



MATERIAL SAFETY DATA SHEET

SECTION 1 - PRODUCT AND COMPANY INFORMATION

- ◆ **Product name:** LDH Cytotoxicity Assay Kit
- ◆ **Catalog number:** LDH0500

◆ **Contact:**

OZ Biosciences
Parc Scientifique de Luminy – Zone Luminy Entreprises
163 Avenue de Luminy – Case 922
13288 Marseille cedex 9, France
Phone: +33 (0)4.86.94.85.16 / Fax: +33 (0)4.86.94.85.15
www.ozbiosciences.com / contact@ozbiosciences.com

KIT CONTENT AND CLASSIFICATION

Content

Classification

- | | |
|---------------------------------|---|
| • 12.5mL of 2X INT Buffer (A) | / |
| • 12.5mL of 2X Assay Buffer (B) | / |
| • 100µL of 1000X Buffer (C) | / |
| • 25mL Stop Solution | / |
| • 1mL Lysis Buffer (10X) | / |
| • 10µL positive control | / |

MSDS: 2X INT Buffer (A)

SECTION 1 - PRODUCT AND COMPANY INFORMATION

◆ **Product name:** 2X INT Buffer (A)

◆ **Contact:**

OZ Biosciences
 Parc Scientifique de Luminy – Zone Luminy Entreprises
 163 Avenue de Luminy – Case 922
 13288 Marseille cedex 9, France
 Phone: +33 (0)4.86.94.85.16/ Fax: +33 (0)4.86.94.85.15
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SECTION 2 – HAZARDS IDENTIFICATION

- **GHS Classification**

Physical Hazards	not classified
Health Hazards	serious irritation (Category 2) acute toxicity (Category 4) (single exposure), STOT SE3
Environmental Hazards	not classified

- **GHS Label element**

Symbol

GHS07 exclamation mark

**Pictogram****Signal Word**

Warning

Warning

Hazard Statement

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary Statement

P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P270	Do not eat, drink or smoke when using this product.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Remove contact lenses, if possible.

Hazard-determining components of labeling: *Iodonitrotetrazolium chloride*

- This product contains hazardous ingredients (Yes; No; Not Applicable or no information): **Yes**
- This product contains hazardous carcinogens (Yes; No; N/A): **No**
- This product contains hazardous ingredients to the environment. (Yes; No; N/A): **No**

SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS

Description: Iodonitrotetrazolium chloride in solution in Trix Buffer

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EINECS</u>	<u>Classification</u>
Water	7732-18-5	95 %	231-791-2	None
Iodonitrotetrazolium chloride	146-68-9	<0.05 %		None
Tris Base	77-86-1	<5 %	201-064-4	None
Other ingredients		<0.1 %		None

Ingredients are not hazardous or their concentrations do not exceed the limit specified according to 29 CFR 1910.1200 Hazard Communication Standard (USA) and Directive 1999/45/EC-2001/59/EC (EU).

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

First Aid: Eye

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

First Aid: Skin

Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

First Aid: Ingestion

Wash out mouth with water provided person is conscious. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed

Hints for Physician: Symptoms

See Section 11 for additional information on health hazards

4.3 Indication of any immediate medical attention and special treatment needed

First Aid: Inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Hints for Physician: Treatment

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing Media

Suitable

foam, dry extinguishing powder, carbon dioxide (CO₂), water spray jet

5.2 Special hazards arising from the substance or mixture

Wear a self-contained breathing apparatus and chemical protective clothing.

Hazards During Fire-Fighting

toxic fumes

5.3 Fire-Fighting/Further Advice

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately.

This must not be dis

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

6.2 Environmental Precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

6.3 Methods and material for containment and cleaning up

not available

6.4 Further Accidental Release Measures

Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

SECTION 7 – HANDLING AND STORAGE

- **Handling:** Avoid breathing vapors or spray mists.
- **Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area. Store -20°C
- **Intended use:** Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific application.
- **Packaging materials**

- **Suitable:** Use original container.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Exposure limit values

Does not contain any substances with occupational exposure limits.

8.2 Exposure controls

Industrial Hygiene

Mechanical exhaust required. Safety shower and eye shower.

8.3 Personal Protective Equipment

Respiratory Protection

Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

Hand Protection

Wear compatible chemical-resistant gloves to prevent skin exposure.

Eye Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

Body Protection

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

Advice on Safe Handling

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**

- **Physical State:** Solution.
- **Color:** Yellow.
- **Odor:** Not available.
- **Taste:** Not available.

- **Molecular weight:** Not available.
- **pH:** Between 8.2
- **Boiling point:** 100°C (212 F).
- **Decomposition temperature:** 100°C (212 F)
- **Melting point:** Not available.
- **Flash point:** Not available.
- **Dispersion properties:** In suspension in water.
- **Solubility:** Not available.

SECTION 10 – STABILITY AND REACTIVITY

- **Stability and reactivity:** The product is stable at a pH between 4 and 11
- **Conditions to avoid:** pH < 4 and pH > 11, using temperatures > + 96°C
- **Materials to avoid:** Strong acids, strong bases and pure organic solvents.
- **Hazardous polymerization:** Will not occur.
- **Hazardous decomposition products:** Not available.

SECTION 11 – TOXICOLOGICAL INFORMATION

- ◆ **Toxicity on animals:**
 - **LD50:** Not available.
 - **LC50:** Not available.
- ◆ **Chronic effects on humans:** Carcinogenic effects: classified none. by NIOSH. By OSHA.
- ◆ **Other toxic effects on humans:** Slightly hazardous in case of ingestion, of eye contact.

