



This document contains Safety Data Sheets for the following kit components:

**1. Buffers / Nucleotides**

- Step 1: ER Buffer
- Step 2: Ligase Buffer
- Step 2: Adaptor A
- Step 2: Adaptor B
- Step 3: Primer
- PCR Buffer
- Step 4: Primers
- Nuclease-Free Water

**2. Enzyme Reagents**

- Step 1: ER Enzyme Mix
- Step 2: Ligase
- DNA Polymerase

CytoSure™ NGS Library Preparation Kit –  
Buffers / Nucleotides  
SAFETY DATA SHEET



A Sysmex Group Company

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

Product Name CytoSure™ NGS Library Preparation Kit – Buffers / Nucleotides  
Product code 502001 CytoSure™ NGS Library Preparation Kit  
CAS No. None assigned.  
EC No. None assigned.  
REACH Registration No. None assigned.

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

Identified Use(s) Analytical reagent. For research use only.  
Uses Advised Against Not known.

**1.3 Details of the supplier of the safety data sheet**

Company Identification Oxford Gene Technology  
Begbroke Science Park  
Begbroke Hill, Woodstock Road  
Begbroke, Oxfordshire  
OX5 1PF, United Kingdom  
Telephone +44 (0)1865 856800  
E-mail support@ogt.com

**1.4 Emergency telephone number**

Company +44 (0)1865 856800 (08.30-17.30 GMT)  
National Poisons Information Service 111  
(NHS Direct)

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Not classified as dangerous for supply/use.

**2.2 Label elements**

According to Regulation (EC) No. 1272/2008 (CLP)  
Product Name CytoSure™ NGS Library Preparation Kit – Buffers / Nucleotides  
Hazard Pictogram(s) None.  
Signal Word(s) None.  
Hazard Statement(s) None.  
Precautionary Statement(s) None.

**2.3 Other hazards**

None known.

**2.4 Additional Information**

None.

**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable.

**3.2 Mixtures**

Contains no hazardous ingredients.



#### SECTION 4: FIRST AID MEASURES

##### 4.1 Description of first aid measures

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash skin with soap and water.
Eye Contact	If contact with eyes directly, flush with gently flowing fresh water thoroughly.
Ingestion	Wash out mouth with water. Get medical advice/attention if you feel unwell.

##### 4.2 Most important symptoms and effects, both acute and delayed

None anticipated.

##### 4.3 Indication of any immediate medical attention and special treatment needed

Unlikely to be required but if necessary treat symptomatically.

#### SECTION 5: FIREFIGHTING MEASURES

##### 5.1 Extinguishing media

Suitable extinguishing media	Use water spray, dry powder or carbon dioxide to extinguish.
Unsuitable extinguishing media	None known.

##### 5.2 Special hazards arising from the substance or mixture

Decomposes in a fire giving off toxic fumes: Oxides of nitrogen, sulphur and carbon may be formed.

##### 5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

#### SECTION 6: ACCIDENTAL RELEASE MEASURES

##### 6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures.

##### 6.2 Environmental precautions

Do not release large quantities into the surface water or into drains.

##### 6.3 Methods and material for containment and cleaning up

Absorb spillage in suitable inert material. Transfer to a container for disposal.  
Wash the spillage area with water.

##### 6.4 Reference to other sections

See Also Section 8, 13.

#### SECTION 7: HANDLING AND STORAGE

##### 7.1 Precautions for safe handling

General hygiene measures for the handling of chemicals are applicable. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place. Wash hands and exposed skin after use.

##### 7.2 Conditions for safe storage, including any incompatibilities

	Keep in a cool, dry, well ventilated place.
Storage temperature	-20°C
Storage life	Stable under normal conditions.
Incompatible materials	None known.

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**7.3 Specific end use(s)**

Analytical reagent. For research use only.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

8.1.1 Occupational Exposure Limits No Occupational Exposure Limit assigned.

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
						None assigned

Source UK Workplace Exposure Limits EH40/2005 (Third edition, published 2018)

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Ensure adequate ventilation.

8.2.2. Personal protection equipment



Eye Protection Wear protective eye glasses for protection against liquid splashes.



Skin protection Wear suitable protective clothing and gloves. Wear: Natural rubber, Nitrile rubber, Impervious gloves (EN 374).  
 Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection Normally no personal respiratory protection is necessary.



Thermal hazards Not applicable.

8.2.3. Environmental Exposure Controls Do not release large quantities into the surface water or into drains.

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance	Liquid. Colour : Colourless.
Odour	Odourless.
Odour threshold	Not established.
pH	7 - 8
Melting point/freezing point	0°C (By analogy with similar materials: Water)
Initial boiling point and boiling range	100°C (By analogy with similar materials: Water)
Flash Point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.

