/irritation

Not classified based on available information.

## Components:

#### glycerol:

Species	:	Rabbit
Exposure time	:	24 h
Result	:	No skin irritation
GLP	:	no

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Exposure time	:	4 h
Method	:	OECD Test Guideline 404
Result	:	No skin irritation
GLP	:	yes

#### Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Result	: Irritating to skin.
--------	-----------------------

#### Serious eye damage/eye irritation

Not classified based on available information.

## Components:

#### glycerol:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	7 d
GLP	:	no

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Species	:	Rabbit
Result	:	No eye irritation
Exposure time	:	72 h
Method	:	OECD Test Guideline 405
GLP	:	yes

#### Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Species	:	Rabbit
Result	:	No eye irritation
Method	:	OECD Test Guideline 405

#### Respiratory or skin sensitization

#### Skin sensitization

Not classified based on available information.

#### **Respiratory sensitization**

Not classified based on available information.



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## Components:

glycerol:

Assessment

: Mild eye irritant, Mild respiratory irritant, No skin irritation

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Test Type Assessment GLP Remarks		Direct Peptide Reactivity Assay (DPRA) Does not cause skin sensitization. yes Based on data from similar materials Expert judgment
Test Type Species Method GLP Remarks		Buehler Test Guinea pig OECD Test Guideline 406 no Based on data from similar materials
Test Type Species GLP Remarks	: : :	Intracutaneous test Guinea pig no Based on data from similar materials

#### Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Test Type	:	Local lymph node assay (LLNA)
Species	:	Mouse
Assessment	:	Does not cause skin sensitization.
Method	:	OECD Test Guideline 429

#### Germ cell mutagenicity

Not classified based on available information.

## Components:

## glycerol:

Genotoxicity in vitro	:	Test Type: Microbial mutagenesis assay (Ames test) Test system: Salmonella typhimurium Metabolic activation: with and without metabolic activation Result: negative GLP: No information available.
		Test Type: In vitro mammalian cell gene mutation test

Test Type: In vitro mammalian cell gene mutation test Test system: Chinese hamster ovary cells Metabolic activation: with and without metabolic activation Method: OECD Test Guideline 476 Result: negative GLP: No information available.

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Genotoxicity in vitro	:	Test Type: Chromosome aberration test in vitro	
		Test system: Chinese hamster lung cells	
		Metabolic activation: with and without metabolic activation	
		Method: OECD Test Guideline 473	



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		Result: nega GLP: yes	tive
		Test system Metabolic ad	n vitro mammalian cell gene mutation test : Chinese hamster ovary cells ctivation: with and without metabolic activatior CD Test Guideline 476 ative
		Test system Metabolic ad Method: OE Result: nega GLP: yes	Aicrobial mutagenesis assay (Ames test) : Salmonella typhimurium ctivation: with and without metabolic activation CD Test Guideline 471 ative ased on data from similar materials
Methanaminiu Genotoxicity ir	u <b>m, N,N,N-trimeth</b> n vitro :	Test Type: N	Aicrobial mutagenesis assay (Ames test) : Salmonella typhimurium
			<i>l</i> icrobial mutagenesis assay (Ames test) : Escherichia coli ative
Carcinogenic Not classified I	<b>ity</b> based on available	information.	
Components:			
glycerol:			
Species Application Ro Exposure time GLP Remarks		No ingredier equal to 0.1	nd female on available. nt of this product present at levels greater tha % is identified as probable, possible or confirr nogen by IARC.
IARC			resent at levels greater than or equal to 0.1% or confirmed human carcinogen by IARC.
OSHA	No component of on OSHA's list of		present at levels greater than or equal to 0.1% cinogens.
			resent at levels greater than or equal to 0.1%

Not classified based on available information.



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Components:			
glycerol:			
Effects on fertility	:	Species: Application Dose: 20	be: Two-generation study : Rat, male and female ion Route: Oral 000 mg/kg bw/day NOAEL: 2,000 mg/kg body weight
Effects on fetal develop	oment :	Application Dose: 11 Duration	: Rabbit, female ion Route: Oral 1.8, 54.8, 254.5, 1180 mg/kg bw/day of Single Treatment: 29 d mental Toxicity: NOAEL: 1,180 mg/kg bw/day
1,3-Propanediol, 2-am	ino-2-(hy	droxymet	thyl)-:
Effects on fertility	:	Species: Application Dose: 10 General General Method:	be: reproductive and developmental toxicity stud Rat, male and female ion Route: Oral 00, 300, 1000 mg/kg bw/day Toxicity Parent: NOAEL: > 1,000 mg/kg body w Toxicity F1: NOAEL: > 1,000 mg/kg body weigh OECD Test Guideline 421 Animal testing did not show any effects on fertilit s
Effects on fetal develop	oment :	Species: Strain: w Application Dose: 10 General weight Developr Method: Result: N GLP: yes	ion Route: Oral 00, 300, 1000 mg/kg bw/day Toxicity Maternal: NOAEL: > 1,000 mg/kg body mental Toxicity: NOAEL: 1,000 mg/kg body weig OECD Test Guideline 414 No effects on fetal development.
STOT-single exposure	e		
Causes damage to orga	ans.		
Components:			
Methanaminium, N,N,	N-trimeth	yl-, chlori	ide (1:1):
Routes of exposure	:	Ingestion Central n	n nervous system

Routes of exposure	•	Ingestion
Target Organs	:	Central nervous system
Assessment	:	Causes damage to organs.

:

## **DNA-dependent DNA polymerase:**

Assessment

The substance or mixture is not classified as specific target organ toxicant, single exposure.



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:

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## STOT-repeated exposure

Not classified based on available information.

## Components:

#### **DNA-dependent DNA polymerase:**

Assessment

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

#### **Repeated dose toxicity**

#### Components:

<b>glycerol:</b> Species NOAEL NOAEL Application Route Exposure time Number of exposures Dose GLP	<ul> <li>Rat, male and female</li> <li>4580 mg/kg</li> <li>4,580 mg/kg</li> <li>Oral</li> <li>90 d</li> <li>daily</li> <li>4580 - 25,800 mg/kg/day</li> <li>no</li> </ul>
Species Application Route Test atmosphere Exposure time Number of exposures Dose GLP	<ul> <li>Rat, male and female</li> <li>Inhalation</li> <li>dust/mist</li> <li>13 Weeks</li> <li>6 hours/day, 5 days/week</li> <li>33, 165 and 660 mg/m3</li> <li>No information available.</li> </ul>
Species NOAEL NOAEL Application Route Exposure time Number of exposures Dose GLP	<ul> <li>Rat</li> <li>5040 mg/kg</li> <li>5,040 mg/kg</li> <li>dermal</li> <li>45 Weeks</li> <li>8 hours/day, 5 days/week</li> <li>0.5-4.0 ml/kg</li> <li>no</li> </ul>
Repeated dose toxicity - Assessment	: Mild eye irritant, Mild respiratory irritant, No skin irritation
1,3-Propanediol, 2-amino-2-	(hydroxymethyl)-:
Species	: Rat, male and female

Species	:	Rat, male and female
NOAEL	:	250 mg/kg
LOAEL	:	1,000 mg/kg
Application Route	:	Oral
Exposure time	:	90 d
Number of exposures	:	daily
Dose	:	62.5, 250, 1000 mg/kg bw
Method	:	OECD Test Guideline 408
GLP	:	yes
Remarks	:	Based on data from similar materials



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#### Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Species:RatNOAEL:5 mg/kgApplication Route:OralMethod:0ECD Test Guideline 421GLP:yes

#### Aspiration toxicity

Not classified based on available information.

#### **Components:**

**DNA-dependent DNA polymerase:** No data available

## **Further information**

#### Components:

## Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Remarks

: Other dangerous properties can not be excluded.