SECTION 12 – ECOLOGICAL INFORMATION

- ◆ No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

- **Waste stream:** Not available.
- **Waste disposal method:** Contact a licensed professional waste disposal service to dispose of this material. Dispose in accordance with governmental environmental regulations. Observe all federal, state, and local environmental regulations.
- **European waste catalogue (EWC):** Not available.

- **Hazardous waste:** Will not occur.

SECTION 14 – TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

D.O.T.: Not regulated.

IATA.: Not regulated.

IMDG: Not regulated.

SECTION 15 – REGULATORY INFORMATION

◆ **US Federal Regulations**

RCRA (Lists of Hazardous Wastes, 40 CFR 261 Subpart D): Not applicable

CLEAN AIR ACT (SEC. 112. Hazardous Air Pollutants): Not applicable

CLEAN WATER ACT (RQ, 40 CFR): Not applicable

SARA Title III:
 Section 302 -304, 40 CFR 355: Components present in this product at a level which could require reporting are: none.
 Section 311 - 312: Components present in this product at a level which could require reporting are: none.
 Section 313: Not applicable

TSCA Section 8(b) Inventory Status: All ingredients are listed on TSCA Inventory of Chemical Substances or exempt from TSCA Inventory requirements.

AICS Inventory Status: All ingredients are listed on the Australia Inventory of Chemical Substances.

State Lists

This product does not contain any Proposition 65 chemicals.

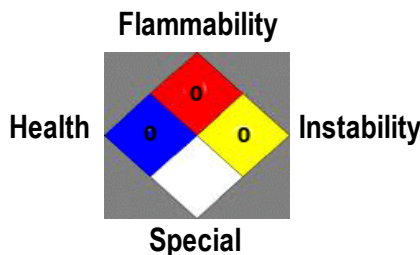
- ◆ This product is not classified according to the EU regulations..

SECTION 16 – OTHER INFORMATION

◆ **Hazardous Material Information System (U.S.A.):**

Health	0
Fire hazard	0
Reactivity	0
Personal protection	

◆ **National Fire Protection Association (U.S.A.):**



◆ **Revisions:**

Issue Date: 07-Mar-2023
 Last Revision New document
 Revision note: N/A.

◆ **Other Comments:**

To the best of our knowledge, the information contain herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Restriction of use: for research use only.

MSDS: 2X Assay Buffer (B)

SECTION 1 - PRODUCT AND COMPANY INFORMATION

◆ **Product name:** 2X Assay Buffer (B)

◆ **Contact:**

OZ Biosciences
 Parc Scientifique de Luminy – Zone Luminy Entreprises
 163 Avenue de Luminy – Case 922
 13288 Marseille cedex 9, France
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www.ozbiosciences.com / contact@ozbiosciences.com

SECTION 2 – HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
 Eye Dam. 1 H318 Causes serious eye damage.

Label elements

GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

GHS05

Signal word Danger

Hazard-determining components of labeling:

L-Lactic acid (2-hydroxy propionic acid)

Hazard statements

Causes severe skin burns and eye damage.

Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:**NFPA ratings (scale 0 - 4)**

Health = 3

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 3

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200):

Toxic

Highly Toxic

Target Organ(s): Not applicable or unknown

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable

SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS**Description:** Mixture of organic compound in aqueous solution

Ingredient name	CAS number	%	EINECS	Classification
Water	7732-18-5	>90 %	231-791-2	None
L-Lactic acid (2-hydroxy propionic acid)	79-33-4	5-10%		None
β-NAD	20111-18-6	1-5 %	201-064-4	None
Other ingredients		<0.1 %		None

The product is made up of a mixture of non-hazardous components. The exact concentration percentages and components name may be withheld as a OZ Biosciences SAS trade secret.

SECTION 4 – FIRST AID MEASURES**◆ Effects and symptoms:**

- *Inhalation* Not likely to occur.
- *Ingestion* Hazardous if swallowed.
- *Skin contact* May cause skin irritation.
- *Eye contact* May cause eye irritation.
- *Aggravating conditions* No aggravating condition known.

◆ First-Aid measures:

- *Inhalation* If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
- *Ingestion* Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
- *Skin contact* In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- *Eye contact* In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
- *Notes to physician* Not available.
- *Protection of first-aiders* Not available.

SECTION 5 – FIRE FIGHTING MEASURES

- ◆ **Flammability of the product:** May be combustible at high temperature.
- ◆ **Flash Point:** N/A.
- ◆ **Fire hazards in presence of various substances:** N/A.
- ◆ **Fire fighting media and instructions:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- ◆ **Protective clothing (fire):** Be sure to use an approved/certified respirator or equivalent.
- ◆ **Hazardous thermal decomposition products:** Carbon oxides, nitrogen oxides.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- ◆ **Personal precautions:** Wear safety glasses, lab coat and gloves.
- ◆ **Environmental precautions and clean-up methods:** Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system.
- ◆ **Small spill and leak:** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

SECTION 7 – HANDLING AND STORAGE

- ◆ **Handling:** Keep away from heat and sources of ignition. Avoid breathing vapors or spray mists. Avoid prolonged exposure.
- ◆ **Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area. Store at -20°C. Use original container.
- ◆ **Intended use:** Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific application.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

- ◆ **Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
- ◆ **Personal protection**
 - **Eyes:** Safety glasses.
 - **Body:** Lab coat and gloves.
 - **Respiratory:** Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.
- ◆ **General Hygiene measures:** wash hands thoroughly after handling.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties**General Information****Appearance:**

Form:	Fluid
Color:	Colorless
Odor:	Not determined
Odor threshold:	Not determined.
pH-value at 20 °C (68 °F):	8.6
Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Undetermined.
Flash point:	Not applicable.
Flammability (solid, gaseous):	Not applicable.
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure:	Not determined.
Density at 20 °C (68 °F):	1.029 g/cm ³ (8.58701 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Water:	90.2 %

SECTION 10 – STABILITY AND REACTIVITY

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects**Acute toxicity:**

LD/LC50 values that are relevant for classification: No data available

Primary irritant effect:

on the skin: No data available.

on the eye: No data available.