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Vapour pressure	23 hPa (By analogy with similar materials: Water)
Vapour density	Not available.
Density (g/ml)	Not available.
Relative density	Not available.
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	Not available.
Decomposition Temperature (°C)	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

**9.2 Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

Stable under normal conditions.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

None anticipated.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

Acute toxicity	Low acute toxicity.
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Non-irritant.
Skin sensitization data	It is not a skin sensitiser.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	No evidence of reproductive effects.
Lactation	Not classified.
STOT - single exposure	None anticipated.
STOT - repeated exposure	None anticipated.
Aspiration hazard	Not classified.

**11.2 Other information**

None.



## SECTION 12: ECOLOGICAL INFORMATION

- 12.1 Toxicity**  
Low toxicity to aquatic organisms.
- 12.2 Persistence and Degradation**  
The product is substantially biodegradable.
- 12.3 Bioaccumulative potential**  
No information available.
- 12.4 Mobility in soil**  
Soluble in water. The product is predicted to have high mobility in soil.
- 12.5 Results of PBT and vPvB assessment**  
Not classified as PBT or vPvB.
- 12.6 Other adverse effects**  
Not known.

## SECTION 13: DISPOSAL CONSIDERATIONS

- 13.1 Waste treatment methods**  
Dispose of empty containers and wastes safely. Send to a licensed recycler, reclaimer or incinerator. Disposal should be in accordance with local, state or national legislation.
- 13.2 Additional Information**  
EU Waste Codes: 18 01 07

## SECTION 14: TRANSPORT INFORMATION

- Not classified as dangerous for transport.
- 14.1 UN number**  
Not applicable.
- 14.2 UN proper shipping name**  
Not applicable.
- 14.3 Transport hazard class(es)**  
Not applicable.
- 14.4 Packing group**  
Not applicable.
- 14.5 Environmental hazards**  
Not applicable.
- 14.6 Special precautions for user**  
Not applicable.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**  
Not applicable.



## SECTION 15: REGULATORY INFORMATION

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed.

High Concern for Authorisation

REACH: ANNEX XIV list of substances subject to authorisation Not listed.

subject to authorisation

REACH: Annex XVII Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not listed.

manufacture, placing on the market and

use of certain dangerous substances,

mixtures and articles

Community Rolling Action Plan (CoRAP) Not listed.

#### National regulations

Other Not known.

### 15.2 Chemical Safety Assessment

A REACH chemical safety assessment has not been carried out.

## SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16

### LEGEND

#### Acronyms

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

EC : European Community

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

#### Disclaimers

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CytoSure™ NGS Library Preparation Kit –  
Enzyme Reagents  
SAFETY DATA SHEET



A Sysmex Group Company

ACCORDING TO EC-REGULATIONS 1907/2006 (REACH), 1272/2008 (CLP) & 2015/830

**SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

**1.1 Product identifier**

Product Name CytoSure™ NGS Library Preparation Kit – Enzyme Reagents  
Product code 502001 CytoSure™ NGS Library Preparation Kit  
CAS No. None assigned.  
EC No. None assigned.  
REACH Registration No. None assigned.

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

Identified Use(s) Analytical reagent. For research use only.  
Uses Advised Against Not known.

**1.3 Details of the supplier of the safety data sheet**

Company Identification Oxford Gene Technology  
Begbroke Science Park  
Begbroke Hill, Woodstock Road  
Begbroke, Oxfordshire  
OX5 1PF, United Kingdom  
Telephone +44 (0)1865 856800  
E-mail support@ogt.com

**1.4 Emergency telephone number**

Company +44 (0)1865 856800 (08.30-17.30 GMT)  
National Poisons Information Service 111  
(NHS Direct)

**SECTION 2: HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

Regulation (EC) No. 1272/2008 (CLP) Not classified as dangerous for supply/use.

**2.2 Label elements**

According to Regulation (EC) No. 1272/2008 (CLP)  
Product Name CytoSure™ NGS Library Preparation Kit – Enzyme Reagents  
Hazard Pictogram(s) None.  
Signal Word(s) None.  
Hazard Statement(s) None.  
Precautionary Statement(s) None.

**2.3 Other hazards**

None known.

**2.4 Additional Information**

None.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1 Substances**

Not applicable.

**3.2 Mixtures**

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / REACH Registration No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Glycerol	56-81-5	200-289-65 01-2119471987-18-XXXX	40 - 80	Not classified	None

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures**

Inhalation	If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
Skin Contact	Wash skin with soap and water.
Eye Contact	If contact with eyes directly, flush with gently flowing fresh water thoroughly.
Ingestion	Wash out mouth with water. Get medical advice/attention if you feel unwell.

**4.2 Most important symptoms and effects, both acute and delayed**

None anticipated.

**4.3 Indication of any immediate medical attention and special treatment needed**

Unlikely to be required but if necessary treat symptomatically.

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

Suitable extinguishing media	Use water spray, dry powder or carbon dioxide to extinguish.
Unsuitable extinguishing media	None known.

**5.2 Special hazards arising from the substance or mixture**

Decomposes in a fire giving off toxic fumes: Oxides of nitrogen, sulphur and carbon may be formed.