## SECTION 12. ECOLOGICAL INFORMATION

## KAPA Fragment, Prime and Elute Buffer (2X)

Ecotoxicity

#### **Components:**

# **1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:** Toxicity to fish : LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no GLP: no

aquatic invertebrates	Ecolo (Daphina magna (Water nea)): > 300 mg/ End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic : plants	ErC50 (Pseudokirchneriella subcapitata (green algae)): 473 mg/l End point: Growth rate Exposure time: 48 h Test Type: static test

Analytical monitoring: no



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		Method: OECD GLP: No inform	Test Guideline 201 ation available.
Toxicity to micr	oorganisms :	End point: Resp Exposure time: Test Type: static Analytical monit	3 h c test
Ecotoxicology	Assessment		
Toxicity Data o		Not expected to	adsorb on soil.
Other organism the environmer	ns relevant to : nt	No data availab	e
Potassium ch	loride (KCl):		
Toxicity to fish	: :	End point: morta Exposure time: Test Type: static Analytical monit	96 h c test oring: yes Test Guideline 203
Toxicity to dapl aquatic inverte	nnia and other : brates	End point: Immo Exposure time: Test Type: static Analytical monit	48 h c test oring: yes Test Guideline 202
Toxicity to alga plants	e/aquatic :	End point: Grow Exposure time: Test Type: static Analytical monit	72 h c test
		End point: Grow Exposure time: Test Type: static Analytical monit	72 h c test
Toxicity to micr	oorganisms :	EC50 (activated End point: Resp Exposure time: Test Type: statio	3 h



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Analytical monitoring: yes Method: OECD Test Guideline 209 GLP: no

#### **Ecotoxicology Assessment**

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available

#### Persistence and degradability

#### Components:

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

.,• • • • • • • • • • • • • • • • •	······································
Biodegradability :	aerobic Inoculum: activated sludge Result: Readily biodegradable. Biodegradation: 100 % Exposure time: 28 d Method: OECD Test Guideline 301F GLP: yes
Potassium chloride (KCI):	
Biodegradability :	Remarks: The methods for determining biodegradability are not applicable to inorganic substances.
Bioaccumulative potential	
Components:	
1,3-Propanediol, 2-amino-2-(h	ydroxymethyl)-:
Bioaccumulation :	Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
Partition coefficient: n- : octanol/water	log Pow: -2.31 (68 °F / 20 °C) Method: OECD Test Guideline 107 GLP: no
Potassium chloride (KCI):	
	Remarks: Not applicable
Mobility in soil No data available Other adverse effects	



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# KAPA 1st Strand Synthesis Buffer

Ecotoxicity No data available Persistence and degradabil No data available Bioaccumulative potential No data available Mobility in soil	ity	
No data available		
Other adverse effects		
KAPA Script		
Ecotoxicity		
Components:		
glycerol:		
Toxicity to fish	:	LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 mg/l End point: mortality Exposure time: 96 h Test Type: static test GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	LC50 (Daphnia magna (Water flea)): 1,955 mg/l End point: mortality Exposure time: 48 h Test Type: static test Analytical monitoring: no GLP: no
Toxicity to algae/aquatic plants	:	(Scenedesmus quadricauda (Green algae)): > 10,000 mg/l End point: Growth rate Exposure time: 8 d Test Type: static test GLP: no
Toxicity to microorganisms	:	EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.
Ecotoxicology Assessment		
Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.



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Other organisms relevant to : No data available the environment

## Persistence and degradability

#### **Components:**

#### glycerol:

Biodegradability

: aerobic Inoculum: activated sludge Concentration: 226 mg/l Result: Readily biodegradable. Biodegradation: 94 % Exposure time: 24 h GLP: no

#### **Bioaccumulative potential**

#### **Components:**

#### glycerol:

Partition coefficient: n-	:	log Pow: -1.75 (77 °F / 25 °C)
octanol/water		pH: 7.4
		Method: OECD Test Guideline 107
		GLP: no

#### Mobility in soil

No data available

Other adverse effects

## KAPA 2nd Strand Marking Buffer

Ecotoxicity

#### **Components:**

## 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Toxicity to fish	:	LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic plants	:	ErC50 (Pseudokirchneriella subcapitata (green algae)): 473 mg/l



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		End point: Grow Exposure time: Test Type: stati Analytical monit Method: OECD GLP: No inform	48 h c test oring: no Test Guideline 201
Toxicity to microorganism	s :	End point: Resp Exposure time: Test Type: static Analytical monit	c test
Ecotoxicology Assessm	ent		
Toxicity Data on Soil	:	Not expected to	adsorb on soil.
Other organisms relevant the environment	to :	No data availab	le
Persistence and degrad	ability		
Components:			
1,3-Propanediol, 2-amin	o-2-(hyd	lroxymethyl)-:	
Biodegradability	:	aerobic Inoculum: activa Result: Readily Biodegradation: Exposure time: Method: OECD GLP: yes	biodegradable. 100 %
Bioaccumulative potent	ial		
Components:			
1,3-Propanediol, 2-amin	o-2-(hyd	lroxymethyl)-:	
Bioaccumulation	:	Remarks: Due t	o the distribution coefficient n-octanol/wa organisms is not expected.
		log Pow: -2.31 (	68 °F / 20 °C)
Partition coefficient: n- octanol/water	:		Test Guideline 107
	:	Method: OECD	Test Guideline 107

# KAPA 2nd Strand Synthesis Enzyme Mix



	it for mumma platforms
Revision Da 03-22-2022	te: Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
E E T	C50 (Oncorhynchus mykiss (rainbow trout)): 54,000 mg/l nd point: mortality xposure time: 96 h est Type: static test GLP: no
E E T A	C50 (Daphnia magna (Water flea)): 1,955 mg/l nd point: mortality exposure time: 48 h est Type: static test analytical monitoring: no GLP: no
E E T	(Scenedesmus quadricauda (Green algae)): > 10,000 mg nd point: Growth rate exposure time: 8 d Test Type: static test GLP: no
E E T	C50 (Pseudomonas putida): > 10,000 mg/l nd point: Growth rate exposure time: 16 h fest Type: static test GLP: No information available.
ssment	
: Т	his product has no known ecotoxicological effects.
ity : T	his product has no known ecotoxicological effects.
: N	lot expected to adsorb on soil.
vant to : N	lo data available
gradability	
lr C B E	erobic noculum: activated sludge Concentration: 226 mg/l Result: Readily biodegradable. Biodegradation: 94 % Exposure time: 24 h GLP: no
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#### **Bioaccumulative potential**

#### Components:

#### glycerol:

Partition coefficient: n-octanol/water

: log Pow: -1.75 (77 °F / 25 °C) pH: 7.4 Method: OECD Test Guideline 107 GLP: no

#### Mobility in soil

No data available Other adverse effects

# Kapa A-Tailing Buffer (10X)

#### Ecotoxicity

#### **Components:**

## 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Toxicity to fish	LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no
Toxicity to daphnia and other aquatic invertebrates	EC50 (Daphnia magna (Water flea)): > 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202 GLP: yes
Toxicity to algae/aquatic : plants	ErC50 (Pseudokirchneriella subcapitata (green algae)): 473 mg/l End point: Growth rate Exposure time: 48 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 201 GLP: No information available.
Toxicity to microorganisms	EC50 (activated sludge): > 1,000 mg/l End point: Respiration inhibition Exposure time: 3 h Test Type: static test Analytical monitoring: no Method: OECD Test Guideline 209 GLP: yes

#### Ecotoxicology Assessment



		-		
Vers 2.0	ion	Revision 03-22-202		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
	Toxicity Data on Soil	:	Not expec	ed to adsorb on soil.
	Other organisms relevant the environment	ant to :	No data av	railable
	Persistence and deg	radability		
	Components:			
	<b>1,3-Propanediol, 2-an</b> Biodegradability	nino-2-(hy :	aerobic Inoculum: Result: Re Biodegrad Exposure	activated sludge adily biodegradable. ation: 100 %
	Bioaccumulative pote	ential		
	Components:			
	1,3-Propanediol, 2-an	nino-2-(hy	droxymeth	<b>/I)-</b> :
	Bioaccumulation	:		Due to the distribution coefficient n-octanol/water on in organisms is not expected.
	Partition coefficient: n- octanol/water	:		2.31 (68 °F / 20 °C) ECD Test Guideline 107
	Mobility in soil No data available Other adverse effects	5		
KA	PA A-Tailing Enzy	me		
	Ecotoxicity			
	Components:			
	glycerol:			
	Toxicity to fish	:	LC50 (Ond End point: Exposure Test Type GLP: no	ime: 96 h
	Toxicity to daphnia and aquatic invertebrates	d other :	End point: Exposure Test Type	ime: 48 h