Sensitization: No sensitizing effects known.

Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity**Aquatic toxicity:**

Not available

No further relevant information available.

Persistence and degradability

Not available

No further relevant information available.

Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available**Ecotoxicological effects:****Remark:** Not available**Additional ecological information:****General notes:** No data available.**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Other adverse effects** No further relevant information available.

SECTION 13 – DISPOSAL CONSIDERATIONS

Waste treatment methods**Recommendation:***Disposal should be in accordance with applicable regional, national and local laws and regulations.**Refer to Section 7: Handling and Storage and Section 8: Exposure Control/Personal Protection for additional handling information and protection of employees.***Uncleaned packagings:***Recommendation: Disposal must be made according to official regulations.**Recommended cleansing agent: Water, if necessary with cleansing agents.*

SECTION 14 – TRANSPORT INFORMATION

- ◆ This substance is considered to be non-hazardous for transport and air-transport.

SECTION 15 – REGULATORY INFORMATION

◆ **US Federal Regulations**RCRA (Lists of Hazardous Wastes,
40 CFR 261 Subpart D):

Not applicable

CLEAN AIR ACT (SEC. 112.
Hazardous Air Pollutants):

Not applicable

CLEAN WATER ACT (RQ, 40 CFR):

Not applicable

SARA Title III:

Section 302 -304, 40 CFR 355: Components present in this product at a level which could require reporting are:
none.Section 311 - 312: Components present in this product at a level which could require reporting are:
none.

Section 313: Not applicable

TSCA Section 8(b) Inventory Status: All ingredients are listed on TSCA Inventory of Chemical Substances or exempt from TSCA Inventory requirements.

AICS Inventory Status: All ingredients are listed on the Australia Inventory of Chemical Substances.

State Lists

This product does not contain any Proposition 65 chemicals.

- ◆ This product is not classified according to the EU regulations..

GHS label elements *The product is classified and labeled according to the Globally Harmonized System (GHS).*

Signal word *Danger*

Hazard-determining components of labeling:

L-Lactic acid (2-hydroxy propionic acid)

Hazard statements

Causes severe skin burns and eye damage.

Precautionary statements

Do not breathe dusts or mists.

Wash thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection.

If swallowed: Rinse mouth. Do NOT induce vomiting.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Immediately call a poison center/doctor.

Wash contaminated clothing before reuse.

Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

Water hazard class: *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

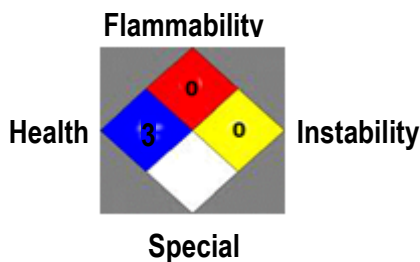
Chemical safety assessment: *A Chemical Safety Assessment has not been carried out.*

SECTION 16 – OTHER INFORMATION

◆ **Hazardous Material Information System (U.S.A.):**

Health	4
Fire hazard	0
Reactivity	0
Personal protection	

◆ **National Fire Protection Association (U.S.A.):**



0 = not significant
1 = slight
2 = moderate

3 = high
4 = extreme
* = chronic

◆ **Revisions:**

Issue Date: 07-Mar-2023

Last Revision New document

Revision note: N/A.

◆ **Other Comments:**

To the best of our knowledge, the information contain herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Restriction of use: for research use only.

1000X BUFFER (C)**SECTION 1 - PRODUCT AND COMPANY INFORMATION**

◆ **Product name:** 1000X Buffer (C)

◆ **Contact:**

OZ Biosciences
 Parc Scientifique de Luminy – Zone Luminy Entreprises
 163 Avenue de Luminy – Case 922
 13288 Marseille cedex 9, France
 Phone: +33 (0)4.86.94.85.16 / Fax: +33 (0)4.86.94.85.15
www.ozbiosciences.com / contact@ozbiosciences.com

SECTION 2 – HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Germ cell mutagenicity (Category 2),H341

Carcinogenicity (Category 2),H351

Reproductive toxicity (Category 2),H361

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word Warning

Hazard statement(s)

H341 Suspected of causing genetic defects

H351 Suspected of causing cancer

H361 Suspected of damaging fertility or the unborn child

Precautionary statement(s)

P202 Do not handle until all safety precautions have been read and understood.

P308+P313 IF exposed or concerned: Get medical advice/attention.

2.3 Other hazards

None

SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS

Description: ; 1-Methoxyphenazine methosulfate in solution in Tris Buffer

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EINECS</u>	<u>Classification</u>
Water	7732-18-5	95 %	231-791-2	None
; 1-Methoxyphenazine methosulfate	146-68-9	<0.05 %		None
Tris Base	77-86-1	<5 %	201-064-4	None
Other ingredients		<0.1 %		None

Ingredients are not hazardous or their concentrations do not exceed the limit specified according to 29 CFR 1910.1200 Hazard Communication Standard (USA) and Directive 1999/45/EC-2001/59/EC (EU).

SECTION 4 – FIRST AID MEASURES

◆ **Effects and symptoms:**

- *Inhalation* Not likely to occur.
- *Ingestion* Harmful if swallowed.

- *Skin contact* Causes skin irritation.
- *Eye contact* Causes transient eye irritation..
- *Aggravating conditions* No aggravating condition known.

◆ **First-Aid measures:**

- *Inhalation* If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
- *Ingestion* Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
- *Skin contact* In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- *Eye contact* In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
- *Notes to physician* Not available.
- *Protection of first-aiders* Not available.

