

Version 1.4 Revision Date: 08-02-2018

Date of last issue: 06-15-2018 Date of first issue: 11-11-2015

## **SECTION 1. IDENTIFICATION**

Product name	:	LC RNA Amplification Kit, Hyb.	Probes
Product code	:	12015145001	
Manufacturer or supplier's d	eta	iils	
Company name of supplier	:	Roche Diagnostics -	
Address	:	9115 Hague Road 46250 Indianapolis IN 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.

## **SECTION 2. HAZARDS IDENTIFICATION**

## GHS classification in accordance with 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 Label elements contains the resulting labelling for the kit

## **GHS** label elements

Not a hazardous substance or mixture.

## Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

## Enzyme Mix

## **GHS Classification**

Not a hazardous substance or mixture.

#### Hazardous ingredients

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

## Reaction Mix, 5x conc.



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## **GHS Classification**

Not a hazardous substance or mixture.

#### **Hazardous ingredients**

Chemical name	CAS-No.	Concentration (% w/w)
glycerol	56-81-5	>= 5 - < 10

## MgCl2 Solution, 25mM

## **GHS Classification**

Not a hazardous substance or mixture.

## Hazardous ingredients

No hazardous ingredients

## Water

GHS Classification

Not a hazardous substance or mixture.

## Hazardous ingredients

No hazardous ingredients

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

General advice	:	Do not leave the victim unattended.
If inhaled	:	Move to fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	:	If on skin, rinse well with water.
In case of eye contact	:	Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. If eye irritation persists, consult a specialist.
If swallowed	:	Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Rinse mouth with water.
Most important symptoms and effects, both acute and delayed	:	No information available.
Notes to physician	:	The first aid procedure should be established in consultation
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## SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media	:	Use extinguishing measures that are appropriate to local cir- cumstances and the surrounding environment.
Specific hazards during fire fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
Further information	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Special protective equipment for fire-fighters	:	Wear self-contained breathing apparatus for firefighting if necessary.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Refer to protective measures listed in sections 7 and 8.
Environmental precautions	:	Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, 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	:	For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap- plication area.
Conditions for safe storage	:	Containers which are opened must be carefully resealed and kept upright to prevent leakage. Electrical installations / working materials must comply with the technological safety standards.
Technical measures/Precautions	:	See label, package insert or internal guidelines
Materials to avoid	:	No materials to be especially mentioned.
Further information on stor- age stability	:	No decomposition if stored and applied as directed.



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## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## Enzyme Mix

## Ingredients with workplace control parameters

Ingredients	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

## Reaction Mix, 5x conc.

## Ingredients with workplace control parameters

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

## MgCl2 Solution, 25mM

## Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

## Water

Ingredients with workplace control parameters Contains no substances with occupational exposure limit values.			
Engineering measures	No data available		
Personal protective equipmen Respiratory protection :	t No personal respiratory protective equipment normally requi- red.		



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Hand protection		
Material	: Protective gloves	

Remarks	:	Wear appropriate protective gloves to prevent skin contact. Replace torn or punctured gloves promptly.
Eye protection	:	Safety glasses
Skin and body protection	:	Protective suit
Hygiene measures	:	Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

## Enzyme Mix

Appearance	:	liquid
Color	:	clear
		colorless
Odor	:	No data available
Odor Threshold	:	No data available
рН	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	The product is not flammable.
Flammability (liquids)	:	Does not sustain combustion.
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



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Relative density	:	No data available
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
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

## Reaction Mix, 5x conc.

Appearance	:	liquid
Color	:	clear
		colorless
Odor	:	No data available
Odor Threshold	:	No data available
рН	:	No data available
Melting point/range	:	No data available
Boiling point/boiling range	:	No data available
Flash point	:	No data available
Evaporation rate	:	No data available
Flammability (solid, gas)	:	The product is not flammable.
Flammability (liquids)	:	Does not sustain combustion.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower	:	No data available



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flammability limit				
Vapor pressure	:	No data available		
Relative vapor density	:	No data available		
Relative density	:	No data available		
Solubility(ies) Water solubility	:	completely miscib	le	
Solubility in other solv	vents :	No data available		
Partition coefficient: n- octanol/water	:	No data available		
Autoignition temperature	) :	No data available		
Decomposition temperat	ture :	No data available		
Viscosity Viscosity, dynamic Viscosity, kinematic	:	No data available No data available		
Oxidizing properties	:		mixture is not classified as oxidizing.	