Roche

rsion )	Revisior 03-22-20		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
Toxici plants	ty to algae/aquatic	End point Exposure	esmus quadricauda (Green algae)): > 10,000 mg/ : Growth rate time: 8 d e: static test
Toxic	ty to microorganisms	End point Exposure Test Type	eudomonas putida): > 10,000 mg/l : Growth rate time: 16 h e: static test nformation available.
Ecoto	oxicology Assessment		
Acute	aquatic toxicity	This prod	uct has no known ecotoxicological effects.
Chron	ic aquatic toxicity	This prod	uct has no known ecotoxicological effects.
Toxic	ty Data on Soil	Not exped	cted to adsorb on soil.
	organisms relevant to	No data a	vailable
DNA-	dependent DNA polyme	rase:	
Ecoto	xicology Assessment		
Toxic	ty Data on Soil	Not exped	sted to adsorb on soil.
	organisms relevant to sinvironment	No data a	vailable
Persi	stence and degradability	,	
<u>Com</u>	oonents:		
glyce	rol:		
Biode	gradability	Concentra Result: Re Biodegrad	activated sludge ation: 226 mg/l eadily biodegradable. dation: 94 % time: 24 h
Bioad	cumulative potential		
<u>Comp</u>	oonents:		
glyce			
	on coefficient: n- ol/water	pH: 7.4	-1.75 (77 °F / 25 °C) DECD Test Guideline 107



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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#### **DNA-dependent DNA polymerase:**

Partition coefficient: n- : Remarks: No data available octanol/water

#### Mobility in soil

No data available

Other adverse effects

# Kapa Ligation Buffer (5X)

#### Ecotoxicity

#### Components:

#### Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Toxicity to fish	:	LC50 (Cyprinus carpio (Carp)): > 100 mg/l Exposure time: 4 d Method: OECD Test Guideline 203
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 100 mg/l Exposure time: 48 h Method: OECD Test Guideline 202
Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): > 100 mg/l Exposure time: 72 h
Toxicity to fish (Chronic tox- icity)	:	> 1 mg/l
Ecotoxicology Assessment		
Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.

Toxicity Data on Soil	1	Not expected to adsorb on soil.

Other organisms relevant to	No
the environment	

#### 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

·,• · · • • • • • • · · · · · · · · · ·	.,	
Toxicity to fish	:	LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna (Water flea)): > 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202

data available



rsion )	Revision Da 03-22-2022		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
		GLP: yes	
Toxicity to algae/aqu plants		mg/l End point: Growt Exposure time: 4 Test Type: static Analytical monito	ŀ8 h ⊧ test pring: no Γest Guideline 201
Toxicity to microorga		End point: Respi Exposure time: 3 Test Type: static Analytical monito	3 h : test
Ecotoxicology Asse			
Toxicity Data on Soil	:	Not expected to	adsorb on soil.
Other organisms release the environment	vant to :	No data available	e
Persistence and de	gradability		
Components:			
Poly(oxy-1,2-ethane			
Biodegradability		Biodegradation: Exposure time: 2 Method: OECD	
1,3-Propanediol, 2-a	amino-2-(hvd	roxymethyl)-:	
Biodegradability	:	aerobic Inoculum: activa Result: Readily b Biodegradation: Exposure time: 2	biodegradable. 100 %
Bioaccumulative po	otential		
Components:			
Poly(oxy-1,2-ethane Partition coefficient: octanol/water		<b>-hydroomega</b> . Remarks: No da	
		roxymethyl)-:	



rsion	Revision 03-22-202		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
		accumula	tion in organisms is not expected.
Partition coefficient: n- octanol/water	:		-2.31 (68 °F / 20 °C) DECD Test Guideline 107
<b>Mobility in soil</b> No data available			
Other adverse effects	5		
Components:			
<b>Poly(oxy-1,2-ethaned</b> Adsorbed organic boun halogens (AOX)		•	omegahydroxy-: Not applicable
APA Hyper Prep DN	A Ligas	e	
Ecotoxicity			
Components:			
<b>glycerol:</b> Toxicity to fish	:	End point Exposure	ncorhynchus mykiss (rainbow trout)): 54,000 mg t: mortality e time: 96 h e: static test
Toxicity to daphnia and aquatic invertebrates	d other :	End point Exposure Test Type	aphnia magna (Water flea)): 1,955mg/l :: mortality e time: 48 h e: static test I monitoring: no
		GLP: no	C C
Toxicity to algae/aquat plants	ic :	GLP: no (Scened End point Exposure	
		GLP: no (Scened End point Exposure Test Type GLP: no EC50 (Ps End point Exposure Test Type	esmus quadricauda (Green algae)): > 10,000 m :: Growth rate e time: 8 d
plants	sms :	GLP: no (Scened End point Exposure Test Type GLP: no EC50 (Ps End point Exposure Test Type	esmus quadricauda (Green algae)): > 10,000 m :: Growth rate • time: 8 d e: static test seudomonas putida): > 10,000 mg/l :: Growth rate • time: 16 h e: static test
plants Toxicity to microorgani	sms :	GLP: no (Scened End point Exposure Test Type GLP: no EC50 (Ps End point Exposure Test Type GLP: No	esmus quadricauda (Green algae)): > 10,000 m :: Growth rate • time: 8 d e: static test seudomonas putida): > 10,000 mg/l :: Growth rate • time: 16 h e: static test



NA	PA Stranded Rr	NA-260	9	<b>NIT FOR IIIUMI</b>	na plationns
Vers 2.0	ion	Revisior 03-22-2			Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
	Toxicity Data on Soil		:	Not expected to a	dsorb on soil.
	Other organisms relev the environment	ant to	:	No data available	
	Polynucleotide 5'-hy	droxyl ki	na	ise:	
	Ecotoxicology Asses Toxicity Data on Soil		:	Not expected to a	idsorb on soil.
	Other organisms relev the environment	ant to	:	No data available	
	Persistence and deg	radability	y		
	Components:				
	glycerol:				
	Biodegradability		:	aerobic Inoculum: activate Concentration: 22 Result: Readily bi Biodegradation: 9 Exposure time: 24 GLP: no	26 mg/l iodegradable. 94 %
	Bioaccumulative pot	ential			
	Components:				
	glycerol:				
	Partition coefficient: n- octanol/water		•	pH: 7.4	7 °F / 25 °C) est Guideline 107
	Polynucleotide 5'-hy	droxvl ki	na	ISe:	
	Partition coefficient: n- octanol/water	•	:		a available
	<b>Mobility in soil</b> No data available				
	Other adverse effects	S			
KA	PA PEG/NaCl				
	Ecotoxicity				
	Components:				
	Poly(oxy-1,2-ethaned	liyl), .alp	ha	hydroomegal	hydroxy-:
	Toxicity to fish		:	LC50: > 100 mg/l	



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Exposure time: 96 h

# Ecotoxicology Assessment

Acute aquatic toxicity	:	This product has no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product has no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to adsorb on soil.
Other organisms relevant to the environment	:	No data available
Persistence and degradabili	ity	
No data available		

**Bioaccumulative potential** 

#### **Components:**

# Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-:

Partition coefficient: n- : Remarks: No data available octanol/water

# Mobility in soil

No data available

# Other adverse effects

# Components:

# Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-hydroxy-: Adsorbed organic bound : Remarks: Not applicable halogens (AOX)

# KAPA Library Amplification Primer Premixes (10X)

Ecotoxicity No data available Persistence and degradability No data available Bioaccumulative potential No data available Mobility in soil No data available Other adverse effects