SECTION 5 – FIRE FIGHTING MEASURES

- ◆ **Flammability of the product:** May be combustible at high temperature.
- ◆ **Flash Point:** N/A.
- ◆ **Fire hazards in presence of various substances:** N/A.
- ◆ **Fire fighting media and instructions:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- ◆ **Protective clothing (fire):** Be sure to use an approved/certified respirator or equivalent.
- ◆ **Hazardous thermal decomposition products:** Carbon oxides, nitrogen oxides.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- ◆ **Personal precautions:** Wear safety glasses, lab coat and gloves.
- ◆ **Environmental precautions and clean-up methods:** Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow evacuating through the sanitary system.
- ◆ **Small spill and leak:** Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

SECTION 7 – HANDLING AND STORAGE

- ◆ **Handling:** Keep away from heat and sources of ignition. Avoid breathing vapors or spray mists. Avoid prolonged exposure.
- ◆ **Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area. Store at -20°C. Use original container.
- ◆ **Intended use:** Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific application.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

- ◆ **Engineering Controls:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location.
- ◆ **Personal protection**
 - **Eyes:** Safety glasses.
 - **Body:** Lab coat and gloves.
 - **Respiratory:** Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.
- ◆ **General Hygiene measures:** wash hands thoroughly after handling.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- ◆ **Appearance and physical state:** colorless aqueous solution.

SECTION 10 – STABILITY AND REACTIVITY

- ◆ **Stability and reactivity:** The product is stable at a pH between 4 and 11
- ◆ **Conditions to avoid:** pH < 4 and pH > 11, using temperatures and > + 96°C

- ◆ **Materials to avoid:** Strong acids, strong bases, strong oxidizing agents.
- ◆ **Hazardous polymerization:** Will not occur.
- ◆ **Hazardous decomposition products:** Not available.
- ◆

SECTION 11 – TOXICOLOGICAL INFORMATION

- ◆ **Toxicity on animals:** Not available
- ◆ **Chronic effects on humans:** Carcinogenic effects: classified none by NIOSH, By OSHA.
- ◆ **Other toxic effects on human:** Harmful if Swallowed. Causes irritation to skin and eyes

SECTION 12 – ECOLOGICAL INFORMATION

- ◆ **Ecotoxicity** Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants.
- ◆ **Mobility** No information available.
- ◆ **Biodegradation** Inherently biodegradable.
- ◆ **Bioaccumulation** Material does

SECTION 13 – DISPOSAL CONSIDERATIONS

- ◆ **Waste disposal method:** Contact a licensed professional waste disposal service to dispose of this material. Dispose in accordance with governmental environmental regulations. Observe all federal, state, and local environmental regulations.
- ◆ **European waste catalogue (EWC):** Not available.
- ◆ **Hazardous waste:** Will not occur.

SECTION 14 – TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

D.O.T.: Not regulated.

IATA.: Not regulated.

IMDG: Not regulated.

SECTION 15 – OTHER INFORMATION

◆ **US Federal Regulations**

RCRA (Lists of Hazardous Wastes, 40 CFR 261 Subpart D): Not applicable

CLEAN AIR ACT (SEC. 112. Hazardous Air Pollutants): Not applicable

CLEAN WATER ACT (RQ, 40 CFR): Not applicable

SARA Title III:

Section 302 -304, 40 CFR 355: Components present in this product at a level which could require reporting are: none.

Section 311 - 312: Components present in this product at a level which could require reporting are: none.

Section 313: Not applicable

TSCA Section 8(b) Inventory Status: All ingredients are listed on TSCA Inventory of Chemical Substances or exempt from TSCA Inventory requirements.

AICS Inventory Status: All ingredients are listed on the Australia Inventory of Chemical Substances.

State Lists

This product does not contain any Proposition 65 chemicals.

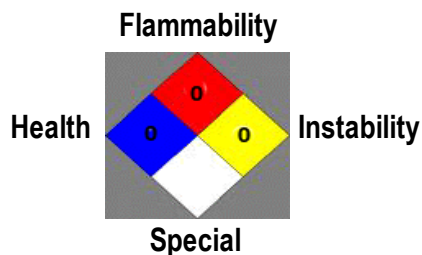
- ◆ This product is not classified according to the EU regulations.

SECTION 16— OTHER INFORMATION

◆ Hazardous Material Information System (U.S.A.):

Health	0
Fire hazard	0
Reactivity	0
Personal protection	

◆ National Fire Protection Association (U.S.A.):



0 = not significant
 1 = slight
 2 = moderate

3 = high
 4 = extreme
 * = chronic

◆ Revisions:

Issue Date: 07-Mar-2023
 Last Revision New document
 Revision note: N/A.

◆ Other Comments:

To the best of our knowledge, the information contain herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.
 Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Restriction of use: for research use only.

MSDS: Stop Solution**SECTION 1 - PRODUCT AND COMPANY INFORMATION**

◆ **Product name:** Stop Solution

◆ **Contact:**

OZ Biosciences
 Parc Scientifique de Luminy – Zone Luminy Entreprises
 163 Avenue de Luminy – Case 922
 13288 Marseille cedex 9, France
 Phone: +33 (0)4.86.94.85.16/ Fax: +33 (0)4.86.94.85.15
www.ozbiosciences.com / contact@ozbiosciences.com

SECTION 2 – HAZARDS IDENTIFICATION**Classification of the substance or mixture**

Classification EC 67/548 or EC 1999/45:

Hazard Class and Category Code(s), Regulation (EC) No 1272/2008 (CLP):

Health hazards :

Skin Corr. 2) H315

Label elements

Labelling EC 67/548 or EC 1999/45 :

Contains :

Labelling Regulation EC 1272/2008 (CLP):

Not classified.