## MgCl2 Solution, 25mM

Appearance	:	liquid
Color	:	clear, colorless
Odor	:	odorless
Odor Threshold	:	No data available
рН	:	8.25 - 8.45 (25 °C / 25 °C)
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)	:	The product is not flammable.
Self-ignition	:	No data available
Upper explosion limit / Upper flammability limit	:	No data available

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Lower explosion limit / Lo flammability limit	ower : No data ava	ilable
Vapor pressure	: No data ava	ilable
Relative vapor density	: No data ava	ilable
Relative density	: No data ava	ilable
Density	: 0.997 - 1.01	0 g/cm3 (25 °C / 25 °C)
Solubility(ies) Water solubility	: completely r	miscible
Solubility in other solv	ents : No data ava	ilable
Partition coefficient: n- octanol/water	: No data ava	ilable
Autoignition temperature	: No data ava	ilable
Decomposition temperat	ure : No data ava	ilable
Viscosity Viscosity, dynamic	: No data ava	ilable
Viscosity, kinematic	: No data ava	ilable
Oxidizing properties	: The substar	nce or mixture is not classified as oxidizing
Conductivity	: 4,500 - 6,00	0 μS/cm (25 °C / 25 °C)
Vater		
Appearance	: liquid	
Color	: colorless	
Odor	: none	
Odor Threshold	: No data ava	ilable
рН	: 7.0	
Melting point/range	: 0.0 °C / 0.0	°C
Boiling point/boiling rang	e : 99.97 °C / 9 (1,013 hPa)	
Flash point	: Not applicat	ble
Evaporation rate	: No data ava	ilable
Flammability (liquids)	: Does not su	istain combustion.



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		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	:	0.61 hPa (0 °C / 0 °C)
		23.4 hPa (20 °C / 20 °C)
		31.7 hPa (25 °C / 25 °C)
		123.3 hPa (50 °C / 50 °C)
		385.4 hPa (75 °C / 75 °C)
		1,013 hPa (99.97 °C / 99.97 °C)
Relative vapor density	:	No data available
Relative density	:	No data available
Density	:	0.999 g/cm3 (0 °C / 0 °C)
		1.000 g/cm3 (3.98 °C / 3.98 °C)
		0.997 g/cm3 (25 °C / 25 °C)
		0.958 g/cm3 (99.97 °C / 99.97 °C)
Solubility(ies) Water solubility	:	completely miscible
Solubility in other solvents	:	(20 °C / 20 °C) Solvent: Alcohol Description: completely miscible
Partition coefficient: n- octanol/water	:	No data available
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Viscosity Viscosity, dynamic	:	0.998 mPa.s (20 °C / 20 °C)
		0.285 mPa.s (99.97 °C / 99.97 °C)
Viscosity, kinematic	:	No data available



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Oxidizing properties	: The substan	ce or mixture is not classified as oxidizing.
Molecular weight	: 18.02 g/mol	

## 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 dangerous reaction known under conditions of normal use. Stable under recommended storage conditions. No hazards to be specially mentioned.
Conditions to avoid	:	Exposure to light.
Incompatible materials	:	No data available
Hazardous decomposition products	:	No data available

## SECTION 11. TOXICOLOGICAL INFORMATION

## Enzyme Mix

Acute toxicity Not classified based on available information. Ingredients:			
glycerol:			
Acute oral toxicity	: LD50 Oral (Rat): 12,600 mg/kg		
	LD50 Oral (Mouse): 4,090 mg/kg		
Acute inhalation toxicity	: Acute toxicity estimate: > 30 mg/l Test atmosphere: vapor Method: Expert judgment		
Acute dermal toxicity	: LD50 Dermal (Rabbit): 10,000 mg/kg		
Skin corrosion/irritation Not classified based on ava	ailable information.		
Serious eye damage/eye i	irritation		
Not classified based on available information.			
Respiratory or skin sensitization			
Skin sensitization			

Not classified based on available information.



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## **Respiratory sensitization**

Not classified based on available information.

#### Ingredients:

#### glycerol:

Assessment

Mild eye irritant, Mild respiratory irritant, No skin irritation

## 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.

## Ingredients:

## glycerol:

Repeated dose toxicity - : Mild eye irritant, Mild respiratory irritant, No skin irritation Assessment

## Aspiration toxicity

Not classified based on available information.

## Reaction Mix, 5x conc.

## Acute toxicity

Not classified based on available information.

