

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016
SECTION 1. IDENTIFICATION

Product name : EvoScript Universal cDNA Master 50 rxn
Product code : 07912374001

Manufacturer or supplier's details

Company name of supplier : ロシュ・ダイアグノスティックス株式会社

Address : 東京都港区芝2-6-1
1050014

Telephone : 03-5443-5128
Telefax : 03-5443-5299

Emergency telephone:
緊急連絡先: : カスタマーサポートセンタ
ー
0120-600-152
: 03-5443-5287 (LS)

Recommended use of the chemical and restrictions on use

Restrictions on use : For professional users only.

SECTION 2. HAZARDS IDENTIFICATION
GHS Classification

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
EvoScript Universal Buffer
GHS Classification

Not a hazardous substance or mixture.

Hazardous ingredients

No hazardous ingredients

EvoScript Enzyme Blend
GHS Classification

Not a hazardous substance or mixture.

Hazardous ingredients

Chemical name	CAS-No.	Concentration (% w/w)

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Glycerol	56-81-5	>= 30 - < 50
----------	---------	--------------

Water**GHS Classification**

Not a hazardous substance or mixture.

CAS-No. : 7732-18-5

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 : None known.
- Notes to physician : The first aid procedure should be established in consultation with the doctor responsible for industrial medicine.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- Specific hazards during fire fighting : No information available.
- Further information : Standard procedure for chemical fires.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Special protective equipment : Wear self-contained breathing apparatus for firefighting if for fire-fighters necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Environmental precautions : Local authorities should be advised if significant spillages cannot be contained.

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 application area.

Conditions for safe storage : 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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
EvoScript Universal Buffer
Ingredients with workplace control parameters

Contains no substances with occupational exposure limit values.

EvoScript Enzyme Blend
Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Glycerol	56-81-5	TWA (mist, respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (mist, total dust)	15 mg/m ³	OSHA Z-1
		TWA (Mist - total dust)	10 mg/m ³	OSHA P0
		TWA (Mist -	5 mg/m ³	OSHA P0

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

		respirable fraction)		
--	--	-------------------------	--	--

Water**Ingredients with workplace control parameters**

Contains no substances with occupational exposure limit values.

Engineering measures : No data available**Personal protective equipment**

Respiratory protection : No personal respiratory protective equipment normally required.

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***EvoScript Universal Buffer***

Appearance : liquid

Color : colorless

Odor : none

Odor Threshold : No data available

pH : 8.3

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.

Upper explosion limit : No data available

Lower explosion limit : No data available

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Vapor pressure	:	No data available
Relative vapor density	:	No data available
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.

EvoScript Enzyme Blend

Appearance	:	liquid
Color	:	No data available
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	7.5
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.
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	No data available

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Relative vapor density	:	No data available
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.

Water

Appearance	:	liquid
Color	:	colorless
Odor	:	none
Odor Threshold	:	No data available
pH	:	7.0
Melting point/range	:	0.0 °C
Boiling point/boiling range	:	99.97 °C (1,013 hPa)
Flash point	:	does not flash
Evaporation rate	:	No data available
Flammability (liquids)	:	Does not sustain combustion. The product is not flammable.
Upper explosion limit	:	No data available
Lower explosion limit	:	No data available
Vapor pressure	:	0.61 hPa (0 °C) 23.4 hPa (20 °C)

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

	31.7 hPa (25 °C)
	123.3 hPa (50 °C)
	385.4 hPa (75 °C)
	1,013 hPa (99.97 °C)
Relative vapor density	: No data available
Relative density	: No data available
Density	: 0.999 g/cm ³ (0 °C)
	1.000 g/cm ³ (3.98 °C)
	0.997 g/cm ³ (25 °C)
	0.958 g/cm ³ (99.97 °C)
Solubility(ies)	
Water solubility	: No data available
Solubility in other solvents	: (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)
	0.285 mPa.s (99.97 °C)
Viscosity, kinematic	: No data available
Oxidizing properties	: The substance 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 reactions	: No dangerous reaction known under conditions of normal use. Stable under recommended storage conditions. No hazards to be specially mentioned.

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Incompatible materials : Strong oxidizing agents

Hazardous decomposition products : No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION***EvoScript Universal 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.

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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

EvoScript Enzyme Blend

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016**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
Method: Expert judgment

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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016**STOT-repeated exposure**

Not classified based on available information.

Ingredients:**Glycerol:**

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

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.

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 ingredient of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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.