Not classified.

Skin irritation - Category 2 - Warning (CLP :

Serious eye damage - Category 1 - Danger
(CLP : Eye Dam. 1) H318

Not classified.

Water - Acetic acid

Not classified.

**Pictogram**

Signal words :

Hazard statements :

H318 : Causes serious eye damage.

Danger

Precautionary statements

Prevention :

P280: Wear protective gloves, protective clothing, eye protection, face protection.

P264: Wash thoroughly after handling.

Response :

P302+P352: IF ON SKIN : Wash with plenty of soap and water.

P332+P313: If skin irritation occurs : Get medical advice.

P305+P351+P338: IF IN EYES : Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P363: Wash contaminated clothing before reuse.

Contains :

Water - Acetic acid

Other hazards :

The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

H315 : Causes skin irritation.**SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS**

Description: Iodonitrotetrazolium chloride in solution in Trix Buffer

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EINECS</u>	<u>Classification</u>
Water	7732-18-5	>75 %	231-791-2	None
Acetic acid	64-19-7	<10 %	200-580-7	R10 C; R35 Skin Corr. 1A+ H314 Eye Dam 1 _ H318 Flam. Liq. 3 _ H226 Acute Tox. 4 (inhal) H332

Ingredients are not hazardous or their concentrations do not exceed the limit specified according to 29 CFR 1910.1200 Hazard Communication Standard (USA) and Directive 1999/45/EC-2001/59/EC (EU).

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures**First Aid: Eye**

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

First Aid: Skin

Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

First Aid: Ingestion

Wash out mouth with water provided person is conscious. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed**Hints for Physician: Symptoms**

See Section 11 for additional information on health hazards

4.3 Indication of any immediate medical attention and special treatment needed**First Aid: Inhalation**

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Hints for Physician: Treatment

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing Media**Suitable**

foam, dry extinguishing powder, carbon dioxide (CO₂), water spray jet

5.2 Special hazards arising from the substance or mixture

Wear a self-contained breathing apparatus and chemical protective clothing.

Hazards During Fire-Fighting

toxic fumes

5.3 Fire-Fighting/Further Advice

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately.

This must not be dis

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

6.2 Environmental Precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

6.3 Methods and material for containment and cleaning up

not available

6.4 Further Accidental Release Measures

Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

SECTION 7 – HANDLING AND STORAGE

- **Handling:** Avoid breathing vapors or spray mists.
- **Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area. Store at +4°C
- **Intended use:** Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific application.
- **Packaging materials**
- **Suitable:** Use original container.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

8.1 Exposure limit values

Does not contain any substances with occupational exposure limits.

8.2 Exposure controls

Industrial Hygiene

Mechanical exhaust required. Safety shower and eye shower.

8.3 Personal Protective Equipment

Respiratory Protection

Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

Hand Protection

Wear compatible chemical-resistant gloves to prevent skin exposure.

Eye Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

Body Protection

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

Advice on Safe Handling

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**
 - **Physical State:** Solution.
 - **Color:** Colorless.
 - **Odor:** Not available.
 - **Taste:** Not available.
- **Molecular weight:** Not available.
- **pH:** 3
- **Boiling point:** 100°C (212 F).
- **Decomposition temperature:** 100°C (212 F)
- **Melting point:** Not available.
- **Flash point:** Not available.
- **Dispersion properties:** In suspension in water.
- **Solubility:** Not available.

SECTION 10 – STABILITY AND REACTIVITY

- **Stability and reactivity:** The product is stable at a pH between 2 and 7
- **Conditions to avoid:** pH < 2 and pH > 8, using temperatures > + 96°C
- **Materials to avoid:** Strong acids, strong bases and pure organic solvents.
- **Hazardous polymerization:** Will not occur.
- **Hazardous decomposition products:** Not available.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Acute toxicity

- **Inhalation :** Based on available data, the classification criteria are not met.
- **Dermal :** Based on available data, the classification criteria are not met.
- **Ingestion :** Based on available data, the classification criteria are not met.

Corrosion : Causes serious eye damage.

Irritation : Causes skin irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity

Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Persistence - degradability : Biodegradable.

Bioaccumulative potential : Not established.

Mobility in soil : Not established.

Results of PBT and vPvB assessment: The substance does not fulfil the criteria to be identified as PBT substance or vPvB substance according to Annex XIII of Regulation REACH.

Other adverse effects

Components

acetic acid

Toxicity to fish	semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1.000 mg/l - 96 h (OECD Test Guideline 203)
Toxicity to daphnia and other aquatic invertebrates	static test EC50 - Daphnia magna (Water flea) - > 1.000 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to algae	static test EC50 - Skeletonema costatum - > 1.000 mg/l - 72 h (ISO 10253)
Toxicity to bacteria	EC5 - Pseudomonas putida - 2.850 mg/l - 16 h Remarks: neutral (maximum permissible toxic concentration) (Lit.) microtox test EC50 - Photobacterium phosphoreum - 11 mg/l - 15 min Remarks: (IUCLID)

Environmental precautions : Avoid release to the environment

SECTION 13 – DISPOSAL CONSIDERATIONS

- **Waste stream:** Not available.
- **Waste disposal method:** Contact a licensed professional waste disposal service to dispose of this material. Dispose in accordance with governmental environmental regulations. Observe all federal, state, and local environmental regulations.
- **European waste catalogue (EWC):** Not available.
- **Hazardous waste:** Will not occur.

SECTION 14 – TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

D.O.T.: Not regulated.

IATA.: Not regulated.

IMDG: Not regulated.