# KAPA HiFi HotStart ReadyMix (2X)



Ecotoxicity         Components:         glycerol:         Toxicity to fish       : LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 End point: mortality Exposure time: 96 h Test Type: static test GLP: no         Toxicity to daphnia and other aquatic invertebrates       : LC50 (Daphnia magna (Water flea)): 1,955 mg/l End point: mortality Exposure time: 48 h Test Type: static test Analytical monitoring: no GLP: no         Toxicity to algae/aquatic plants       : (Scenedesmus quadricauda (Green algae)): > 10,000 GLP: no         Toxicity to microorganisms       : EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 8 d Test Type: static test GLP: no         Toxicity to microorganisms       : EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.         Ecotoxicology Assessment       : Acute aquatic toxicity       : This product has no known ecotoxicological effects.         Chronic aquatic toxicity       : This product has no known ecotoxicological effects.         Chronic aquatic toxicity       : No data available         the environment       : No data available         1.3-Propanediol, 2-amino-2-(hydroxymethy):: Toxicity to fish       : LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no         Toxicity to daphnia and other aquatic invertebrates       : EC50 (Daphnia magna (Water flea)): > 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test	ersion 0	Revisi 03-22-			Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
glycerol:         Toxicity to fish       :       LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 End point: mortality Exposure time: 96 h Test Type: static test GLP: no         Toxicity to daphnia and other aquatic invertebrates       :       LC50 (Daphnia magna (Water flea)): 1,955 mg/l End point: mortality Exposure time: 48 h Test Type: static test Analytical monitoring: no GLP: no         Toxicity to algae/aquatic plants       :       (Scenedesmus quadricauda (Green algae)): > 10,000 End point: Growth rate Exposure time: 8 d Test Type: static test GLP: no         Toxicity to microorganisms       :       EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.         Ecotoxicology Assessment       :         Acute aquatic toxicity       :       This product has no known ecotoxicological effects.         Chronic aquatic toxicity       :       No texpected to adsorb on soil.         Other organisms relevant to the environment       :       No data available         1       :       LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DNI 38412 GLP: no         1       Toxicity to daphnia and other aquatic invertebrates       :       EC50 (Daphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202	Ecotoxicity				
Toxicity to fish       :       LC50 (Oncorhynchus mykiss (rainbow trout)): 54,000 End point: mortality Exposure time: 96 h Test Type: static test GLP: no         Toxicity to daphnia and other aquatic invertebrates       :       LC50 (Daphnia magna (Water flea)): 1,955 mg/l End point: mortality Exposure time: 48 h Test Type: static test Analytical monitoring: no GLP: no         Toxicity to algae/aquatic plants       :       (Scenedesmus quadricauda (Green algae)): > 10,000 End point: Growth rate Exposure time: 8 d Test Type: static test GLP: no         Toxicity to microorganisms       :       EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.         Ecotoxicology Assessment Acute aquatic toxicity       :       This product has no known ecotoxicological effects.         Chronic aquatic toxicity       :       This product has no known ecotoxicological effects.         Toxicity Data on Soil       :       Not expected to adsorb on soil.         Other organisms relevant to the environment       :       No data available         Itest Type: static test Analytical monitoring: no Method: DNI 38412 GLP: no       :       Sec (Opphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: CECD Test Guideline 202	<u>Components</u>	<u>):</u>			
End point: mortality       Exposure time: 96 h         Test Type: static test       GLP: no         Toxicity to daphnia and other       :       LC50 (Daphnia magna (Water flea)): 1,955 mg/l         aquatic invertebrates       :       LC50 (Daphnia magna (Water flea)): 1,955 mg/l         Exposure time: 48 h       Test Type: static test       Analytical monitoring: no         GLP: no       GLP: no         Toxicity to algae/aquatic       :       (Scenedesmus quadricauda (Green algae)): > 10,000         plants       :       (Scenedesmus quadricauda (Green algae)): > 10,000         End point: Growth rate       Exposure time: 8 d         Test Type: static test       GLP: no         Toxicity to microorganisms       :       EC50 (Pseudomonas putida): > 10,000 mg/l         End point: Growth rate       Exposure time: 16 h       Test Type: static test         GLP: no       :       Toxicity to microorganisms       :         Ecotoxicology Assessment       Acute aquatic toxicity       :       This product has no known ecotoxicological effects.         Chronic aquatic toxicity       :       This product has no known ecotoxicological effects.         Chronic aquatic toxicity       :       Not expected to adsorb on soil.         Other organisms relevant to       :       No data available	glycerol:				
aquatic invertebrates       End point: mortality Exposure time: 48 h Test Type: static test Analytical monitoring: no GLP: no         Toxicity to algae/aquatic plants       : (Scenedesmus quadricauda (Green algae)): > 10,000 End point: Growth rate Exposure time: 8 d Test Type: static test GLP: no         Toxicity to microorganisms       : EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.         Ecotoxicology Assessment Acute aquatic toxicity       : This product has no known ecotoxicological effects.         Chronic aquatic toxicity       : This product has no known ecotoxicological effects.         Toxicity Data on Soil       : Not expected to adsorb on soil.         Other organisms relevant to the environment       : No data available         1,3-Propanediol, 2-amino-2-(hydroxymethyl)-: Toxicity to fish       : LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no         Toxicity to daphnia and other aquatic invertebrates       : EC50 (Daphnia magna (Water flea)): > 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202	Toxicity to fis	n	:	End point: Exposure Test Type:	time: 96 h
plantsEnd point: Growth rate Exposure time: 8 d Test Type: static test GLP: noToxicity to microorganisms:EC50 (Pseudomonas putida): > 10,000 mg/l End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.Ecotoxicology Assessment Acute aquatic toxicity:This product has no known ecotoxicological effects.Chronic aquatic toxicity:This product has no known ecotoxicological effects.Chronic aquatic toxicity:Not expected to adsorb on soil.Other organisms relevant to the environment:No data available1,3-Propanediol, 2-amino-2-(hydroxymethyl): Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no:Toxicity to daphnia and other aquatic invertebrates:EC50 (Daphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202			:	End point: Exposure Test Type: Analytical	: mortality time: 48 h :: static test
End point: Growth rate Exposure time: 16 h Test Type: static test GLP: No information available.Ecotoxicology Assessment Acute aquatic toxicity:Acute aquatic toxicity:This product has no known ecotoxicological effects.Chronic aquatic toxicity:Toxicity Data on Soil:Not expected to adsorb on soil.Other organisms relevant to the environment:No data available1,3-Propanediol, 2-amino-2-(hydroxymethyl): Toxicity to fish:LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: noToxicity to daphnia and other aquatic invertebrates:EC50 (Daphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202		jae/aquatic	:	End point: Exposure Test Type:	: Growth rate time: 8 d
Acute aquatic toxicity:This product has no known ecotoxicological effects.Chronic aquatic toxicity:This product has no known ecotoxicological effects.Toxicity Data on Soil:Not expected to adsorb on soil.Other organisms relevant to the environment:No data available <b>1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:</b> Toxicity to fish:LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: noToxicity to daphnia and other aquatic invertebrates:EC50 (Daphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202	Toxicity to mi	croorganisms	:	End point: Exposure Test Type:	: Growth rate time: 16 h :: static test
Chronic aquatic toxicity:This product has no known ecotoxicological effects.Toxicity Data on Soil:Not expected to adsorb on soil.Other organisms relevant to the environment:No data available <b>1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:</b> Toxicity to fish:LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: noToxicity to daphnia and other aquatic invertebrates:EC50 (Daphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202	-			This produ	ict has no known acotoxicological affects
Toxicity Data on Soil:Not expected to adsorb on soil.Other organisms relevant to the environment:No data available <b>1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:</b> Toxicity to fish:LC50 (Fish): > 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: noToxicity to daphnia and other aquatic invertebrates:EC50 (Daphnia magna (Water flea)): > 980 mg/l Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202			•		-
Other organisms relevant to the environment       : No data available <b>1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:</b> Toxicity to fish       : LC50 (Fish): > 4,000 mg/l         Exposure time: 96 h         Test Type: static test         Analytical monitoring: no         Method: DIN 38412         GLP: no         Toxicity to daphnia and other         aquatic invertebrates         :       EC50 (Daphnia magna (Water flea)): > 980 mg/l         End point: Immobilization         Exposure time: 48 h         Test Type: static test         Analytical monitoring: yes         Method: OECD Test Guideline 202		-	•		u u u u u u u u u u u u u u u u u u u
<ul> <li>Toxicity to fish</li> <li>LC50 (Fish): &gt; 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no</li> <li>Toxicity to daphnia and other aquatic invertebrates</li> <li>EC50 (Daphnia magna (Water flea)): &gt; 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202</li> </ul>	Other organis	ms relevant to	:		
<ul> <li>Toxicity to fish</li> <li>LC50 (Fish): &gt; 4,000 mg/l Exposure time: 96 h Test Type: static test Analytical monitoring: no Method: DIN 38412 GLP: no</li> <li>Toxicity to daphnia and other aquatic invertebrates</li> <li>EC50 (Daphnia magna (Water flea)): &gt; 980 mg/l End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202</li> </ul>	1.3-Propaner	diol 2-amino-2-	(hv	droxymeth	vl)
aquatic invertebrates End point: Immobilization Exposure time: 48 h Test Type: static test Analytical monitoring: yes Method: OECD Test Guideline 202	•	-	:	LC50 (Fish Exposure Test Type: Analytical Method: D	h): > 4,000 mg/l time: 96 h :: static test monitoring: no
GLP: yes			:	End point: Exposure Test Type: Analytical	Immobilization time: 48 h static test monitoring: yes