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016**Aspiration toxicity**

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION***EvoScript Universal Buffer*****Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects***EvoScript Enzyme Blend*****Ecotoxicity****Ingredients:****Glycerol:**Toxicity to fish : LC50: > 100 mg/l
Exposure time: 96 hToxicity to algae : EC0 (Scenedesmus quadricauda (Green algae)): > 10,000 mg/l
Exposure time: 7 d

Toxicity to fish (Chronic toxicity) : > 1 mg/l

Toxicity to bacteria : EC0 (Pseudomonas putida): > 10,000 mg/l
Exposure time: 16 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



EvoScript Universal cDNA Master 50 rxn

Version
1.1

Revision Date:
04-21-2016

Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Persistence and degradability

Ingredients:

Glycerol:

Biodegradability : Remarks: The product is miscible in water and readily biodegradable in both water and soil. Accumulation is not expected.

Bioaccumulative potential

Ingredients:

Glycerol:

Partition coefficient: n-octanol/water : log Pow: -2.66

Mobility in soil

No data available

Other adverse effects

Water

Ecotoxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Can be disposed as waste water, when in compliance with local regulations.

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 Regulation

UNRTDG

Not regulated as a dangerous good

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016**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 for product as supplied.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION***EvoScript Universal Buffer*****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 311/312 Hazards : No SARA Hazards**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**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 SOCOMI 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

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

Water	7732-18-5	90 - 100 %
N-(tri(hydroxymethyl)methyl)glycine	5704-04-1	1 - 5 %

New Jersey Right To Know

Water	7732-18-5	90 - 100 %
N-(tri(hydroxymethyl)methyl)glycine	5704-04-1	1 - 5 %
Potassium acetate	127-08-2	1 - 5 %

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

CH INV	Not in compliance with the inventory Magnesium di(acetate)Tetrahydrate Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe
DSL	This product contains the following components that are not on the Canadian DSL nor NDSL. Magnesium di(acetate)Tetrahydrate 2'-Deoxyguanosine 5'-triphosphate trisodium salt 2'-deoxyadenosine 5'-(disodium dihydrogen triphosphate) Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe
AICS	Not in compliance with the inventory 2'-Deoxyguanosine 5'-triphosphate trisodium salt 2'-deoxyadenosine 5'-(disodium dihydrogen triphosphate) Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe
NZIoC	On the inventory, or in compliance with the inventory
ENCS	Not in compliance with the inventory Water N-(tri(hydroxymethyl)methyl)glycine Magnesium di(acetate)Tetrahydrate 2'-Deoxyguanosine 5'-triphosphate trisodium salt 2'-deoxyadenosine 5'-(disodium dihydrogen triphosphate) Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe Tris hydrochloride
ISHL	Not in compliance with the inventory Water N-(tri(hydroxymethyl)methyl)glycine Magnesium di(acetate)Tetrahydrate 2'-Deoxyguanosine 5'-triphosphate trisodium salt 2'-deoxyadenosine 5'-(disodium dihydrogen triphosphate) Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

	Primer / Oligonucleotide / Probe Tris hydrochloride
KECI	Not in compliance with the inventory N-(tri(hydroxymethyl)methyl)glycine Magnesium di(acetate)Tetrahydrate Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe
PICCS	Not in compliance with the inventory N-(tri(hydroxymethyl)methyl)glycine 2'-Deoxyguanosine 5'-triphosphate trisodium salt 2'-deoxyadenosine 5'-(disodium dihydrogen triphosphate) Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe
IECSC	Not in compliance with the inventory 2'-Deoxyguanosine 5'-triphosphate trisodium salt 2'-deoxyadenosine 5'-(disodium dihydrogen triphosphate) Uridine 5'-(tetrahydrogen triphosphate), 2'-deoxy-, trisodium salt 2'-Deoxycytidine 5'-triphosphate disodium salt Primer / Oligonucleotide / Probe

TSCA list

No substances are subject to a Significant New Use Rule.

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

EvoScript Enzyme Blend**EPCRA - Emergency Planning and Community Right-to-Know****CERCLA Reportable Quantity**

Ingredients	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
Edetic acid	60-00-4	5000	*

*: Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

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

SARA 311/312 Hazards : No SARA Hazards**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.**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**

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

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 SOCMII Intermediate or Final VOC's (40 CFR 60.489):

Glycerol	56-81-5	49.2504 %
----------	---------	-----------

Clean Water Act

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

Edetic acid	60-00-4	0.003 %
-------------	---------	---------

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

Edetic acid	60-00-4	0.003 %
-------------	---------	---------

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	30 - 50 %
----------	---------	-----------

