



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 US CFR 1910.1200

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.

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 Inc.
(North America office)
520 White Plains Road, Suite 500
Tarrytown, NY 10591
Telephone 914 467 5285
E-mail support@ogt.com

1.4 Emergency telephone number

Company 914 467 5285

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

US CFR 1910.1200 Not classified as dangerous for supply/use.

2.2 Label elements

US CFR 1910.1200
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.

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



A Sysmex Group Company

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 ³)	STEL (ppm)	STEL (mg/m ³)	Note
						None assigned

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.
 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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Color : Colorless.
Odor	Odourless.
Odor 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.
Vapor pressure	23 hPa (By analogy with similar materials: Water)
Vapor density	Not available.
Density (g/ml)	Not available.

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



A Sysmex Group Company

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.
Oxidizing properties	Not oxidizing.

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 sensitizer.
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 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.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

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 US Federal Regulations

Toxic and hazardous substances (29 CFR 1910; Subpart Z) Not listed

National emission standards for hazardous air pollutants (40 CFR 61.01) Not listed

SARA Title III Section 313 Not listed

TSCA (Toxic Substance Control Act) Not listed

CAA 602 - Ozone Depleting Substances (ODS) Not listed

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



A Sysmex Group Company

15.2 US State Regulations

State Right to Know Lists

Proposition 65 (California)	Not listed
Minnesota	Not listed
New Jersey	Not listed
Pennsylvania	Not listed
Rhode Island	Not listed

15.3 Other

OSPAR List of Chemicals for Priority Action	Not listed
OSHA (List of Highly Hazardous Chemicals, Toxics and Reactives)	Not listed
NTP (National Toxicology Program)	Not listed
IARC (International Agency for Research on Cancer)	Not listed

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 16

NFPA Rating	
Health	0
Flammability	0
Instability	0
Special Hazards	

LEGEND

Acronyms

CAS : Chemical Abstracts Service
LTEL : Long term exposure limit
STEL : Short term exposure limit
STOT : Specific Target Organ Toxicity
UN : United Nations

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose.
Oxford Gene Technology Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law.
Oxford Gene Technology Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.

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



A Sysmex Group Company

ACCORDING TO US CFR 1910.1200

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.

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 Inc.
(North America office)
520 White Plains Road, Suite 500
Tarrytown, NY 10591
Telephone 914 467 5285
E-mail support@ogt.com

1.4 Emergency telephone number

Company 914 467 5285

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

US CFR 1910.1200 Not classified as dangerous for supply/use.

2.2 Label elements

US CFR 1910.1200
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.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Hazardous Ingredient(s)	CAS No.	%W/W	Hazard Statement(s)	Hazard Pictogram(s)
Glycerol	56-81-5	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.

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



A Sysmex Group Company

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/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Glycerol, mist - Total Dust	56-81-5		15			OSHA PEL Z-1
Glycerol, mist – Respirable fraction			5			OSHA PEL Z-1

OSHA PEL Z-1 Occupational Safety and Health Administration (OSHA) Permissible Exposure Limit (PEL) from 29 CFR 1910.1000 Z-1 Table

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.
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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid. Color : Colorless.
Odor	Faint.
Odor 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.

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



A Sysmex Group Company

Upper/lower flammability or explosive limits	Not applicable.
Vapor pressure	Not available.
Vapor 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.
Oxidizing properties	Not oxidizing.

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 sensitizer.
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.

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



A Sysmex Group Company

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 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.
- 13.2 Additional Information** Disposal should be in accordance with local, state or national legislation.

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 US Federal Regulations**
- | | |
|---|--------------------------|
| Toxic and hazardous substances (29 CFR 1910; Subpart Z) | Listed: 56-81-5 |
| National emission standards for hazardous air pollutants (40 CFR 61.01) | Not listed |
| SARA Title III Section 313 | Not listed |
| TSCA (Toxic Substance Control Act) | Listed: 56-81-5 (Active) |
| CAA 602 - Ozone Depleting Substances (ODS) | Not listed |

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



A Sysmex Group Company

15.2 US State Regulations

State Right to Know Lists

Proposition 65 (California)	Not listed
Minnesota	Listed: 56-81-5
New Jersey	Listed: 56-81-5
Pennsylvania	Listed: 56-81-5
Rhode Island	Listed: 56-81-5

15.3 Other

OSPAR List of Chemicals for Priority Action	Not listed
OSHA (List of Highly Hazardous Chemicals, Toxics and Reactives)	Not listed
NTP (National Toxicology Program)	Not listed
IARC (International Agency for Research on Cancer)	Not listed

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 16

NFPA Rating	
Health	0
Flammability	0
Instability	0
Special Hazards	

LEGEND

Acronyms

CAS : Chemical Abstracts Service
 LTEL : Long term exposure limit
 STEL : Short term exposure limit
 STOT : Specific Target Organ Toxicity
 UN : United Nations

Disclaimers

Information contained in this publication or as otherwise supplied to Users is believed to be accurate and is given in good faith, but it is for the Users to satisfy themselves of the suitability of the product for their own particular purpose.

Oxford Gene Technology Inc. gives no warranty as to the fitness of the product for any particular purpose and any implied warranty or condition (statutory or otherwise) is excluded except to the extent that exclusion is prevented by law.

Oxford Gene Technology Inc. accepts no liability for loss or damage (other than that arising from death or personal injury caused by defective product, if proved), resulting from reliance on this information. Freedom under Patents, Copyright and Designs cannot be assumed.