**5.3 Advice for firefighters**

Fire fighters should wear complete protective clothing including self-contained breathing apparatus.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation when using the material and follow the principles of good occupational hygiene to control personal exposures.

**6.2 Environmental precautions**

Do not release large quantities into the surface water or into drains.

**6.3 Methods and material for containment and cleaning up**

Absorb spillage in suitable inert material. Transfer to a container for disposal.  
Wash the spillage area with water.

**6.4 Reference to other sections**

See Also Section 8, 13.



**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

General hygiene measures for the handling of chemicals are applicable. Wear protective equipment to comply with good occupational hygiene practice. Do not eat, drink or smoke at the work place. Wash hands and exposed skin after use.

**7.2 Conditions for safe storage, including any incompatibilities**

Keep in a cool, dry, well ventilated place.

Storage temperature

-20°C

Storage life

Stable under normal conditions.

Incompatible materials

None known.

**7.3 Specific end use(s)**

Analytical reagent. For research use only.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters**

8.1.1 Occupational Exposure Limits

SUBSTANCE	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Glycerol, mist	56-81-5		10			

Source UK Workplace Exposure Limits EH40/2005 (Third edition, published 2018)

**8.2 Exposure controls**

8.2.1. Appropriate engineering controls Ensure adequate ventilation.

8.2.2. Personal protection equipment



Eye Protection

Wear protective eye glasses for protection against liquid splashes.



Skin protection

Wear suitable protective clothing and gloves. Wear: Natural rubber, Nitrile rubber, Impervious gloves (EN 374).

Breakthrough time of the glove material: refer to the information provided by the gloves' producer.



Respiratory protection

Normally no personal respiratory protection is necessary.



Thermal hazards

Not applicable.

8.2.3. Environmental Exposure Controls Do not release large quantities into the surface water or into drains.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties**

Appearance	Liquid. Colour : Colourless.
Odour	Faint.
Odour threshold	Not established.
pH	5.5 – 8.0
Melting point/freezing point	18°C
Initial boiling point and boiling range	289°C
Flash Point	193°C
Evaporation rate	Not available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	Not available.
Vapour density	Not available.
Density (g/ml)	1.26
Relative density	Not available.
Solubility(ies)	Soluble in water.
Partition coefficient: n-octanol/water	Not available.
Auto-ignition temperature	400°C
Decomposition Temperature (°C)	Not available.
Viscosity	Not available.
Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

**9.2 Other information**

None.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity**

Stable under normal conditions.

**10.2 Chemical Stability**

Stable under normal conditions.

**10.3 Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose.

**10.4 Conditions to avoid**

None anticipated.

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.



## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

Acute toxicity	Low acute toxicity.
Skin corrosion/irritation	Non-irritant.
Serious eye damage/irritation	Non-irritant.
Skin sensitization data	It is not a skin sensitiser.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	There is no evidence of mutagenic potential.
Carcinogenicity	No evidence of carcinogenicity.
Reproductive toxicity	No evidence of reproductive effects.
Lactation	Not classified.
STOT - single exposure	None anticipated.
STOT - repeated exposure	None anticipated.
Aspiration hazard	Not classified.

### 11.2 Other information

None.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1 Toxicity

Low toxicity to aquatic organisms.

### 12.2 Persistence and Degradation

The product is substantially biodegradable.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

Soluble in water. The product is predicted to have high mobility in soil.

### 12.5 Results of PBT and vPvB assessment

Not classified as PBT or vPvB.

### 12.6 Other adverse effects

Not known.

## SECTION 13: DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

Dispose of empty containers and wastes safely. Send to a licensed recycler, reclaimer or incinerator. Disposal should be in accordance with local, state or national legislation.

### 13.2 Additional Information

EU Waste Codes: 18 01 07

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**SECTION 14: TRANSPORT INFORMATION**

Not classified as dangerous for transport.

**14.1 UN number**

Not applicable.

**14.2 UN proper shipping name**

Not applicable.

**14.3 Transport hazard class(es)**

Not applicable.

**14.4 Packing group**

Not applicable.

**14.5 Environmental hazards**

Not applicable.

**14.6 Special precautions for user**

Not applicable.

**14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable.

**SECTION 15: REGULATORY INFORMATION**

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

European Regulations - Authorisations and/or Restrictions On Use

Candidate List of Substances of Very High Concern for Authorisation Not listed.

REACH: ANNEX XIV list of substances subject to authorisation

Not listed.

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

Not listed.

Community Rolling Action Plan (CoRAP)

Not listed.

**National regulations**

Other Not known.

**15.2 Chemical Safety Assessment**

A REACH chemical safety assessment has not been carried out.

**SECTION 16: OTHER INFORMATION**

The following sections contain revisions or new statements: 1-16

**LEGEND**

**Acronyms**

CAS : Chemical Abstracts Service

CLP : Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

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LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

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STEL : Short term exposure limit  
STOT : Specific Target Organ Toxicity  
UN : United Nations  
vPvB : very Persistent and very Bioaccumulative

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