## Ingredients:

glycerol:		
Acute oral toxicity	:	LD50 Oral (Rat): 12,600 mg/kg
		LD50 Oral (Mouse): 4,090 mg/kg
Acute inhalation toxicity	:	Acute toxicity estimate: > 30 mg/l Test atmosphere: vapor Method: Expert judgment
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Acute dermal toxicity : LD50 Dermal (Rabbit): 10,000 mg/kg

## 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.

#### Ingredients:

## glycerol:

Assessment

Mild eye irritant, Mild respiratory irritant, No skin irritation

## 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.

#### Ingredients:

## glycerol:

Repeated dose toxicity - : Mild eye irritant, Mild respiratory irritant, No skin irritation Assessment

## Aspiration toxicity

Not classified based on available information.

## MgCl2 Solution, 25mM



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## 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.
- **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.

## Water

## 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.



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## 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.

#### 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.

## **SECTION 12. ECOLOGICAL INFORMATION**

## Enzyme Mix

Ecotoxicity		
Ingredients:		
<b>glycerol:</b> Toxicity to fish	:	LC50: > 100 mg/l Exposure time: 96 h
Toxicity to algae	:	EC0 (Scenedesmus quadricauda (Green algae)): > 10,000 mg/l
Toxicity to fish (Chronic tox- icity)	:	> 1 mg/l
Toxicity to microorganisms	:	EC0 (Pseudomonas putida): > 10,000 mg/l Exposure time: 16 h



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Ecotoxicology Assessn	nent		
Acute aquatic toxicity	:	This product h	as no known ecotoxicological effects.
Chronic aquatic toxicity	:	This product h	as no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected	to adsorb on soil.
Other organisms relevant the environment	t to :	No data availa	ble
Persistence and degrad	lability		
Ingredients:			
glycerol:			
Biodegradability	:		product is miscible in water and readily biode- th water and soil. Accumulation is not expected
Bioaccumulative potent	tial		
Ingredients:			
<b>glycerol:</b> Partition coefficient: n- octanol/water	:	log Pow: -2.66	
<b>Mobility in soil</b> No data available			
Other adverse effects			
Reaction Mix, 5x conc.			
Ecotoxicity			
Ingredients:			
glycerol:			
Toxicity to fish	:	LC50: > 100 n Exposure time	
Toxicity to algae	:	EC0 (Scenede mg/l	esmus quadricauda (Green algae)): > 10,000
Toxicity to fish (Chronic to icity)	ox- :	> 1 mg/l	
Toxicity to microorganism	ns :	EC0 (Pseudor Exposure time	nonas putida): > 10,000 mg/l :: 16 h
Ecotoxicology Assessmediate Acute aquatic toxicity	nent :	This product h	as no known ecotoxicological effects.

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Chronic aquatic toxicity	:	This product ha	s no known ecotoxicological effects.
Toxicity Data on Soil	:	Not expected to	adsorb on soil.
Other organisms relevant the environment	to :	No data availab	le
Persistence and degrad	ability		
Ingredients:			
glycerol:			
Biodegradability	:		broduct is miscible in water and readily biode- n water and soil. Accumulation is not expected.
Bioaccumulative potent	al		
Ingredients:			
glycerol:			
Partition coefficient: n- octanol/water	:	log Pow: -2.66	
Mobility in soil			
No data available			
Other adverse effects			
MgCl2 Solution, 25mM			
Ecotoxicity			
No data available			
Persistence and degrada	ability		
Bioaccumulative potent	al		
No data available			
Mobility in soil			
No data available			
Other adverse effects			
Nater			
Ecotoxicity			
No data available			
Persistence and degrada	ability		
No data available			
Bioaccumulative potenti No data available	al		



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## Mobility in soil

No data available

Other adverse effects

## SECTION 13. DISPOSAL CONSIDERATIONS

#### **Disposal methods**

Waste from residues	:	The product should not be allowed to enter drains, water courses or the soil.
Contaminated packaging	:	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

## SECTION 15. REGULATORY INFORMATION

## Enzyme Mix

## EPCRA - Emergency Planning and Community Right-to-Know

## **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



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>= 50 - < 70 %

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

#### 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

#### **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

#### California Prop. 65

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

California Permissible Exposure Limits for Chemical Contaminants		
glycerol		56-81-5
The ingredients of	this product are reported in t	the following inventories:
DSL	•	ntains the following components that are not DSL nor NDSL.
	Taq DNA Polym	erase
	Reverse Transc	riptase
AICS	: Not in compliance	ce with the inventory
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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	: Not On TSCA Inventory