SECTION 15 – REGULATORY INFORMATION

◆ **US Federal Regulations**

TSCA Inventory Status All ingredients are listed on the TSCA inventory.

DSCL (EEC) All ingredients are listed on the DSCL inventory.

California Proposition 65 Not Listed

SARA 302 Not Listed

SARA 304 Not Listed

SARA 311 Acetic Acid

SARA 312 Acetic Acid

SARA 313 Not Listed

WHMIS Canada Class D-2B: Poisonous and infectious material- Other effects- Toxic

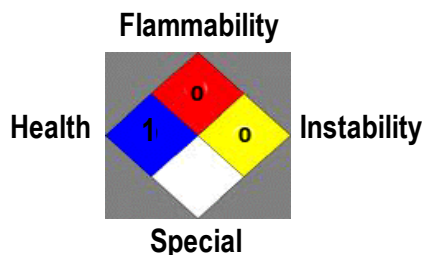
- ◆ This product is not classified according to the EU regulations..

SECTION 16 – OTHER INFORMATION

◆ Hazardous Material Information System (U.S.A.):

Health	2
Fire hazard	0
Reactivity	0
Personal protection	

◆ National Fire Protection Association (U.S.A.):



◆ Revisions:

Issue Date: 07-Mar-2023
 Last Revision New document
 Revision note: N/A.

◆ Other Comments:

To the best of our knowledge, the information contain herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Restriction of use: for research use only.

MSDS: LYSIS BUFFER 10X**SECTION 1 - PRODUCT AND COMPANY INFORMATION**

◆ **Product name:** Lysis Buffer 10X

◆ **Contact:**

OZ Biosciences
 Parc Scientifique de Luminy – Zone Luminy Entreprises
 163 Avenue de Luminy – Case 922
 13288 Marseille cedex 9, France
 Phone: +33 (0)4.86.94.85.16/ Fax: +33 (0)4.86.94.85.15
www.ozbiosciences.com / contact@ozbiosciences.com

SECTION 2 – HAZARDS IDENTIFICATION**OSHA/HCS status :**

10X Lysis Buffer

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency overview

10X Lysis Buffer

WARNING!

**Hazards Statements**

10X Lysis Buffer

CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION. MAY BE HARMFUL IF SWALLOWED. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Precautions

10X Lysis Buffer

Do not ingest. Do not get in eyes. Avoid breathing vapor or mist. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS

5X Lysis Buffer: 12.5M Tris Buffer containing Triton X-100

The following ingredients are considered as Hazardous:

<u>Ingredient name</u>	<u>CAS number</u>	<u>%</u>	<u>EINECS</u>	<u>Classification</u>
Triton X-100	9002-93-1	< 1%	N/A	H302 H319 H411

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section

SECTION 4 – FIRST AID MEASURES

◆ **Effects and symptoms:**

- *Inhalation* Hazardous in case of inhalation.
- *Ingestion* May be fatal if swallowed.
- *Skin contact* Causes skin irritation. May be harmful if absorbed through the skin.
- *Eye contact* Causes eye irritation. Risk of serious damage to the eyes.
- *Aggravating conditions* No aggravating condition known.

Eye Contact

Check for and remove any contact lenses.
 Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and

lower eyelids. Get medical attention immediately.

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Ingestion

Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Protection of first-aiders

risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

Notes to physician

No action shall be taken involving any personal In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Substrate buffer

◆ **First-Aid measures:**

- *Inhalation* If inhaled, remove to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.
- *Ingestion* Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.
- *Skin contact* In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothes before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
- *Eye contact* In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.
- *Notes to physician* Not available.
- *Protection of first-aiders* Not available.

SECTION 5 – FIRE FIGHTING MEASURES

- ◆ **Flammability of the product:** May be combustible at high temperature.
- ◆ **Flash Point:** N/A.
- ◆ **Fire hazards in presence of various substances:** N/A.
- ◆ **Fire fighting media and instructions:** SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
- ◆ **Protective clothing (fire):** Be sure to use an approved/certified respirator or equivalent.
- ◆ **Hazardous thermal decomposition products:** Carbon oxides, nitrogen oxides.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions:

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

contact with soil, waterways, drains and sewers.

Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Avoid dispersal of spilled material and runoff and

Methods for Cleaning up

Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

SECTION 7 – HANDLING AND STORAGE

- ◆ **Handling:** Keep away from heat and sources of ignition. Avoid breathing vapors or spray mists. Avoid prolonged exposure.
- ◆ **Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area.. Use original container. Store at +4°C
- ◆ **Intended use:** Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific application.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also **Personal protection**

Engineering measures :

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

- **Eyes:** Safety glasses.
- **Body:** Lab coat and gloves.
- **Respiratory:** Respirator is not needed under normal and intended conditions of use, if exposures are kept below established limits.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance and physical state:** Liquid
- **Appearance and odor information:** Colorless
- **Boiling point:** N/A
- **Flash Point:** N/A
- **Lower Explosion Limit (% by volume):** N/A
- **Upper Explosion Limit (% by volume):** N/A
- **Vapour pressure at 20°C:** N/A
- **Vapour density:** N/A
- **Solubility in water:** fully miscible
- **Specific Gravity (water = 1):** N/A
- **Percent volatile by volume:** N/A
- **Evaporation Rate:** N/A

SECTION 10 – STABILITY AND REACTIVITY

- **Stability and reactivity:** The product is stable at a pH between 4 and 11
- **Conditions to avoid:** pH < 4 and pH > 11, using temperatures < + 2°C and > + 96°C
- **Materials to avoid:** Strong acids, strong bases, strong oxidizing agents.
- **Hazardous polymerization:** Will not occur.
- **Hazardous decomposition products:** Not available.