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Toxicity to algae/aqu plants	atic :	mg/l End point: Growt Exposure time: 4 Test Type: static Analytical monito	l8 h test pring: no Fest Guideline 201
Toxicity to microorga	nisms :	End point: Respi Exposure time: 3 Test Type: static Analytical monito	3 h test
Ecotoxicology Asse Toxicity Data on Soil		Not expected to	adsorb on soil.
Other organisms rele the environment	evant to :	No data available	9
<b>Methanaminium, N,</b> Toxicity to fish	N,N-trimeth :	LC50 (Pimephale Exposure time: 9	es promelas (fathead minnow)): 462 mg/l
Toxicity to daphnia a aquatic invertebrates		EC50 (Daphnia r Exposure time: 1 GLP: yes	nagna (Water flea)): 0.16 mg/l 1 d
		NOEC (Daphnia Exposure time: 1 GLP: yes	magna (Water flea)): 0.03 mg/l 1 d
		LC50 (Daphnia r Exposure time: 4 GLP: yes	nagna (Water flea)): 1.86 mg/l l8 h
Toxicity to algae/aqu plants	atic :	mg/l Exposure time: 7	irchneriella subcapitata (green algae)): 115 72 h Fest Guideline 201
Ecotoxicology Asse	essment		
Chronic aquatic toxic	ity :	Toxic to aquatic	life with long lasting effects.
Toxicity Data on Soil	:	Not expected to	adsorb on soil.
Other organisms releted the environment	evant to :	No data available	e



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# **DNA-dependent DNA polymerase:**

# **Ecotoxicology Assessment** Toxicity Data on Soil Not expected to adsorb on soil. : Other organisms relevant to : No data available the environment Persistence and degradability **Components:** glycerol: Biodegradability : aerobic Inoculum: activated sludge Concentration: 226 mg/l Result: Readily biodegradable. Biodegradation: 94 % Exposure time: 24 h GLP: no 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-: Biodegradability : aerobic

 Inoculum: activated sludge Result: Readily biodegradable.
Biodegradation: 100 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

# Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Biodegradability : Remarks: Expected to be biodegradable

# Bioaccumulative potential

#### **Components:**

glycerol:

Partition coefficient: n- octanol/water	:	log Pow: -1.75 (77 °F / 25 °C) pH: 7.4
		Method: OECD Test Guideline 107 GLP: no

# 1,3-Propanediol, 2-amino-2-(hydroxymethyl)-:

Bioaccumulation	:	Remarks: Due to the distribution coefficient n-octanol/water, accumulation in organisms is not expected.
Partition coefficient: n- octanol/water	:	log Pow: -2.31 (68 °F / 20 °C) Method: OECD Test Guideline 107 GLP: no



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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# Methanaminium, N,N,N-trimethyl-, chloride (1:1):

Partition coefficient: n- : Remarks: No data available octanol/water

# **DNA-dependent DNA polymerase:**

Partition coefficient: n- : Remarks: No data available octanol/water

#### Mobility in soil

No data available

Other adverse effects

# SECTION 13. DISPOSAL CONSIDERATIONS

<b>Disposal methods</b> Waste from residues :	Do not contaminate ponds, waterways or ditches with chemi- cal or used container. Send to a licensed waste management company. Can be disposed as waste water, when in compliance with local regulations.
Contaminated packaging :	Empty remaining contents. Dispose of as unused product. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers.

# **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

**UNRTDG** Not regulated as a dangerous good

#### IATA-DGR Not regulated as a dangerous good

# IMDG-Code

Not regulated as a dangerous good

# Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

:

# **Domestic regulation**

# 49 CFR

Not regulated as a dangerous good

# Special precautions for user

Remarks

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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# **SECTION 15. REGULATORY INFORMATION**

# KAPA Fragment, Prime and Elute Buffer (2X)

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Hydrochloric acid7647-01-0>= 0 - < 0.1 %</th>The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table117.3:

Hydrochloric acid7647-01-0>= 0 - < 0.1 %</th>This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

#### US State Regulations

Massachusetts Right To Know	
Hydrochloric acid	7647-01-0
Pennsylvania Right To Know	
Water	7732-18-5
Maine Chemicals of High Concern	
Product does not contain any listed chemicals	
Vermont Chemicals of High Concern	
Product does not contain any listed chemicals	
Washington Chemicals of High Concern	
Product does not contain any listed chemicals	



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	The ingredients of th AIIC	nis product :	•	<b>he following inventories:</b> we with the inventory
	DSL	:	This product con on the Canadian	tains the following components that are not DSL nor NDSL.
			Primer / Oligonud	cleotide / Probe
	NZIoC	:	On the inventory	, or in compliance with the inventory
	ENCS	:	Not in complianc	e with the inventory
	ISHL	:	Not in complianc	e with the inventory
	KECI	:	Not in complianc	e with the inventory
	PICCS	:	Not in complianc	e with the inventory
	IECSC	:	Not in complianc	e with the inventory
	TCSI	:	Not in complianc	e with the inventory
	TSCA	:	Product contains	substance(s) not listed on TSCA inventory.
	TECI	:	Not in complianc	e with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA 1st Strand Synthesis Buffer

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).



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This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

# **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Hydrochloric acid7647-01-0>= 0 - < 0.1 %</th>The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table117.3:

Hydrochloric acid7647-01-0>= 0 - < 0.1 %</th>This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

# **US State Regulations**

#### Massachusetts Right To Know Dactinomycin Hydrochloric acid 50-76-0 7647-01-0 Pennsylvania Right To Know Water Dactinomycin 50-76-0

# Maine Chemicals of High Concern

Product does not contain any listed chemicals

# Vermont Chemicals of High Concern

Product does not contain any listed chemicals

# Washington Chemicals of High Concern

Product does not contain any listed chemicals

# California Prop. 65

WARNING: This product can expose you to chemicals including Dactinomycin, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

# The ingredients of this product are reported in the following inventories:

AIIC	: Not in compliance with the inventory
DSL	: This product contains the following components that are not on the Canadian DSL nor NDSL.
	2'-Deoxyguanosine 5'-triphosphate trisodium salt
	Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy-
	Thymidine 5'-(tetrahydrogen triphosphate), sodium salt
	2'-Deoxycytidine 5'-triphosphate disodium salt
	Dactinomycin

Roche

# KAPA Stranded RNA-Seq Kit for Illumina platforms

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NZIoC	: On the inventory	r, or in compliance with the inventory
ENCS	: Not in complianc	e with the inventory
ISHL	: Not in complianc	e with the inventory
KECI	: Not in complianc	e with the inventory
PICCS	: Not in complianc	e with the inventory
IECSC	: Not in complianc	e with the inventory
TCSI	: Not in complianc	e with the inventory
TSCA	: Product contains	s substance(s) not listed on TSCA inventory.
TECI	: Not in complianc	e with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# **KAPA Script**