## **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.

## Reaction Mix, 5x conc.

## EPCRA - Emergency Planning and Community Right-to-Know

## **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):



LC RNA Amplifi	cation Kit, Hyb. Pr	obes		
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glycerol	56-81-5	>= 5 - < 10 %		
Clean Water Act				
Section 311, Table This product does r Section 311, Table	116.4A. not contain any Hazardous ( 117.3.	Substances listed under the U.S. CleanWater Act, Chemicals listed under the U.S. CleanWater Act, nts listed under the U.S. Clean Water Act Section		
US State Regulation	ons			
Massachusetts Rig	aht To Know			
glycerol		56-81-5		
Pennsylvania Rigi	nt To Know			
Water glycerol Glycine,	N-[2-hydroxy-1,1-bis(hydrox um chloride hexahydrate p.a			
Maine Chemicals	of High Concern			
Product of	does not contain any listed o	chemicals		
	Is of High Concern does not contain any listed o	chemicals		
	nicals of High Concern			
Product of	does not contain any listed o	chemicals		
		nown to the State of California to cause cancer,		
California Permiss	sible Exposure Limits for (	Chemical Contaminants		
glycerol	-	56-81-5		
The ingredients of DSL	: This product	I in the following inventories: t contains the following components that are not dian DSL nor NDSL.		
	SYBR Greer	n I nucleic acid gel stain		
	Uridine 5'-(te salt	etrahydrogen triphosphate), 2'-deoxy-, trisodium		
	2'-Deoxygua	anosine 5'-triphosphate trisodium salt		
	2'-Deoxyade (dATP)	2'-Deoxyadenosine 5'-(disodium dihydrogen triphosphate) (dATP)		
	2'-Deoxycyti	dine 5'-triphosphate disodium salt		
	T4-GEN32-F	Proteine		
AICS	: Not in compl	liance with the inventory		
NZIoC	: On the inver	ntory, or in compliance with the inventory		

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	Salion Mil, Hyb. I IC	NC3
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ENCS	: Not in compli	ance with the inventory
ISHL	: Not in compli	ance with the inventory
KECI	: Not in compli	ance with the inventory
PICCS	: Not in compli	ance with the inventory
IECSC	: Not in compli	ance with the inventory
TCSI	: Not in compli	ance with the inventory
TSCA	: Not On TSCA	A Inventory

## **TSCA** list

No substances are subject to a Significant New Use Rule.

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

## MgCl2 Solution, 25mM

## **EPCRA - Emergency Planning and Community Right-to-Know**

## **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).

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.



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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

#### US State Regulations

#### Massachusetts Right To Know

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

#### Pennsylvania Right To Know

Water

## 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

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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

DSL	:	All components of this product are on the Canadian DSL
AICS	:	On the inventory, or in compliance with the inventory
NZIoC	:	On the inventory, or in compliance with the inventory
ENCS	:	On the inventory, or in compliance with the inventory
ISHL	:	Not 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	:	On TSCA Inventory

## **TSCA** list

No substances are subject to a Significant New Use Rule.

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

## Water



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## EPCRA - Emergency Planning and Community Right-to-Know

## **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 S	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**

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

## **US State Regulations**

#### Massachusetts Right To Know

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

## Pennsylvania Right To Know

Water

#### 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

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

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

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DSL	: All components of	this product are on the Canadian DSL
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ISHL	: Not 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	: On TSCA Inventor	ry

## **TSCA** list

No substances are subject to a Significant New Use Rule.

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

## Enzyme Mix

GHS label elements Not a hazardous substance or mixture. *Reaction Mix, 5x conc.* 

## **GHS** label elements

Not a hazardous substance or mixture. *MgCl2 Solution, 25mM* 

## **GHS** label elements

Not a hazardous substance or mixture.

## Water

**GHS label elements** Not a hazardous substance or mixture.

## **SECTION 16. OTHER INFORMATION**

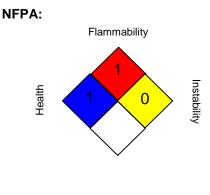
## **Further information**



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Enzyme Mix



Special hazard.

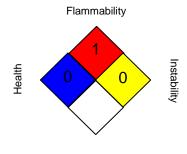
HMIS® IV:



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.

## Reaction Mix, 5x conc.

NFPA:



Special hazard.

## HMIS® IV:

HEALTH	1	0
FLAMMABILITY		0
PHYSICAL HAZARD		0

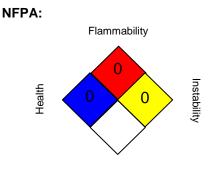
HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. The "\*" represents a chronic hazard, while the "/" represents the absence of a chronic hazard.



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## MgCl2 Solution, 25mM



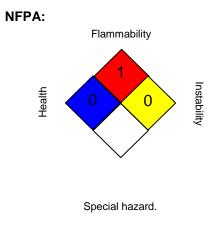
Special hazard.

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.

## Water



## 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.

## Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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; 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

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The information provided in this Material 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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