SECTION 11 – TOXICOLOGICAL INFORMATION

Product/ingredient	Result	Species	Dose
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy	LD50 Oral	Rat	1800 mg/kg
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy	Eyes moderate irritant Skin Mild Irritant	Rabbit Rabbit	24h 10µL 24h 500 µL

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity : No known significant effects or critical hazards

Aquatic ecotoxicity

Ingredient	Result	Species	Exposure
Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy	Acute LC50 5.85 mg/l Fresh water	Crustaceans - Ceriodaphnia rigaudi – Neonate	48 h
	Acute LC50 11.2 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 h
	Acute LC50 4500 µg/l Fresh water	Fish - Pimephales promelas	96 h

- ◆ **Chronic effects on humans:** Carcinogenic effects: classified none by NIOSH, By OSHA.
- ◆ **Other toxic effects on human:** Harmful if Swallowed. Causes irritation to skin and eyes

SECTION 13 – DISPOSAL CONSIDERATIONS

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements. The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

SECTION 14 – TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

D.O.T.: Not regulated.

IATA.: Not regulated.

IMDG: Not regulated.

SECTION 15 – REGULATORY INFORMATION

HCS Classification

Irritating material
Target organ effects

U.S. Federal regulations: **SARA 302/304:** No products were found.
SARA 311/312 Hazards identification: Immediate (acute) health hazard, Delayed (chronic) health hazard
TSCA 8(a) PAIR: Poly(oxy-1,2-ethanediyl), .alpha.-[4-(1,1,3,3-tetramethylbutyl)phenyl]-.omega.-hydroxy
TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) Not listed
Clean Air Act Section 602 Class I Substances Not listed
Clean Air Act Section 602 Class II Substances Not listed
DEA List I Chemicals (Precursor Chemicals) Not listed
DEA List II Chemicals (Essential Chemicals) Not listed

State Regulations

Massachussets	No compounds are listed
New York	No compounds are listed
New Jersey	No compounds are listed
Pennsylvania	No compounds are listed
California Prop 65	No products were found

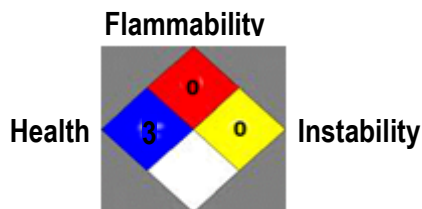
◆ This product is not classified according to the EU regulations..

SECTION 16 – OTHER INFORMATION

◆ **Hazardous Material Information System (U.S.A.):**

Health	2
Fire hazard	0
Reactivity	0
Personal protection	

◆ **National Fire Protection Association (U.S.A.):**



0 = not significant	3 = high
1 = slight	4 = extreme
2 = moderate	* = chronic

◆ **Revisions:**

Issue Date: 07-Mar-2023
Last Revision New document
Revision note: N/A.

◆ **Other Comments:**

To the best of our knowledge, the information contain herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Restriction of use: for research use only.

MSDS: Positive Control**SECTION 1 - PRODUCT AND COMPANY INFORMATION**

◆ **Product name:** Positive Control

◆ **Contact:**

OZ Biosciences
 Parc Scientifique de Luminy – Zone Luminy Entreprises
 163 Avenue de Luminy – Case 922
 13288 Marseille cedex 9, France
 Phone: +33 (0)4.86.94.85.16/ Fax: +33 (0)4.86.94.85.15
www.ozbiosciences.com / contact@ozbiosciences.com

SECTION 2 – HAZARDS IDENTIFICATION**Classification of the substance or mixture**

The product is not classified as hazardous according to the Globally Harmonized System (GHS).

Label elements

GHS label elements Not applicable

Hazard pictograms Not applicable

Signal word Not applicable

Hazard statements Not applicable

Classification system:**NFPA ratings (scale 0 - 4)**

Health = 0

Fire = 0

Reactivity = 0

HMIS-ratings (scale 0 - 4)

Health = 0

Fire = 0

Reactivity = 0

OSHA Hazard Overview (Criteria according to 29CFR1910.1200): Not applicable

Target Organ(s): May cause behavioral changes

Other hazards**Results of PBT and vPvB assessment**

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3 – COMPOSITION, INFORMATION ON INGREDIENTS

Description: Mixture

Ingredients are not hazardous or their concentrations do not exceed the limit specified according to 29 CFR 1910.1200 Hazard Communication Standard (USA) and Directive 1999/45/EC-2001/59/EC (EU).

SECTION 4 – FIRST AID MEASURES**4.1 Description of first aid measures****First Aid: Eye**

Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

First Aid: Skin

Wash immediately with plenty of water and soap for at least 15 minutes. Remove contaminated clothing and shoes. Wash contaminated clothes before reuse. Call a physician.

First Aid: Ingestion

Wash out mouth with water provided person is conscious. Call a physician.

4.2 Most important symptoms and effects, both acute and delayed**Hints for Physician: Symptoms**

See Section 11 for additional information on health hazards

4.3 Indication of any immediate medical attention and special treatment needed

First Aid: Inhalation

Remove casualty to fresh air and keep warm and at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician.

Hints for Physician: Treatment

Treat symptomatically.

SECTION 5 – FIRE FIGHTING MEASURES**5.1 Extinguishing Media****Suitable**

foam, dry extinguishing powder, carbon dioxide (CO₂), water spray jet

5.2 Special hazards arising from the substance or mixture

Wear a self-contained breathing apparatus and chemical protective clothing.

Hazards During Fire-Fighting

toxic fumes

5.3 Fire-Fighting/Further Advice

Do not inhale explosion and combustion gases. Collect contaminated fire extinguishing water separately.