Pennsylvania Right To Know

Glycerol	56-81-5	30 - 50 %
Water	7732-18-5	30 - 50 %

New Jersey Right To Know

Glycerol	56-81-5	30 - 50 %
Water	7732-18-5	30 - 50 %

California Permissible Exposure Limits for Chemical Contaminants

Glycerol	56-81-5
----------	---------

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

CH INV	Not in compliance with the inventory RNase Inhibitor DNA Polymerase Reverse Transcriptase Polyethylengykol-1,1,3,3,-tetra-methylbutyl-phenylether
DSL	This product contains the following components that are not on the Canadian DSL nor NDSL. RNase Inhibitor DNA Polymerase Reverse Transcriptase
AICS	Not in compliance with the inventory RNase Inhibitor DNA Polymerase Reverse Transcriptase
NZIoC	On the inventory, or in compliance with the inventory
ENCS	Not in compliance with the inventory Water

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

	Tris hydrochloride 1,4-Dithiothreitol (DTT) 4-(2-hydroxyethyl)piperazin-1-ylethanesulphonic acid RNase Inhibitor DNA Polymerase Reverse Transcriptase
ISHL	Not in compliance with the inventory Water Tris hydrochloride 1,4-Dithiothreitol (DTT) 4-(2-hydroxyethyl)piperazin-1-ylethanesulphonic acid RNase Inhibitor DNA Polymerase Reverse Transcriptase
KECI	Not in compliance with the inventory 1,4-Dithiothreitol (DTT) 4-(2-hydroxyethyl)piperazin-1-ylethanesulphonic acid RNase Inhibitor DNA Polymerase Reverse Transcriptase
PICCS	Not in compliance with the inventory RNase Inhibitor DNA Polymerase Reverse Transcriptase
IECSC	Not in compliance with the inventory RNase Inhibitor DNA Polymerase Reverse Transcriptase

TSCA list

No substances are subject to a Significant New Use Rule.

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

Water**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 311/312 Hazards : No SARA Hazards**SARA 302** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

EvoScript Universal cDNA Master 50 rxn
Version
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

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 SOCM 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	7732-18-5	90 - 100 %
-------	-----------	------------

New Jersey Right To Know

Water	7732-18-5	90 - 100 %
-------	-----------	------------

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

CH INV	On the inventory, or in compliance with the inventory
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	Not in compliance with the inventory Water
ISHL	Not in compliance with the inventory Water
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

TSCA list

No substances are subject to a Significant New Use Rule.

EvoScript Universal cDNA Master 50 rxnVersion
1.1Revision Date:
04-21-2016Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

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

EvoScript Universal Buffer**GHS label elements**

Not a hazardous substance or mixture.

EvoScript Enzyme Blend**GHS label elements**

Not a hazardous substance or mixture.

Water**GHS label elements**

Not a hazardous substance or mixture.

SECTION 16. OTHER INFORMATION**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 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

Further information

EvoScript Universal cDNA Master 50 rxn

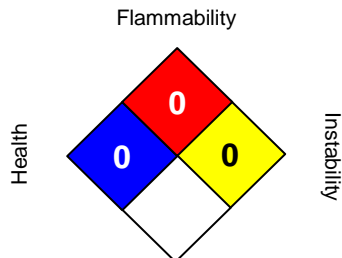
Version
1.1

Revision Date:
04-21-2016

Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

EvoScript Universal Buffer

NFPA:



Special hazard.

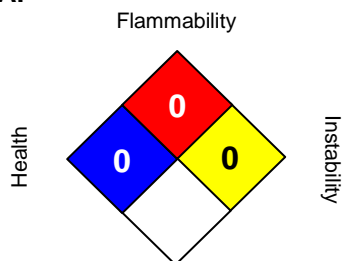
HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

EvoScript Enzyme Blend

NFPA:



Special hazard.

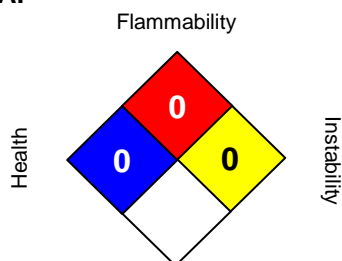
HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Water

NFPA:



Special hazard.

HMIS III:

HEALTH	0
FLAMMABILITY	0
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 = Extreme, * = Chronic

Revision Date : 04-21-2016

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.

SAFETY DATA SHEET



EvoScript Universal cDNA Master 50 rxn

Version
1.1

Revision Date:
04-21-2016

Date of last issue: 02-19-2016
Date of first issue: 02-19-2016

US / Z8 / 1511