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# **Clean Air Act**

glycerol

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489): >= 50 - < 70 %

56-81-5



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	Clean Wat	ter Act			
	The follow ble 116.4A		ances are listed und	ler the U.S. CleanWat	er Act, Section 311, Ta-
		Glycine, N,N'-1,2- ethanediylbis[N- (carboxymethyl)-	60-00-4	>=	: 0 - < 0.1 %
			cals are listed unde	er the U.S. CleanWate	r Act, Section 311, Table
		Glycine, N,N'-1,2- ethanediylbis[N- (carboxymethyl)-	60-00-4	>=	: 0 - < 0.1 %
			ny toxic pollutants li	sted under the U.S. C	lean Water Act Section
			ny priority pollutants	s related to the U.S. C	lean Water Act
		Regulations			
		Isetts Right To Knov	v		
		glycerol ania Right To Know			56-81-5
	-	glycerol Water			56-81-5 7732-18-5
		emicals of High Con			
		Product does not con	-	nicals	
		Chemicals of High C Product does not con			
		on Chemicals of Hig	-	licais	
	-	Product does not con		nicals	
	California	Permissible Exposu	ure Limits for Chei	nical Contaminants	
		glycerol			56-81-5
	-	dients of this produc	-	he following invento	ries:
	AIIC			e with the inventory	
	DSL	:	This product con on the Canadian	tains the following cor DSL nor NDSL.	nponents that are not
			Reverse Transcr	iptase	
	NZIoC	:	On the inventory	, or in compliance with	the inventory
	ENCS	:	Not in compliance	e with the inventory	
	ISHL	:	Not in compliance	e with the inventory	
	KECI	:	Not in compliance	e with the inventory	
	PICCS	:	Not in compliance	e with the inventory	
	IECSC	:	Not in compliance	e with the inventory	
	TCSI	:	On the inventory	, or in compliance with	the inventory



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: Product contains	substance(s) not listed on TSCA inventory.
: Not in compliance	e with the inventory
	03-22-2022 : Product contains

# **TSCA** list

The following substance(s) is/are subject to a Significant New Use Rule: Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.- 9016-45-9 hydroxy-

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA 2nd Strand Marking Buffer

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Hydrochloric acid7647-01-0>= 0.1 - < 1 %The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table117.3:

Hydrochloric acid7647-01-0>= 0.1 - < 1 %This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

# **US State Regulations**

# Massachusetts Right To Know



Version 2.0	Revision I 03-22-202			sue: 10-11-2021 sue: 12-08-2015
	Hydrochloric acid			7647-01-0
Pennsylva	ania Right To Know			
	Water 1,3-Propanediol, 2-ami Hydrochloric acid	no-2-(hydroxyn	nethyl)-	7732-18-5 77-86-1 7647-01-0
Maine Che	emicals of High Conc	ern		
l	Product does not conta	in any listed ch	nemicals	
Vermont C	Chemicals of High Co	ncern		
	Product does not conta	in any listed ch	nemicals	
-	on Chemicals of High			
	Product does not conta	•		
-	dients of this product	-	-	
AIIC	:	Not in compile	ance with the inver	itory
DSL	:		contains the followi ian DSL nor NDSL	ng components that are n 
		Uridine 5'-(tet salt	rahydrogen triphos	sphate), 2'-deoxy-, trisodiu
NZIoC	:	On the invent	ory, or in complian	ce with the inventory
ENCS	:	Not in complia	ance with the inver	ntory
ISHL	:	Not in complia	ance with the inver	ntory
KECI	:	Not in complia	ance with the inver	ntory
PICCS	:	Not in complia	ance with the inver	ntory
IECSC	:	Not in complia	ance with the inver	ntory
TCSI	:	On the invent	ory, or in complian	ce with the inventory
TSCA	:	Product conta	ains substance(s) n	ot listed on TSCA invento
TECI	:	Not in complia	ance with the inver	ntory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA 2nd Strand Synthesis Enzyme Mix

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ



Version 2.0

Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

# SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

#### SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489): >= 50 - < 70 %

glycerol 56-81-5

# **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Glycine, N,N'-1,2-60-00-4 >= 0 - < 0.1 % ethanediylbis[N-(carboxymethyl)-The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table

117.3:

Glycine, N,N'-1,2-60-00-4 >= 0 - < 0.1 % ethanediylbis[N-(carboxymethyl)-

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

#### **US State Regulations**

Massachusetts Right To Know	
glycerol	56-81-5
Pennsylvania Right To Know	
glycerol Water	56-81-5 7732-18-5
Maine Chemicals of High Concern	
Product does not contain any listed chemicals	

#### Vermont Chemicals of High Concern

Product does not contain any listed chemicals

#### Washington Chemicals of High Concern

Product does not contain any listed chemicals



Vers 2.0	ion	Revision Date: 03-22-2022		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
	California Permissib	le Exposur	e Limits for Chei	mical Contaminants 56-81-5
	0,1	nis product	are reported in t	he following inventories:
	AIIC	:	-	ce with the inventory
	DSL	:	This product con on the Canadian	tains the following components that are not DSL nor NDSL.
			Ribonuclease H	
			DNA-dependent	DNA polymerase
	NZIoC	:	On the inventory	r, or in compliance with the inventory
	ENCS	:	Not in compliance	e with the inventory
	ISHL	:	Not in compliance	ce with the inventory
	KECI	:	Not in compliance	ce with the inventory
	PICCS	:	Not in compliance	ce with the inventory
	IECSC	:	Not in compliance	e with the inventory
	TCSI	:	Not in compliance	ce with the inventory
	TSCA	:	Product contains	s substance(s) not listed on TSCA inventory.
	TECI	:	Not in compliance	e with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# Kapa A-Tailing Buffer (10X)

#### **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

# SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.



Version 2.0 Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

# **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

# **US State Regulations**

#### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know				
Water		7732-18-5		
Maine Chemicals of High	Conce	ern		
Product does not	conta	in any listed chemicals		
Vermont Chemicals of Hig	gh Cor	ncern		
Product does not	contai	in any listed chemicals		
Washington Chemicals of	High	Concern		
Product does not	contai	in any listed chemicals		
The ingredients of this pre-	oduct	are reported in the following inventories:		
AIIC	:	Not in compliance with the inventory		
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.		
		Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy-		
NZIoC	:	On the inventory, or in compliance with the inventory		
ENCS	:	Not in compliance with the inventory		
ISHL	:	Not in compliance with the inventory		
KECI	:	Not in compliance with the inventory		
PICCS	:	Not in compliance with the inventory		
IECSC	:	Not in compliance with the inventory		
TCSI	:	On the inventory, or in compliance with the inventory		



Version 2.0	Revision Date: 03-22-2022	Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
TSCA	: Product co	ntains substance(s) not listed on TSCA inventory.
TECI	: Not in com	pliance with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA A-Tailing Enzyme

# **CERCLA** Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

# SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313		This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

glycerol 56-81-5 >= 50 - < 70 %

# **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Glycine, N,N'-1,2ethanediylbis[N-(carboxymethyl)-

N,N'-1,2- 60-00-4 >= 0 - < 0.1 %

>= 0 - < 0.1 %

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Glycine, N,N'-1,2- 60-00-4 ethanediylbis[N-(carboxymethyl)-