This must not be dis

SECTION 6 – ACCIDENTAL RELEASE MEASURES**6.1 Personal Precautions, protective equipment and emergency procedures**

Wear breathing apparatus if exposed to vapours/dusts/aerosols. Provide adequate ventilation.

6.2 Environmental Precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains. Ensure all waste water is collected and treated via a waste water treatment plant.

6.3 Methods and material for containment and cleaning up

not available

6.4 Further Accidental Release Measures

Collect in closed and suitable containers for disposal. Clear contaminated areas thoroughly. Ventilate affected area.

SECTION 7 – HANDLING AND STORAGE

- **Handling:** Avoid breathing vapors or spray mists.
- **Storage:** Keep container tightly closed. Keep container in a cool, well-ventilated area. Store at -20°C
- **Intended use:** Refer to the instruction booklet for proper and intended use. Otherwise, contact supplier for specific application.
- **Packaging materials**
- **Suitable:** Use original container.

SECTION 8 – EXPOSURE CONTROLS, PERSONAL PROTECTION**8.1 Exposure limit values**

Does not contain any substances with occupational exposure limits.

8.2 Exposure controls

Industrial Hygiene

Mechanical exhaust required. Safety shower and eye shower.

8.3 Personal Protective Equipment**Respiratory Protection**

Wear NIOSH/MSHA or European Standard EN 149 approved respirator.

Hand Protection

Wear compatible chemical-resistant gloves to prevent skin exposure.

Eye Protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA.

Body Protection

Wear compatible chemical-resistant gloves and clothing to prevent skin exposure.

Advice on Safe Handling

Wash contaminated clothing before reuse. Wear appropriate protective clothing to prevent exposure.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

- **Appearance**
- **Physical State:** Solution.
- **Color:** Colorless.

- **Odor:** Not available.
- **Taste:** Not available.

- **Molecular weight:** Not available.
- **pH:** 6
- **Boiling point:** 100°C (212 F).
- **Decomposition temperature:** 100°C (212 F)
- **Melting point:** Not available.
- **Flash point:** Not available.
- **Dispersion properties:** In suspension in water.
- **Solubility:** Not available.

SECTION 10 – STABILITY AND REACTIVITY

- **Stability and reactivity:** The product is stable at a pH between 2 and 11
- **Conditions to avoid:** pH < 2 and pH > 11, using temperatures > + 96°C
- **Materials to avoid:** Strong acids, strong bases and pure organic solvents.
- **Hazardous polymerization:** Will not occur.
- **Hazardous decomposition products:** Not available.

SECTION 11 – TOXICOLOGICAL INFORMATION

Information on toxicological effects

Toxicity information : The product has been not fully tested. The calculated risk has been done under the requirements of the EU regulations.

Acute toxicity

- **Inhalation :** Based on available data, the classification criteria are not met.
- **Dermal :** Based on available data, the classification criteria are not met.
- **Ingestion :** Based on available data, the classification criteria are not met.

Corrosion : Causes serious eye damage.

Irritation : Causes skin irritation.

Sensitization : Based on available data, the classification criteria are not met.

Mutagenicity : Based on available data, the classification criteria are not met.

Carcinogenicity : Based on available data, the classification criteria are not met.

Toxic for reproduction : Based on available data, the classification criteria are not met.

STOT-single exposure : Based on available data, the classification criteria are not met.

STOT-repeated exposure : Based on available data, the classification criteria are not met.

Aspiration hazard : Based on available data, the classification criteria are not met.

SECTION 12 – ECOLOGICAL INFORMATION

Toxicity

Aquatic toxicity:

Not available

No further relevant information available.

Persistence and degradability

Not available

No further relevant information available.

Bioaccumulative potential

Not known

No further relevant information available.

Mobility in soil No further relevant information available.

Ecotoxicological effects:

Remark: Not available

Additional ecological information:

General notes: Not known to be hazardous to water.

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

Environmental precautions : Avoid release to the environment

SECTION 13 – DISPOSAL CONSIDERATIONS

- **Waste stream:** Not available.
- **Waste disposal method:** Contact a licensed professional waste disposal service to dispose of this material. Dispose in accordance with governmental environmental regulations. Observe all federal, state, and local environmental regulations.

- **European waste catalogue (EWC):** Not available.
- **Hazardous waste:** Will not occur.

SECTION 14 – TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

D.O.T.: Not regulated.

IATA.: Not regulated.

IMDG: Not regulated.

SECTION 15 – REGULATORY INFORMATION

◆ **US Federal Regulations**

TSCA Inventory Status All ingredients are listed on the TSCA inventory.

DSCL (EEC) All ingredients are listed on the DSCL inventory.

California Proposition 65 Not Listed
 SARA 302 Not Listed
 SARA 304 Not Listed
 SARA 311 Acetic Acid
 SARA 312 Acetic Acid
 SARA 313 Not Listed

WHMIS Canada Class D-2B: Poisonous and infectious material- Other effects- Toxic

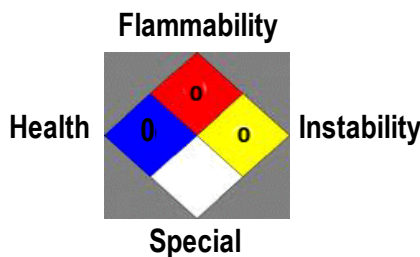
- ◆ This product is not classified according to the EU regulations..

SECTION 16 – OTHER INFORMATION

◆ **Hazardous Material Information System (U.S.A.):**

Health	0
Fire hazard	0
Reactivity	0
Personal protection	

◆ **National Fire Protection Association (U.S.A.):**



◆ **Revisions:**

Issue Date: 07-Mar-2023
 Last Revision New document
 Revision note: N/A.

◆ **Other Comments:**

To the best of our knowledge, the information contain herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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