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act



# **KAPA Stranded RNA-Seq Kit for Illumina platforms**

Vers 2.0	sion	Revision [ 03-22-202		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015	
	US State Regulation	S			
	Massachusetts Righ	nt To Know			
	glycerol			56-81-5	
	Pennsylvania Right	To Know			
	glycerol Water			56-81-5 7732-18-5	
	Maine Chemicals of	High Conce	ern		
	Product do	es not conta	in any listed cher	nicals	
	Vermont Chemicals	-			
			in any listed cher	nicals	
	Washington Chemic Product do	-	Concern in any listed cher	nicals	
	California Permissib	ole Exposur	e Limits for Che	mical Contaminants	
	glycerol	-		56-81-5	
	The ingredients of the second s	his product	are reported in	the following inventories:	
	AIIC	:	Not in compliant	ce with the inventory	
	DSL	:		ntains the following components listed on the All other components are on the Canadian	
			DNA-dependent	t DNA polymerase	
	NZIoC	:	On the inventory	y, or in compliance with the inventory	
	ENCS	:	Not in compliant	ce with the inventory	
	ISHL	:	Not in compliant	ce with the inventory	
	KECI	:	Not in compliant	ce with the inventory	
	PICCS	:	Not in compliant	ce with the inventory	
	IECSC	:	Not in compliant	ce with the inventory	
	TCSI	:	On the inventory	y, or in compliance with the inventory	
	TSCA	:	All substances li	isted as active on the TSCA inventory	
	TECI	:	Not in compliand	ce with the inventory	

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# Kapa Ligation Buffer (5X)



# KAPA Stranded RNA-Seq Kit for Illumina platforms

Version 2.0 Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

# **CERCLA Reportable Quantity**

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : No SARA Hazards

SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

Poly(oxy-1,2ethanediyl), .alpha.hydro-.omega.-hydroxy-

25322-68-3

>= 30 - < 50 %

#### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

#### US State Regulations

#### Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

#### Pennsylvania Right To Know

Water	7732-18-5
Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-	25322-68-3
1,3-Propanediol, 2-amino-2-(hydroxymethyl)-	77-86-1

#### Maine Chemicals of High Concern

Product does not contain any listed chemicals

#### Vermont Chemicals of High Concern

Product does not contain any listed chemicals

#### Washington Chemicals of High Concern

Product does not contain any listed chemicals

## The ingredients of this product are reported in the following inventories:



Vers 2.0	sion	Revision 03-22-202		Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
	AIIC	:	Not in compliance	e with the inventory
	DSL	:	This product con on the Canadian	tains the following components that are not DSL nor NDSL.
			Adenosine 5'-trip	phosphate disodium salt hydrate
	NZIoC	:	On the inventory	, or in compliance with the inventory
	ENCS	:	Not in compliance	e with the inventory
	ISHL	:	Not in compliance	e with the inventory
	KECI	:	Not in compliance	e with the inventory
	PICCS	:	Not in compliance	e with the inventory
	IECSC	:	Not in compliance	e with the inventory
	TCSI	:	On the inventory	r, or in compliance with the inventory
	TSCA	:	Product contains	substance(s) not listed on TSCA inventory.
	TECI	:	Not in compliance	e with the inventory

# TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA Hyper Prep DNA Ligase

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

# SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	: No SARA Hazards
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SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis)
		reporting levels established by SARA Title III, Section 313.

# Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B). This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).



rsion	Revision Date: 03-22-2022		e of last issue: 10-11-2021 e of first issue: 12-08-2015
Accidental Release	se Prevention (40 CF	R 68.130, Subpart	
	mical(s) are listed ur s (40 CFR 60.489):	der the U.S. Clean	Air Act Section 111 SOCMI Intermedi-
glycero		56-81-5	>= 50 - < 70 %
Clean Water Act		are listed under the	e U.S. CleanWater Act, Section 311, Ta
ble 116.4A:			
ethane	e, N,N'-1,2- ( diylbis[N- (ymethyl)-	50-00-4	>= 0 - < 0.1 %
		re listed under the	U.S. CleanWater Act, Section 311, Tab
Glycine ethane	diylbis[N-	60-00-4	>= 0 - < 0.1 %
	kymethyl)- s not contain any toxi	c pollutants listed u	under the U.S. Clean Water Act Section
This product does	s not contain any pric	rity pollutants relate	ed to the U.S. Clean Water Act
US State Regula	tions		
Massachusetts F	-		
glycero			56-81-5
Pennsylvania Ri	-		
glycero Water			56-81-5 7732-18-5
	s of High Concern	. Para di da anche al a	
	t does not contain ar	-	
	cals of High Concer t does not contain ar		
		-	
-	emicals of High Con t does not contain ar		
	ssible Exposure Lir	-	Contaminants
glycero	•		56-81-5
• •		reported in the fol	llowing inventories:
AIIC	•	in compliance with	•
DSL		adian NDSL. All ot	the following components listed on the ther components are on the Canadian
	Pol	/nucleotide 5'-hydro	oxyl kinase
NZIoC	: On	the inventory, or in	compliance with the inventory
ENCS	: Not	in compliance with	the inventory
	N		
ISHL	: Not	in compliance with	the inventory



Version 2.0	Revision Date: 03-22-2022	Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
PICCS	: Not in comp	pliance with the inventory
IECSC	: Not in comp	liance with the inventory
TCSI	: On the inve	ntory, or in compliance with the inventory
TSCA	: All substance	ces listed as active on the TSCA inventory
TECI	: Not in comp	liance with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA PEG/NaCI

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
SARA 313	:	This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# **Clean Air Act**

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A. App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

25322-68-3 Poly(oxy-1,2->= 20 - < 30 % ethanediyl), .alpha.hydro-.omega.-hydroxy-

# **Clean Water Act**

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Hydrochloric acid 7647-01-0 >= 0 - < 0.1 % The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3:

Hydrochloric acid	7647-01-0	>= 0 - < 0.1 %
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Version 2.0 Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

# **US State Regulations**

Massachusetts Right To Know				
Hydrochloric acid	7647-01-0			
Pennsylvania Right To Know				
Water	7732-18-5			
Poly(oxy-1,2-ethanediyl), .alphahydroomegahydroxy-	25322-68-3			
Sodium chloride (NaCl)	7647-14-5			
Hydrochloric acid	7647-01-0			
Maine Chemicals of High Concern				
Product does not contain any listed chemicals				

# **Vermont Chemicals of High Concern**

Product does not contain any listed chemicals

# Washington Chemicals of High Concern

Product does not contain any listed chemicals

#### The ingredients of this product are reported in the following inventories:

AIIC	:	On the inventory, or in compliance with the inventory
DSL	:	All components of this product are on the Canadian DSL
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	On the inventory, or in compliance with the inventory
KECI	:	On the inventory, or in compliance with the inventory
PICCS	:	On the inventory, or in compliance with the inventory
IECSC	:	On the inventory, or in compliance with the inventory
TCSI	:	On the inventory, or in compliance with the inventory
TSCA	:	All substances listed as active on the TSCA inventory
TECI	:	Not in compliance with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA Library Amplification Primer Premixes (10X)



# KAPA Stranded RNA-Seq Kit for Illumina platforms

Version 2.0 Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	No SARA Hazards
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SARA 313

: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A:

Hydrochlo	ric acid	7647-01-0	>= 0 - < 0.1 %	
The following Hazard	lous Chemicals	are listed under the U.S	. CleanWater Act, Section 311,	Table
117.3:				
Hydrochlo	ric acid	7647-01-0	>= 0 - < 0 1 %	

Hydrochloric acid 7647-01-0 >= 0 - < 0.1 %This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

# US State Regulations

Massachusetts Right To Know	
Hydrochloric acid	7647-01-0
Pennsylvania Right To Know	
Water	7732-18-5
Hydrochloric acid	7647-01-0

#### Maine Chemicals of High Concern

Product does not contain any listed chemicals

# Vermont Chemicals of High Concern

Product does not contain any listed chemicals

# Washington Chemicals of High Concern

Product does not contain any listed chemicals

# The ingredients of this product are reported in the following inventories:

AIIC

: Not in compliance with the inventory

Roche

# KAPA Stranded RNA-Seq Kit for Illumina platforms

Version 2.0	Revision Date: 03-22-2022	Date of last issue: 10-11-2021 Date of first issue: 12-08-2015
DSL	•	ntains the following components that are not DSL nor NDSL.
	Primer / Oligonu	cleotide / Probe
NZIoC	: On the inventory	y, or in compliance with the inventory
ENCS	: Not in compliance	ce with the inventory
ISHL	: Not in compliance	ce with the inventory
KECI	: Not in compliance	ce with the inventory
PICCS	: Not in compliance	ce with the inventory
IECSC	: Not in compliance	ce with the inventory
TCSI	: Not in compliance	ce with the inventory
TSCA	: Product contains	s substance(s) not listed on TSCA inventory.
TECI	: Not in compliance	ce with the inventory

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA HiFi HotStart ReadyMix (2X)

# **CERCLA Reportable Quantity**

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

# SARA 304 Extremely Hazardous Substances Reportable Quantity

Listed substances in the product are at low enough levels to not be expected to exceed the RQ

# SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards	:	Specific target organ toxicity (single or repeated exposure)
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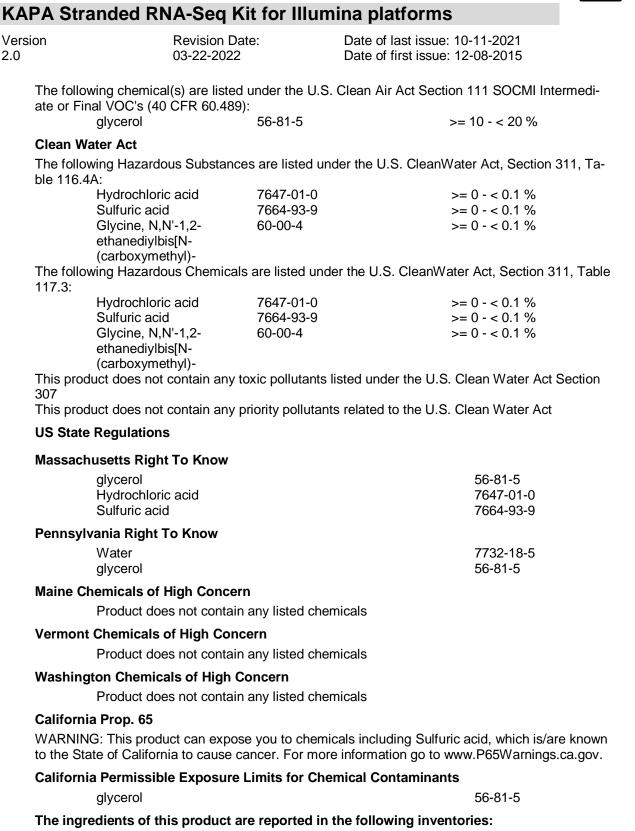
 SARA 313
 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).



Roche

AIIC	:	Not in compliance with the inventory
DSL	:	This product contains the following components that are not on the Canadian DSL nor NDSL.

2'-Deoxyguanosine 5'-triphosphate trisodium salt



#### Version Revision Date: Date of last issue: 10-11-2021 2.0 03-22-2022 Date of first issue: 12-08-2015 Adenosine 5'-(tetrahydrogen triphosphate), 2'-deoxy-Thymidine 5'-(tetrahydrogen triphosphate), sodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt MAB / PAB dUTP diphosphatase DNA-dependent DNA polymerase NZIoC On the inventory, or in compliance with the inventory ENCS Not in compliance with the inventory ISHL Not in compliance with the inventory KECI Not in compliance with the inventory PICCS Not in compliance with the inventory : **IECSC** Not in compliance with the inventory : TCSI Not in compliance with the inventory TSCA : Product contains substance(s) not listed on TSCA inventory. TECI : Not in compliance with the inventory

# **KAPA Stranded RNA-Seq Kit for Illumina platforms**

# **TSCA** list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

# KAPA Fragment, Prime and Elute Buffer (2X)

GHS label elements Not a hazardous substance or mixture. KAPA 1st Strand Synthesis Buffer

# GHS label elements

Not a hazardous substance or mixture. *KAPA Script* 

# **GHS** label elements

Not a hazardous substance or mixture. *KAPA 2nd Strand Marking Buffer* 

# GHS label elements

Not a hazardous substance or mixture.



# KAPA Stranded RNA-Seq Kit for Illumina platforms

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# KAPA 2nd Strand Synthesis Enzyme Mix

# **GHS** label elements

Not a hazardous substance or mixture. *Kapa A-Tailing Buffer (10X)* 

## **GHS** label elements

Not a hazardous substance or mixture.

# KAPA A-Tailing Enzyme

# **GHS** label elements

Not a hazardous substance or mixture. *Kapa Ligation Buffer (5X)* 

# GHS label elements

Not a hazardous substance or mixture. *KAPA Hyper Prep DNA Ligase* 

#### **GHS** label elements

Not a hazardous substance or mixture. KAPA PEG/NaCI

# **GHS** label elements

Not a hazardous substance or mixture. KAPA Library Amplification Primer Premixes (10X)

GHS label elements Not a hazardous substance or mixture. KAPA HiFi HotStart ReadyMix (2X)

# **GHS** label elements

Hazard pictograms

Hazard Statements



Signal Word

Danger

÷

: H370 Causes damage to organs.

Precautionary Statements

Prevention:

P260 Do not breathe mist or vapors.P264 Wash skin thoroughly after handling.P270 Do not eat, drink or smoke when using this product.

#### **Response:**

P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.

# Storage:

P405 Store locked up.



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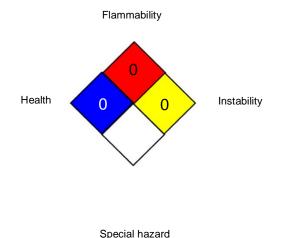
# Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

# **SECTION 16. OTHER INFORMATION**





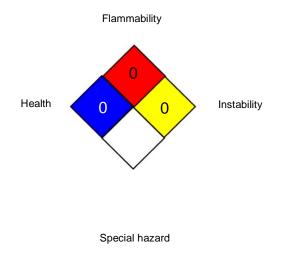


# HMIS® IV:



HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

NFPA 704:



# HMIS® IV:

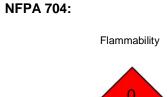




Version 2.0

**Revision Date:** 03-22-2022

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Instability

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

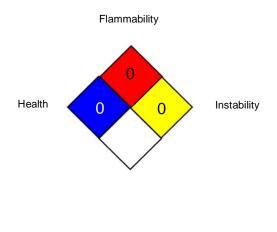
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HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### NFPA 704:

Health



Special hazard

Special hazard

# HMIS® IV:

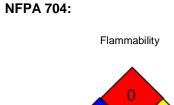




Instability

Version 2.0 Revision Date: 03-22-2022

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Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

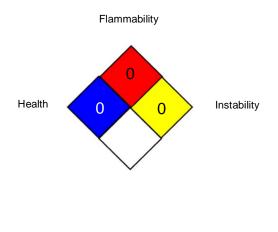
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#### NFPA 704:

Health



Special hazard

Special hazard

# HMIS® IV:

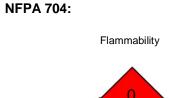




Instability

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Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

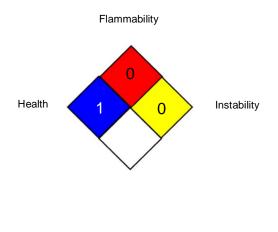
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HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.

#### NFPA 704:

Health



Special hazard

Special hazard

# HMIS® IV:

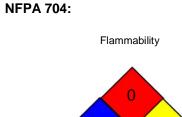




Instability

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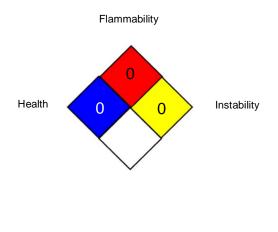
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#### NFPA 704:

Health



Special hazard

Special hazard

# HMIS® IV:

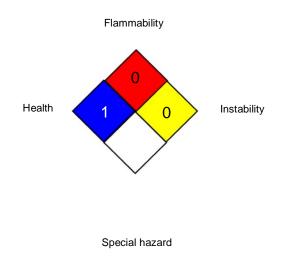




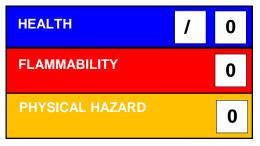
Version 2.0 Revision Date: 03-22-2022

Date of last issue: 10-11-2021 Date of first issue: 12-08-2015

# NFPA 704: Flammability Health 0 0 0 Instability Instability Special hazard



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# HMIS® IV:



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# Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime



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Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 03-22-2022

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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